

PUBLIC ADMINISTRATION AND PUBLIC FINANCE RESEARCH

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Editors

Assoc. Prof. Dr. Kadir Caner Dogan

Assoc. Prof. Dr. Ömer Uğur

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PREFACE

The public administration discipline has witnessed major paradigm changes especially after the 1980s. In this case, the public administration has faced with very different movements or thoughts such as postmodernism, globalization and technology. In this process, public administration has begun to be analyzed with different disciplines and different aspects. As an interdisciplinary field, public finance is one of the branches of science that public administration is most in contact with. As a matter of fact, issues such as public budget, income, expenditure and expenditure have started to be one of the basic researches in public administration. The need for theoretical and empirical studies that intersect the public administration and public finance disciplines is increasing day by day.

This editorial book includes theoretical and current articles in the field of public administration and public finance. As stated above, joint articles on public administration, public finance and its management will increase the efficiency, productivity and quality levels of public administrations in both administrative and economic terms.

In the book, it is included in the Republic of Turkey on the subject of the article mentioned academics working in different universities. In determining the articles, care was taken to have authors / academicians with expertise in public administration and public finance.

Assoc. Prof. Kadir Caner Dođan & Assoc. Prof. Ömer Uđur
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CHAPTER I

THE PUBLIC VALUE APPROACH AS ONE OF THE GOVERNANCE PARADIGMS IN PUBLIC ADMINISTRATION

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1. Introduction

Public administration implemented in the U.S. for the first time in history as a discipline. There are three major paradigms in the discipline of public administration or in theoretical development. These; traditional public administration, new public management and governance. After the 1980s, the new public management has passed from a bureaucracy and privacy-based public administration to an effective, flexible and efficiency-based public administration. The governance has also started a democratic and political public administration. Following the governance paradigm in public administration, many approaches and theories came out.

This study, as one of the governance paradigms, intends to explain the public value approach. The primary research question of the study is that “*the public value approach is an extension of the governance paradigm within the framework of the philosophy.*” As a method, work is using the essential works/resources based on literature review.

It is envisaged that the study will comprise two major parts in the purpose’s context, research question and method. In the first part, the public administration theories and the governance paradigm were discussed, and in the second part,

the public value approach was expressed intrinsically. In the conclusion and evaluation part, the governance paradigm and public value approach were correlated.

2. Theory and Governance Paradigm in Public Administration

The discipline of public administration emerged as a systematic research field in the United States of America (USA) in the 19th century (Frederickson et al., 2012). In the development of the discipline and theoretically in its first phase, the “traditional public administration approach” had its effect until the 1970s. After this period, the “new public management approach” has emerged as a public administration paradigm (Kaboolian, 1998). In the 1990s, “governance theory” has become the dominant paradigm in public administration (Doğan, 2017c). Following this, different approaches emerge in public administration that can be seen as extensions of the governance paradigm in the 2000s and today. Among them; *“neo-weberian state, critical public administration, new public service, whole of government, new public governance, public value and digital age governance”* (Parlak and Doğan, 2020: 72; Doğan, 2020).

The new public management literature in the US occurred in the 1990s. As a matter of fact, the conceptualization of governance in a World Bank report corresponds to 1989. Although there are important differences between governance and new public management, it can be said that they act in line with the common philosophy (localization, efficiency, democracy, participation in the context of Anglo-American culture, etc.) that complement each other (Doğan, 2017a: 272). Among the main cornerstones of new public management writing are; Hood (1991) and Osborne and Gaebler (1992).

As a matter of fact, the new public management, which was the subject of concrete public policies in the states in the 1980s, especially after the 1990s *“increased institutional and political complexity, could not define the concepts clearly, it has been subjected to harsh criticism, such as seeing citizens as customers and marketization of public services causing loss of trust and fragmentation in public administration”*. These criticisms have turned into the search for an alternative to new public management since the mid-2000s (Uysal, 2020: 113). As a matter of fact, these new types of approaches mentioned above are parts of governance which is accepted as a more advanced model of new

public management. Governance is the peak of public administration theories, supported by neo-liberal and new right-wing political and economic policies after the 1980s (Parlak and Doğan, 2020: 72). Among the main themes of the 1980s; there are problems of downsizing the state and narrowing the public. In the 1990s, on the other hand, the debate changed and the problem of efficient use of resources, no matter how small the public sector, should be solved and managed well. In other words, resources should be used effectively in providing public services (Ömürkünülşen, 1998: 518). As a matter of fact, the main issue in the step taken from new public management to governance is the effective position of the state and democratization of public administration (Doğan, 2016: 1800).

When the theoretical development stages of public administration are examined; it can be said that it developed primarily in the USA with a focus on productivity and capitalism. In the USA, serious criticism and questioning about the established values of the traditional public administration have come to the fore in the discipline under the leadership of Dwight Waldo, starting from the 1940s. With Waldo, public administration was wanted to be strengthened with interdisciplinary, democratic and participatory notions (Doğan, 2017d). According to Waldo, public administration cannot be separated from political science, and the emphasis on democracy in public administration should be strengthened and brought to a position to respond to social reality. After that, the discipline of public administration was shifting towards a new axis in the 1980s with the new public management (from modernist-based public administration to postmodernism-based public administration) (Doğan, 2017b; Doğan, 2017c), the dominant character of business discipline in public administration has reappeared (Özer, 2012). At this point, governance is of great importance for the public administration discipline to return to its original essence and to achieve a systematic theoretical whole by overcoming identity crises (Parlak and Doğan, 2020).

With the governance paradigm, in the 1990s, public administration theories continued to grow stronger with the emphasis on political, democratic and participation. Governance can be defined as a synergistic model in which all social groups actively participate in the process of determining political power in a state. In this context, this approach suggests that in addition to the government, civil society and the private sector should also be involved in important political decision-making processes of the state (Özer, 2006). The

most emphasized concepts by governance can be explained as follows (Arslaner and Karaca, 2017: 133-134):

- Participation,
- Democracy,
- Constitutional state,
- Accountability,
- Transparency.

Additionally governance is explained by five propositions (Stoker, 1998: 18):

- Governance refers to a set of institutions and tools that come from government but are also beyond the government.
- Governance defines the blurring of boundaries and responsibilities to tackle social and economic problems.
- Governance defines the dependence of power involved in the relations between institutions involved in collective action.
- Governance is about autonomous, self-directed networks of actors.
- Governance acknowledges the capacity of the government to manage or perform tasks that are not based on its power to use.

On the other hand, there are at least six separate uses of governance (Rhodes, 1996: 653):

- as the minimal state,
- as corporate governance,
- as the new public management,
- as good governance,
- as a socio-cybernetic system,
- as self-organizing networks.

As a matter of fact, the public value approach, which will be introduced in the following part of the study and which will be associated with governance in places, can be considered as a public administration theory that draws attention to different aspects of public administration in the context of governance philosophy.

3. Public Value Approach

Public value is not a new concept or approach. After Mark H. Moore's 1995 book "*Creating Public Value*", it has been met with increasing interest. Moore (1995) did not provide a definition of the concept in this study, and treated it as a part of the managerial process. Following Moore, some of those working on public value treated the concept as the value created by the state through services, laws and other actions; others perceive them as principles such as equality, impartiality, justice, honesty, continuity, accountability and transparency, which are at the center of public administration (Erten, 2021: 105-106; Uslan, 2020). Public value refers to the value created through government services, regulations and other actions. These values in democracies determined directly by the people themselves and implemented by elected politicians (Uzun and Demir, 2019: 74).

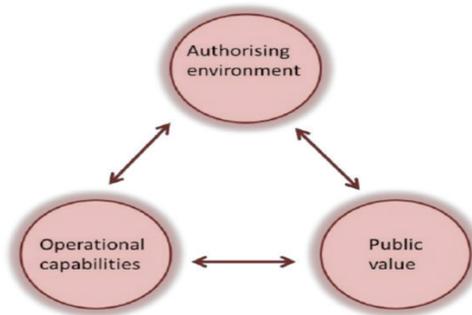
Public value has been defined as a multidimensional construct-a reflection of politically mediated preferences consumed by citizens, expressed collectively-values that can be created not only through "outcomes" but also through processes that can generate trust or justice (O'Flynn, 2007: 358). In addition, the public value approach is built on the differences between the public sector and the private sector (Köseoğlu and Tuncer, 2014: 151). According to Moore, the purpose of private administration is to create private (economic) value, and the purpose of public administration is to create public (social) value. The private sector can produce concrete and measurable values that can make a profit, but in cases where the public value market cannot provide equal production, justice, equity, it regularly deals with matters of meeting citizen's needs. Therefore, public value is more complex and difficult to measure (Kocaoğlu and Saylam, 2015: 143-144).

Public value alone is not created by the public sector. Public value outputs can be produced by the private sector, the voluntary sector, and informal community organizations and governments (Benington, 2007: 13). The public value perspective states that the state can create public value in different ways when different needs and demands, individual needs cannot be translated into effective demand, there are individuals who do not have the power to buy, or when risky investments are not realized without government support, the state cannot be met by the private / market (Özalp, 2020: 255). This approach claims to produce solutions with a different perspective to various problems in the fields such as administration, organization, personnel, legitimacy, participation,

administration-politics and management-citizen relations under headings such as public policy process, public sphere, public interest, public service (Erten, 2021: 106). In this respect, public policy, political science, public administration, and many scholars, directly or indirectly, are interested in public value. Therefore, the public value literature is multidimensional (Bozeman, 2007: 15). The most important model for creating public value is public-private partnership (Reynaers, 2013). This model is also linked to the governance paradigm (Prats, 2019: 5).

Figure 1 below shows a triangle to the public value design according to Moore.

Figure 1: Moore’s Strategic Triangle



Source: Benington and Moore, 2011: 5.

Moore explained the practical hints of this approach with the concept of the strategic triangle. Accordingly, the strategic triangle consists of three separate but interdependent processes in order to achieve public value: The first communicates the general mission or purpose of the organization. Second, it provides resources of support and legitimacy to sustain its community’s commitment to the institution. Third, it explains how the institution will be organized and operated to achieve the set goals. Moore defined the strategic triangle as follows in his book “*Public Value: Theory and Practice*” co-authored with Benington (Parlak and Gençosman, 2020: 321; Brandt et al., 2021):

- Defining public value: Determining and explaining strategic goals, public value outputs,
- Authorization: The jurisdiction needs to be established in order to obtain public value outputs. Creating a sustainable coalition with stakeholders

belonging to public, private and other sectors that need support for strategic actions,

- Formation of operational capacity: It is the mobilization of both internal and external operational resources (finance, technology, expertise, skills, etc.) in order to achieve the desired public value outputs.

The value produced by the public reflects the difference between the powers and resources that citizens agree to give to the public and the benefits they obtain. In fact, government legitimacy is largely about how much value it can create. Public value serves as a benchmark for public institutions and policies for the correct allocation of resources and the right decisions (Kelly et al., 2002).

According to Moore, the purpose of public administration work is to create public value. The people are judges and juries of public value. The public evaluates what public administrators produce according to the degree to which the goals expressed in public forums and are achieved through the political process. Instead of politics being external to the public administration, political institutional ties and forums are central to the public administrator's decision-making. Public administration is an area of professional autonomy that actively interprets public values expressed in political processes and evaluates the risks involved in following alternative agendas. Public values are based on a reciprocal relationship between rulers and citizens. Value is created by satisfying the politically expressed desires of citizens and customers (Turler and Turler, 2016: 3).

4. Conclusion and Evaluation

Governance literature as a paradigm in public administration emerged after the 1990s, with Anglo-American origin. Governance has values such as politics, democracy and participation, far from the organizational efficiency of new public management. In this respect, it is an advanced model of new public management. The extensions of the values defended by governance in the public administration have started to find a response especially after the 2000s. One of these is the public value approach.

Although public value has been used in the literature in previous periods, it has gained popularity in the field of public administration for the first time with Moore's mentioned book. In essence, it offers a conceptual framework on actors, processes and methods that create value in the public sphere.

The public value approach approaches the issue from the perspective of creating value to overcome the new public management crises in public administration after the 1990s. Accordingly, it responds to discourses such as participation, democracy, accountability and the rule of law, which are the basic premises of the governance paradigm, through the value creation literature. Thus, it offers solutions to universal contemporary concepts such as citizenship, social responsibility, ethics, and democracy, and the problems related to these in public administration literature and practice.

The relationship between governance and public value approaches can easily be seen through the political culture, conjuncture and qualities in which they emerged. While governance as a theoretical paradigm in public administration tries to strengthen the discipline with concepts such as democracy, participation and politics, public value contributes to the process with more systematic, specific and empirical studies based on values in the same perspective. Thus governance is a more general concept and theory than public value.

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CHAPTER II

H. GEORGE FREDERICKSON AND HIS PERSPECTIVE ON PUBLIC ADMINISTRATION

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1. Introduction

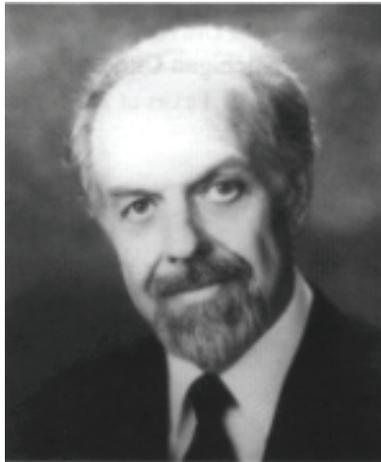
H. George Frederickson was born in 1934 and died in 2020 in the United States of America. In addition to this, he holds a significant place in American public administration literature and is known as an academician who is acknowledged as the founder of the New Public Administration Movement. This movement has formed the theoretical framework of the public administration claiming that the traditional public administration perception was beyond the level to meet the conditions of that period of time as well as its concepts being inadequate from discipline point of view. The New Public Administration Movement is one of the theories of the American public administration discipline that emerged at the end of 1960s. Frederickson is a significant name to understand the New Public Administration Movement and to follow the discussions related with the development of discipline of American public administration.

This study aims to reveal the ideas of Frederickson on public administration and his position in the discipline. However, his opinions on the new public administration, his arguments on the new public administration which is the basic subject he dwells on and his point of view on public administration have been investigated by literature search.

2. Life of H. George Frederickson

H. George Frederickson was born in Twin Falls – Idaho (United States of America) in 1934. He completed his early education in Twin Falls High School. His undergraduate study was on political science at Brigham Young University and he graduated in 1959. He got his master's degree on public administration at California University - Los Angeles in 1961. In 1967 he received his doctor's degree on public administration at Southern California University (Kansas University, 2021). Figure 1 below shows a picture of H. George Frederickson.

Figure 1. H. George Frederickson



Source: Toward A New Public Administration (H. George Frederickson) <http://paisues.blogspot.com/2011/10/toward-new-public-administration-h.html>, (26.03.2021).

Frederickson has taken various tasks at different universities and institutions in the United States. He worked as the president of the American Society for Public Administration (ASPA) between 1976-1977 and following this task, he held office as the rector at the Eastern Washington University between 1977-1987. In 1987, he was appointed as “Edwin O. Stene Public Administration Emeritus Professor” at the Department of Public Administration of the Kansas University. Besides, he organized the Minnowbrook II. Conference in 1988 (Davis, Moldavanova and Stazyk, 2020: 257).

Frederickson is one of the long-term members of the American National Public Administration Academy. He carried out the task of chief-editor of the Journal of Public Administration Research and Theory. Frederickson has

received many awards during his career such as The Distinguished Research Award, The Charles Levine Award and John Gaus Lecture Award, Dwight Waldo Award being in the first place. Moreover, he has received Irving Youngberg Award in the branch of Recognition of Research Achievements in the field of Applied Sciences of the Kansas University in 2005. He was awarded the prize of Lifelong Social Capital Contribution at Wilder State College and Virginia Commonwealth University in 2007 (Karacaoğlu, 2021: 171-172).

Frederickson was an academician who worked in the field of public administration and conducted studies on the new public administration, “public administration” concept, and governance and ethics. He wrote nine books which contributed to the field of public administration. He wrote more than 60 papers and book chapters (Davis, Moldavanova and Stazyk, 2020: 257). H. George Frederickson, who emphasized that he was a student of Dwight Waldo¹ and who was indicated as one of the prominent names of the American public administration (Ciğeroğlu and Özgür, 2011, 2011: 286) died on July 24, 2020.

3. Works of H. George Frederickson

H. George Frederickson has left many works related with public administration field behind. Some of the works of H. George Frederickson are as follows: Ethics and Public Administration (1993), The Spirit Of Public Administration (1997), New Public Administration (1980), The Public Administration Theory Primer (2003), The Adapted City: Institutional Dynamics and Structural Change (2003), Ethics in Public Management (2005), Up the Bureaucracy: A True and Faultless Guide to Organizational Success and the Further Adventures of Knute and Thor (2005), Public Administration with an Attitude (2005), Social Equity and Public Administration: Origins, Development and Applications (2010) (Karacaoğlu, 2021: 172; Kansas University, 2021).

In his “The Spirit of Public Administration “(1997a: 21-49) work, he has recommended the public administrators to be loyal to Constitution and to be virtuous citizens, to have public responsibility, to love and to be helpful. According to Frederickson, a public administrator should both be technically adequate and feel himself/herself responsible in ethical sense. Together with

¹ For Dwight Waldo please refer to Mehmet Atalay, Thinking of Dwight Waldo in Public Administration Discipline, Ankara University, Institute of Social Sciences, Unpublished Ph.D. Thesis, 2008; Coşkun Sayman, Dwight Waldo and His Administration Literature, Ankara University, Institute of Social Sciences, Master’s Thesis, 2006.

this feeling, the public administrator should use democracy as a tool to spread the basic values of the nation to the entirety of the citizens. Public officers must be the guardians of themselves being conscious of representing the people and being aware of the obligation to commit the values at the beginning.

In his chapter of the work “Toward a New Public Administration” which was published under the editorship of Frank Marini, Frederickson indicates that answers to the questions of how a better service could be provided using the existing resources and how could the quality of the service be increased were sought in classical public administration by emphasizing that a new answer to this new question, in addition to the existing questions, was sought as well by the New Public Administration Movement. The question here is the question “whether the services provided ensure justice and equality?” (Hergüner, 2015: 79; Cığeroğlu and Özgür, 2011: 281). In this framework, Frederickson indicates that the New Public Administration Movement seeks the policies that hinder the social equality systematically and the means to change the constitution (Frederickson, 2016: 450).

4. Contribution of H. George Frederickson to Public Administration

It is often possible to see the marks of Waldo in ideas of Frederickson who was educated as a student of Waldo. Frederickson, who stated that the foundations of the New Public Administration Movement were laid by Dwight Waldo, has followed Waldo closely; on the other, he himself has also been at least as significant as Waldo in the movement by achieving to add new fields of focus to the discipline and to the movement (Tozlu, 2017: 338; Frederickson, 1999: 5).

Twenty years after the organization of Minnowbrook I. Conference, Minnowbrook II. Conference was organized by Frederickson in 1988. Sixty-eight academicians in the fields of public administration, economy, political science, sociology, psychology, anthropology and history have attended to the conference (Parlak and Bincan, 2019: 490; yalçın, 2010: 233). The aims of the Minnowbrook II. Conference were set to discuss the future of the discipline of the public administration and to identify the differences in the opinions of those who entered into the discipline in 1960s and in 1980s (Özgür, 2003: 190).

During the Minnowbrook II. Conference, together with reconciling the social equality, ethics, human relations, democracy with public administration

that came into prominence during the first conference, subjects such as leadership, constitutional and legal perspective, technology, policy making and economical perspective have also been discussed (Parlak and Bincan, 2019: 409; Özgür and Öztepe, 2015: 105). According to Frederickson, themes of the Minnowbrook II. Conference are based on a more technical, more individual social equality insight including age and sex and covers positivist and behavioral perspectives with social sciences paying attention to productivity and performance management (Frederickson, 1997b: 832-833).

The classical public administration has a more positivist perspective which emphasizes efficiency, effectiveness and economy in a general sense. The New Public Administration Movement supporters which are comprised of those who believe the values owned by the classical public administration are inadequate have desired to include equality and social justice into the basic values of the public administration (Özer, 2005: 10). The New Public Administration Movement emphasize the significance of representation and participation which denies positivism, dwells on the conflict between capitalism-democracy, defends the necessity of involvement with the actual problems as well as theory of the public administration, opposes the politics-administration differentiation (Genç, 2010: 150). According to Frederickson, “newness” of the New Public Administration Movement is not in the material but in processing of the material. What makes the New Public Administration Movement “new”, of which concepts and some arguments are old, is the effort to melt the existing concepts and concerns in a new melting pot and to give a direction to American public administration (Özgür, 2003: 185, after Frederickson, 1976: 150).

The answer given by Frederickson to the question “What is the New Public Administration Movement?”, as indicated earlier, is the addition of social justice to the management of productive, economical and coordinated services which are included in definition of public administration. In this context, he defends that the New Public Administration Movement would construct its legitimacy over the “social justice” concept. However, the New Public Administration Movement does not disregard the targets such as good administration, productivity and economy. The New Public Administration Movement is a quest for transformation which would include these targets as well; in addition, social justice and equality would take their places at the center of the movement (Cığeroğlu and Özgür, 2011: 282, after Frederickson, 1971: 311).

The ideas that are defended by the New Public Administration Movement and later become effective in public administration discipline are as follows (Frederickson, 1989: 97): Shifting of the related field of the discipline from the public institutions to the public policies; accepting equality together with effectiveness as a criterion in taking decisions related with public policies, regaining of some concepts such as ethics, decency and responsibility into the discipline, shutting organizational units and organizations down which lost their functions, increasing the effectiveness of public institutions by participation of citizens, questioning the rational model and strict hierarchy concepts.

Frederickson dwells on the “ethics” concept which is one of the elements dwelled on by the New Public Administration Movement. “Social Equality” and “Justice” concepts begin by degrees to spread over and bring along the “ethics” concept which begin to form another field of study. In understanding of the New Public Administration Movement, the subject that would become kind of warrantee to reach the target envisaged and in operation of the new system is “Ethics in Public Administration” subject. In order the administration to counterbalance the “Good Governance” term implicitly and to provide a governance medium is based on application of “Justice” in depth by providing “Social Equality” and to understand and to put “Ethics” concept into practice (Karacaoğlu, 2021: 175).

In order to understand the ideas of Frederickson in the field of public administration, it would be useful to touch upon the evaluation made by himself on the historical process of the American public administration discipline. Frederickson emphasizes two perspectives to understand the public administration in the United States. First of these is the opinions of the Alexander Hamilton, the first secretary of state for treasury department of the United States, and the second is the opinions of James Madison, one of the ex-presidents of the United States. Accordingly, while the first opinion defends the existence of an effective bureaucracy and an independent administration concept, the second opinion defends a perspective requiring the limitation of the authorities of the bureaucracy and minimizing the state interventions which are close to liberal opinions of today (Tozlu, 2017: 339). When looking at the historical development of the American public administration discipline, Frederickson states that structure of the American public administration has been acknowledged and has a Hamiltonist perspective. He develops his determinations related with public administration based on this perspective (Cığeroğlu and Özgür, 2011: 280).

Frederickson defends that on the purpose of scaling down the state, eviscerating the state and leaving the tasks and functions to private sector or voluntary agencies and applying the principles of business management to public administration would lead great numbers of problems. He emphasizes that privatization applications should not be considered as solutions at all events. He also emphasizes that the state can manage many services in a productive and economic manner without needing the private sector. In this context, he approaches the concept of governance in a critical point of view. Even if the concept of governance is looked at in a fashionable way throughout the world, governance has negative sides as well as positive sides according to Frederickson. He states that these negative sides should not be disregarded (Karacaoğlu, 2021: 176).

5. Conclusion

Under the effect of Waldo, because he was a student of Waldo, Frederickson has shaped his ideas in line with those of Waldo in a period in which Simon and Waldo were arguing. From this point forth, Frederickson, as his professor Waldo, has attached importance to values and social justice. He defends that practices and principles of business management can not find space in public administration and also indicates that a strict politics-administration differentiation is not possible. He feels uncomfortable with eviscerating the state by public administration practices.

Frederickson, indicating that the classical public administration approach focuses on providing services in a more productive way with less cost, and although not objecting this idea, puts forward that democratic values and principles such as social justice, equality, ethics, focality, participating, democracy should be added to the classical public administration approach. On the other hand, by indicating that the values in question could not be realized by the arguments of the classical public administration, he states that the inadequate and failing sides of the classical public administration could be eliminated by the “New Public Administration Movement” (Tozlu, 2017: 339). According to Frederickson, basic point of departure of the state, public administrators and theoreticians should be providing social justice and equality in a society.

Frederickson is a thinker who critically evaluates becoming marketable in the field of public administration with an attitude to reject the business manager

point of view in the American public administration. Besides, he expresses that majority of the society would equally and fairly benefit from services, and indicates that this could only be made possible by the hands of the state. Frederickson is an academician whose works would especially be taken into account when discussing the American public administration discipline.

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CHAPTER III

ENDLESS PROBLEMS AND IMPRACTICABLE SOLUTIONS IN TURKISH PUBLIC ADMINISTRATION

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1. Introduction

The economic crisis in the world in the late 1970s brought a series of changes in the administration of England and the United States of America in the early 1980s. In this period, not only a structural change in public administration, but also many functional changes began to be mentioned. In public administration, especially responsibility started to come to the fore. This responsibility is mostly focused on how the resources to be used in the performance of the services are used and increasing the level of satisfaction with the services (Heinrich, 2002).

This development has also been reflected in the public administration as satisfying citizens in service fields, in other words, as a citizen-oriented approach (Halis, Tekinkuş, 2003).

The change in public administration after the economic, political and social developments in the 1980s was named as the new public administration. This new management understanding underlines two main objectives in public administration: Cutting the budget, improving the efficiency and productivity of the bureaucracy. The realization of these goals will be achieved by developing a transparent, participatory and performance-oriented management approach in public administration (Thil, Leeuw, 2002).

In this study, the emergence of a new public administration approach is referred to in general and in particular the current problems of Turkish public administration and reform efforts as solution proposals are emphasized.

2. Reform in Public Administration

With the new public administration approach that started in England and then in the United States in the 1980s and spread rapidly to other countries, public institutions started to see it as a necessity to change traditional management structures with the management techniques and policies applied in the private sector (Ateş, 2007).

In addition to this, the public administration principles, which are generally accepted by the European Union member states regarding the change in public administration, also revealed the conditions that constitute the European Administrative Space. The European Administrative Space includes a number of common standards. These standards are the body of various procedures and responsibility mechanisms that ensure the functioning of public administration and that is defined by laws. Countries applying for European Union membership have to develop their own public administration systems according to these standards. Central and Eastern European countries applying for European Union membership need to reform their public administration in the context of the Copenhagen and Madrid criteria for admission. The areas in which reforms are required and the content of the reforms are clearly stated. The second part of the SIGMA Report prepared for this purpose is reserved for public services. Good governance principles such as transparency and participation in ensuring efficiency in public service delivery and what should be considered in the realization of reform were highlighted, thus ensuring a better understanding of European Administrative Area standards (Kuzey, 2004). This change, which especially emphasizes an effective public administration approach, is a management approach that takes into account the expectations and needs of citizens (Karakaş, Ak, 2003).

3. New Public Administration Approach

The stages of public administration have led to the formation of certain types of public administration. Accordingly, public administration types are listed as traditional public administration, development management, developmental management and new public administration. Especially, the new public administration approach includes many structural and functional changes in public administration (Özer, 1997).

The hierarchical, rigid, cumbersome, centralized and bureaucratic structure that dominated public administration throughout the twentieth century has been

replaced by a new management approach in the public sector since the 1980s and 1990s. This is not a simple change, but rather a change in the role of the state in society and the state-citizen relationship. As the problems and deficiencies of traditional public administration increased, the new public administration emerged as a paradigm in the public sector. The new public administration is the latest paradigm shift that underlines how the public sector should be managed. It is a new management approach that first started in England, then spread to the United States, Australia and New Zealand and then spread to Europe. The new public administration is part of the managerial evolution all over the world. It has affected all countries, albeit to varying degrees. The new public administration is an understanding that adds a new approach to the public sector (Sözen, 2005; Al, 2002; Bayraktar, 2003; Eryılmaz, 2007; Lane, 2000). With the new public administration, it has begun to be emphasized that public administration should be a tool to ensure the benefit and welfare of the public rather than a goal. Thus, the transition of the public from a passive to an active status is in question, and as mentioned above, the relationship between state and citizen is reshaped (Nohutçu, Balcı, 2003).

On the other hand, the new public administration approach pioneers a result-oriented organizational culture in the public sector. This culture aims to increase the responsibility and efficiency of the public sector, improve the quality of public service and citizen satisfaction (Ospina et al, 2004). In the newly discovered public administration, importance is given to making and implementing decisions with a participatory approach. The understanding of a state that steers, not rows, is spreading. The aim is to provide the best service. For this, it is important to establish coordination among all sectors. On the other hand, performance agreements among public institutions, companies and non-governmental organizations are emphasized. A proactive management approach is displayed. The emphasis is on bottom-up control rather than top-down control model. In public administration, what is important is the missions and visions, rather than the rules now. The important thing in the realization of all these is not the process, but a result-oriented management approach that envisages the effective, efficient and economical use of resources (Osborne, 2007).

In other words, the new public administration approach has brought about an important change in public services. The traditional management approach has left its place to the understanding of good governance. Therefore, it has emerged that public institutions and organizations should be public organizations

which are respectful to human rights, transparent, accountable and participatory, as well as providing efficient, productive and economic services (Bilgin, 2004).

With the new public administration understanding, results, needs, comparison of the determined goals and achieved goals and accordingly evaluation of the performance become important in the management process. This process is illustrated in the figure below:

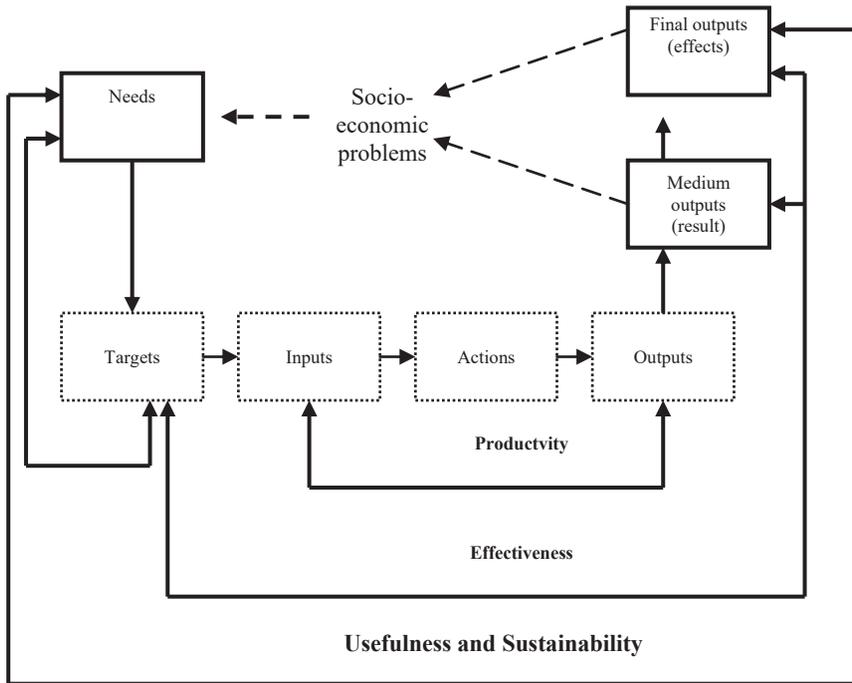


Figure 1. The Change Caused by the New Public Administration Approach (Pollitt, Bouckaert, 2002)

With the new management approach, needs shaped by socio-economic problems determine the goals. Resources are included in the process to achieve the objectives. Then actions and activities are carried out. What is essential, rather than the output achieved, is the achieved results and the effects of these results. These results and effects are again shaped by problems and determine new needs. The important thing here is the connection between goals and needs. The relationship between inputs and outputs shows 'efficiency', the relationship between goals and effects shows 'effectiveness', and the relationship between needs and final outputs (effects) shows 'usefulness and sustainability'.

4. Restructuring in Turkish Public Administration

Reform efforts in Turkish public administration have a history extending to the Seljuk Empire and the Ottoman Empire. This study deals with reform efforts starting from the post-Republic period in terms of the actuality of the subject.

Similar developments to the ones around the world are observed in the Turkish public administration reform efforts. The excessive growth of the public administration, its being cumbersome, uniformity in service provision, increased bureaucracy, excessive centralization, increase in public expenditures, decrease in resources, deficit budget, lack of trust as a result of performance and strategy deficits have made reform in public administration mandatory.

Along with similar problems in Turkish public administration, the necessity of a change in public administration has always been emphasized. It is possible to consider these reform efforts in two periods, the Planned Period, which includes the years 1923-1960, and the Post-Planned Period, which includes 1960 and after. It will be useful to evaluate the post-planned reform efforts in periods within itself in terms of comparing the efforts (Ateş, Banazılı, 2019; Genç, 2019; Eren, Aydın, 2019; Özer, 2005; Sobacı, 2014; Avaner, 2020; Eryılmaz, 2018)

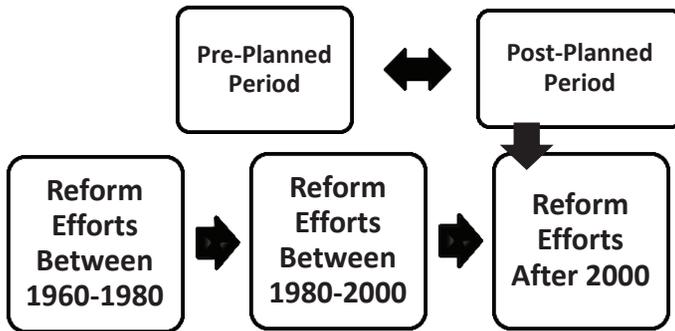


Figure 2. Turkish Public Administration Reform Efforts

4.1. Pre-Planned Period in Turkish Public Administration

It is possible to start the reform efforts for the development of Turkish public administration with the Civil Servants Law No. 788 dated 1926. With the first legal regulation of public personnel management, steps started to be taken to improve public administration. However, it is the foreign expert reports that left their mark on this period. In this period, starting from 1949, foreign experts in

Turkey were asked to prepare reports on determining the problems of the public administration and proposing solutions. The prominent among these reports are Neumark, Barker, Martin and Cush, Leimgruber, Dantel reports. In these reports, similar problems regarding public administration were pointed out and different solution proposals were included. It is possible to show these problems as follows:

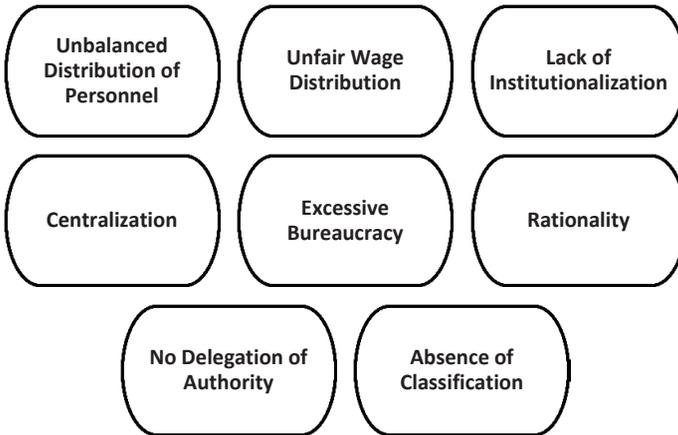


Figure 3. Problems of Turkish Public Administration

Excessive growth, excessive centralization, increasing bureaucracy, lack of delegation of authority, and the existence of problems related to personnel management in public administration are mentioned.

Regarding the solutions of the problems, the following suggestions are provided:

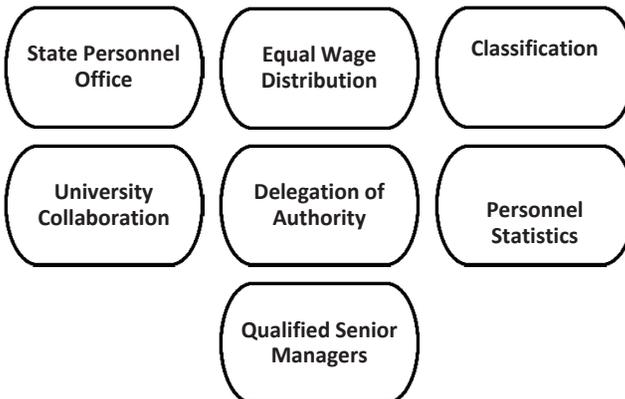


Figure 4. Solution Proposals for Turkish Public Administration Problems

In the expert reports, in order to overcome the problems of the public administration, it is emphasized that the delegation of authority should be implemented as soon as possible, the reform of the personnel management must be made, the wage regime should be updated, bureaucracy should be reduced and importance should be given to the training of qualified public managers.

4.2. Post-Planned Period in Turkish Public Administration

With the establishment of the State Planning Organization in 1960, the planned development period started.

4.2.1. Period between 1960-1980

Expert reports were included in the reform efforts carried out in this period, and projects carried out in cooperation with TODAİE and DPT were also included. Among these projects, MEHTAP (Central Government Organization Research Project) was one of the most comprehensive efforts. In this report, the suggestions similar to those previously mentioned were included. One of the most important developments in this period is the Civil Servants Law No. 657 dated 1965. With this law, there has been an important development especially for the development and improvement of public personnel management.

4.2.2. Period between 1980-2000

The effect of neoliberal policies that started in the 1980s and the minimal state understanding brought along with the new right wing understanding also affected the Turkish public administration. Especially in this period, KAYA (Public Administration Research Project), which was prepared in 1991, carries the traces of the new public administration approach. Reducing bureaucracy, focusing on efficiency, quality and speed in public service delivery are among the prominent features of this period.

4.2.3. Reform Efforts After 2000

The period after 2000 can be considered as a new page in the reform efforts in Turkish public administration. While the reports and the suggestions in these reports are emphasized in previous efforts, post-2000 reform efforts are seen as more concrete and law-based efforts. Three titles regarding public administration reform included in the Emergency Action Plan prepared in 2003 determine the

direction of these reform efforts. It is seen that a large structural and functional reform package has been prepared in the public administration with the reform targets in the central, local and personnel management, and these reform efforts have been put into effect by being supported by laws beyond the suggestions .

As a result of the referendum held in 2017, within the post-2000 reform efforts, the Presidential Government System was accepted. Since 2018, the Presidential Government System has been put into practice. In this context, Turkish public administration has undergone a great structural and functional change. Significant changes have occurred in the central administration and decentralization organizations. The new system reveals a new management model that is simple, decreasing the authorities, adapting rapidly to innovations, allowing the development of human resources, with clearly defined areas of authority and responsibility, fast decision-making processes, which is highly competitive, participatory, targeting digital transformation. The capital organization of the administrative structure of the state was reorganized under the name of the Presidential Organization, which is subordinate to the president, using the executive power alone (Koçak, 2021; Akıncı, 2019; Sobacı, Köseoğlu, 2018; Gezici, Kutlu, 2019).

With the change in the public administration structure with the new system, the presidency general secretariat was abolished and replaced by the administrative affairs department. In addition, etat major and auxiliary units were established at the point of effective and productive provision of public services through the presidency and “offices”. The number of ministries was reduced, “policy boards” were formed according to their subjects and it was aimed to determine and follow up public policies that would guide the executive power. The new organizational structure has been brought together as rationally as possible while fulfilling political and administrative tasks (Sobacı, Köseoğlu, 2018: 1-6).

The new system brings along a management approach that shifts from traditional public administration to business management. Among the prominent features of the new system are the appointment of managers from the private sector in senior management appointments, emphasizing the multi-actor management approach with offices and policy boards, and emphasizing an accountable and transparent management approach.

In fact, the new system is important for the implementation of the recommendations expressed in foreign expert reports in the 1950s. However, the fact that a period of almost 70 years has passed constitutes one of the biggest problems of the Turkish public administration.

5. Current Problems of Turkish Public Administration

The reason for giving information about the reform efforts in Turkey by making a general evaluation on the change of public administration is to be able to make an evaluation regarding the reform efforts carried out in the Turkish public administration. Considering the reform efforts that have been going on for nearly a century in Turkey, it is seen that there are still ongoing problems. It is possible to summarize these problems as follows:

Period before 2000

- Reform efforts are mostly carried out in the form of government policies. They could not be made into a state policy.
- Reform efforts could not be supported by public policies.
- Short-term solutions have been produced instead of long-term works.
- Continuity could not be achieved much in reform works.
- Reports were mostly prepared in reform works, but there were delays in their implementation.
- The sequence of mind, organization and legislation followed in reform works could not be implemented. First of all, laws were enacted and it was thought that with the enactment of laws and with new institutions the reform works would be successful.
- Due to the political changes, there were pauses in the reform efforts and the efforts were resumed from the beginning, not where they were left off.
- As one of the most important areas of reform in public administration, reform efforts in public personnel management lagged behind.
- External dynamics rather than internal dynamics and social expectations shaped reforms.
- Cooperation between actors, which was desired in reform efforts, was not achieved.

Period after 2000

- Reform efforts have continued by enacting laws.
- Reforms could not be widespread at the level of senior management and implementers, and the reform in minds could not be carried out as desired.
- Although the citizen-oriented management is emphasized, the citizen has been left out of these reform efforts.

- There are still deficiencies in the inspection and enforcement of innovations.
- A new public management approach is implemented, but the traces of traditional public administration continue in the current legislation.
- The influence of international organizations can be felt significantly.
- Problems regarding merit persist.
- While new applications (such as performance evaluation) are in practice, deficiencies persist.
- Existence of laws is not very effective in implementing reforms.
- There is a lack of supervision and sanctions in the absence of full implementation of regulations in the laws.
- Offices and policy boards are particularly important for the implementation of multi-actor management, but ongoing problems in implementation stand out.
- Despite the regulation of public administration within the framework of the new public administration, traditional public administration, which has become chronic, continues to manifest itself.

6. Solution Proposals for Turkish Public Administration Problems

Suggestions for the solution of these problems should be complementary and continuous:

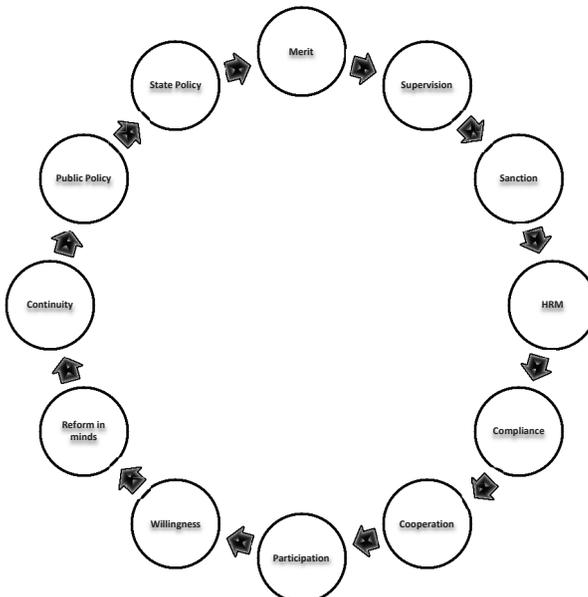


Figure 5. *Solution Proposals for Public Administration Problems*

For a reform to be successful, a complementary and continuous cycle is needed.

- First of all, time should be taken into consideration. Reforms are not changes that happen in a short time. In Turkish public administration, time is needed for the implementation results of the latest Presidential Government System.
- But as important as time is the willingness that must exist for the success of these reforms. All staff members, from the top management to the lowest, must be willing for the implementation of these reforms.
- Another issue that is as important as the willingness is that this reform requirement must first live in the minds of decision-makers and implementers. Otherwise, reforms will not go beyond just enacting laws and creating new institutions.
- Another important factor in the success of reforms in Turkish public administration is the need for harmony between theory and practice. Although they are included in theory, due to the difficulties experienced in practice, the arrangements made remain only on paper.
- Merit is the most important factor affecting the success of reform efforts in public administration. Decisions to be taken and the implementation of these decisions should be carried out with competent personnel.
- The reform efforts in Turkish public administration should be transformed into a state policy. Even if different ideologies have come to power, as in the examples in the world, without political polarization, the practices of the previous government should be maintained and continuity should be ensured.
- Digital transformation should be followed in accordance with the requirements of the digital age. The digital transformation office can be considered as one of the important steps taken in this regard.
- Human resources management should be given importance. Again, the Presidency Human Resources Office is seen as a positive step in this regard.
- Public policy analysis should be among the main issues. Presidential Policy Boards have been established for this purpose. As mentioned above, the main issue is that these reforms should not be limited to only establishing new boards and that these boards should actively carry out projects.

7. Conclusion

From the first half of the twentieth century until the second half, the state was solely responsible for the production, provision of public goods and services, determination and execution of personnel policies, together with the understanding of the welfare state. Increasing population and differing needs have further increased the responsibility of the state. The gradual decrease in public resources in the face of increasing needs revealed the budget deficit. The resulting budget deficit showed that correct planning could not be made, and the strategic deficit emerged. As a result, there occurred a failure of public administration. As a result of all these developments, the trust of the citizens in the state started to decrease and the lack of trust became a serious problem.

In addition to these deficits, the increasing responsibility and increasing burden of the state made the public administration cumbersome, slowed down the service delivery, caused waste in resource use, and negligence and violations started to increase.

While these negativities were experienced, with an economic crisis experienced at the end of the 1970s, the role of the state in Britain and the United States of America began to be questioned again. With the influence of the New Right movement, the understanding of the welfare state has left its place to the understanding of the minimal state together with neoliberal policies and neo-conservatism.

With the changing role of the state and the paradigm change in public administration, traditional public administration has left its place to the new public administration. Instead of the traditional public administration based on the Weberian bureaucracy understanding, a new public administration approach similar to business management has come. The centralist, hierarchical, formal, prescriptive, closed, rigid administration of traditional public administration has been replaced by the decentralized, heterarchical, flexible, open, informal new public administration.

These developments in the world have also affected the Turkish public administration. In Turkish public administration, the centralized, formal, hierarchical and bureaucratic structure of the public administration has caused serious problems. It has caused corruption, slowness and clumsiness in public administration. In Turkish public administration, efforts to improve public administration began to change especially after the 1980s with the effect of neoliberal policies.

Developments in Turkish public administration, especially after 2000, can be considered as more concrete steps towards the solution of public administration problems. Works involving major structural and functional changes beyond just projects and suggestions have been carried out.

The most important of these developments was the Presidential Government System, which was put into practice in 2018. With the new system, the organization and administrative structure of the Turkish public administration has changed.

The new system, designed with a management approach similar to business management, is a radical change for the Turkish public administration. The important thing is to ensure the continuity of this change. When we look at the problems that arise in the Turkish public administration today, it is seen that there is a public administration between traditional public administration and business management. Although the legislation has been renewed, the laws that show the effect of traditional public administration are still in progress. Partial changes have been made on the existing laws, but there are problems in practice because they cannot be implemented in a holistic way. The innovations in the theory should be reinforced with practice.

It is necessary to ensure the functionality of the structural changes brought by the Presidential Government System. Especially with Presidential offices and policy boards, it is important to realize a participatory, common-minded, simple, cooperative administration. Unless this change occurs, it is inevitable that the ongoing problems in public administration will continue. The arrangements made should not only remain on paper, they should be supported with projects and the implementations should be increased. In addition, it is important to carry out inspections regarding applications and to impose sanctions when necessary, in terms of increasing functionality.

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CHAPTER IV

WHAT IS THE RELATIONSHIP AND LINK BETWEEN PUBLIC ADMINISTRATION AND INTERNATIONAL RELATIONS: A REVIEW OF PUBLIC POLICIES

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1. On the Relationships Between the Public Administration (PA) and the International Relations (IR)

This study has been prepared to demonstrate the links and correlations between the disciplines of the PA and IR and to discuss how should establish and regulate these relations on these branches of the science. The links are so strong between the PA and IR than expected and contrary to the existing understanding. Both of them has been derived from the evolution of the political science during the centuries. In other words political science (PS), PA and IR are close to each other even though they have different topics and methodologies. Nowadays PS overtakes the role of cement between two disciplines in line with it is the common roof of the both discipline. In this perspective, it is possible to argue that the PS is a scope of research unifying the PA and IR and creating a link between them coherently. Therefore, it is compulsory to use the peculiarities of the PS while analyzing the connection to share the both discipline.

When attempted to display the tie between the PA and IR, it is necessary to initiate the mission from the changing role and definition of the PA in recent days. For the end of the 1970s the system approach gives the important clues relevant with the research area of the PA. The discussions initiated under the shadow of the international system debates have been reflected into the PA and drastically changed and transformed the literature of the practice and theory apparently. The debates on New Public Management Movement (NPM) and the Public Policies Analysis (PPA) which have been taken part in literature in these years enhances new openings in theory and practice and strengthen the existing ties with the IR. For this reason the relation between two disciplines has more than suspected. In this context, the aim of this study is to put forward the relations between two disciplines within the frame of the NPM and PPA.

2. The Nature of the Public Administration

The PA comprise of two terms as administration and the public. With its simplest definition the administration means the governance of an institution in a most proper way. Public also corresponds to the entire entity of the people living in a country and accessible service by all people and an existence belonging to everybody. While unifying these two terms we come conclude a definition that the PA is the governance of the entity which belongs to people and accessible by every people. It is certain that the governance of the entity which belongs to people and accessible by every people is possible by means of an organization determined its frame before. This organization has been called in literature as state. In this case the PA is a body placed within the state. The discussions on the definitions and the functions pertaining with the state has prolonged during the centuries. All states owned an organized PA without any exception in every century and geography. Then the PA is the natural extension of the state as the upmost institutional structure.

Actually there is a huge compromise and common reconciliation on the idea that the PA takes part within the state body and has a relation with the politics somehow. Briefly the politics regarded as the private consideration and understanding relevant with the art of the regulating and executing the state affairs transformed into a scope of the academic discipline together with Aristo. It is apparent that the PA kept its existence within the PS tenuously during the centuries. However the PA distinguished from the politics since the 17th century

gradually and turned into an independent branch of science in progress of time. As a matter of course, the evolutionary development processes of these two disciplines have been realized on the differentiated terms and concepts. The PS focused mostly on the notions related with the fundamental issues of the national politics towards to modern times such as state, class, power, government, political party and democracy. The PA, apart from the PS, concentrated over shaping and implementing the public policies together with the administrative organization and finance, and administrative issues of the public sector. Nevertheless, the correlation between two branches of the science never ended.

It is also mostly accepted that the correlation between two branches, as the PA and PS, paved way rising of the international relations (IR) in 19th century. In fact, the rise of IR is mostly relevant with the transformation of the mechanism called as the state even though the emergence of the IR associated with the institutionalization of the western diplomacy initiated with the Westphalian system. Definitely the state was attributed the unexpected meanings during the last century. As a matter of fact, the debates on the international system accelerated at the end of 19th century have a private position in this attribution process. The discussions of international system have been embodied immediately the aftermath of the WWI and as a result of this embodiment the League of Nations has been emerged as the first supra-state organization. In other words, the development of the politics in international platform led to the establishment of the supra-national organizations successively. As such the causes and effects of the WWII are consisting of the chain of events which made the supra-national organizations permanent. The United Nations (UN) has been established immediate after the two world wars in 1945 is the umbrella of the kind of universal organizations as the first example. In fact, this umbrella has been widen and enlarged during the Cold War and eventually become permanent in a new millennium.

3. The Paradigmatic Transformation in Traditional Public Administration: The Rise of the New Public Management Movement (NPMM)

In a classical period when the PA has been accepted as a branch of the science the commonly shared idea is the necessity of separation of PA from the PS with the clear lines and that the government executives must keep away from the politics

absolutely (Gültekin, 2012:87). The traditionalist school which takes the politics away from the administration was depended upon the idea that the government executives must keep away from the politics absolutely. While the formulation and the production of the public policies is the duty of politicians, the execution of the produced policies is the duty of the government executives ideally. Thus the public executives stay away from the manipulation of the politics on the one hand, the productive and impartial public services will be provided on the other hand. However, the mostly known academicians such as Gulick, Simon and Waldo rejected this idea in traditional period with their famous narratives. For instance, while Gulick asserted that this separation will create a weak public administration, Simon put forward that this separation will not be logical and reasonable (Gültekin, 2012:88). Waldo uphold the PA is a branch of science which has risen within the scope of the NPM and the determination of the public policies in a realistic way will not be possible with the idea that the government executives must keep away from the politics absolutely (Waldo, 1948:23).

The idea and approach that the public policies are require to be evaluated together with the government executives had transferred to a new stage in seventies within the traditionalist debates in line with the emergence of the New Public Management Movement (NPMM). In general terms the New Public Management Movement (NPMM) had an understanding to emphasize the social equality and the inclusion of the different segments of society into the decision-making process of the public administration. No doubt the NPM is directly relevant with the drastic transformation of the welfare state. At the end of the seventies increasing crisis in the welfare state led to the downsizing of the state, its restructuring in optimal level and thus, the decreasing the public expenditure which had an increasing trajectory before. In this period of time, the downsizing of the western public institutions and the tackling of the public problems in market-oriented manner was classified within the paradigmatic changing of the understanding for the NPM. At the same time the NPM has emerged as an approach giving priority to the human management and being determined by the resources, programs, administrative activities, processes and regulations (Ömürgönülşen, 1997:520).

Generally two important changing ideas are really important determinants in the emergence of the NPM The former is the institutional economy understanding with its peculiarity to emphasize the competition, user choices, openness, transparency and motivation. The latter is the transformation of

the public sector into the competitive private sector and the admittance of the administrative process which depends upon the economic productivity-oriented understanding (Özer, 2005:8). It cannot be said that this process can be preceded by merely politicians because they sometimes may not take logical and reasonable decisions due to their ambitions to be reelected. Therefore, together with the implementation of the NPM model, it can be witnessed that the relations between the politician and public executive become more fluent and more progressive in comparing with the traditional method. The traditional bureaucrat model applying the taken decisions with great punctiliousness and accuracy gave place to the bureaucratic politician moving in coordination with the politician.

Two administrative mentalities lie behind the NPM movement theoretically. The former is the *analytic manner of rule* depends upon the policy analysis and the reference to some economic techniques such as classic cost/benefit analysis. Principally this sense of rule is the system analysis targeting to determine the public policies and programs by means of strategical techniques used in private sector. Thanks to the contribution of new manner of rule the public policies are supposed to be shaped prudentially and carried out the institutional achievement. The latter is defined as political rule. This manner concentrated on the policies of PA moots the stipulation of taking charge the public executives in shaping process of public policies. The dividing line in this manner of rule defended by the NPM is the tools of policy and orientation apart from the traditional public administration (Özer, 2005:16). It is possible to add the liberal and market-oriented manner of rule into these two mentioned approach. Thus, the PA will turn into the more dynamic and more effective, more influential and more systematic position. This model sponsored by the NPM provides the determination of new strategies in performing the public services on one hand; it creates confusion in the debate of public policy analysis in as much as a new mission attributed to PA with the NPM includes the development of policy within the process of the production of public services at the same time.

4. Public Policies Analysis, Foreign Policy and Public Administration

The foreign policy of a state can be regarded as the spread of the public policies implemented beyond the national borders into the internal sphere. In other

words, it can be asserted that the foreign policy activities are essentially PA activities principally. The politicians who constitute the core of the decision-making process for the government may follow kind of foreign policy trajectories in line with their political targets and within the framework of the determinacy of the internal and external environment. Accordingly the foreign policy is generally perceived as a political attitude and a kind international relations implementation. Nevertheless, the foreign policy activities are the PA activities at the same time because it is required to benefit from the experiences of the expert government executives acquaint oneself with the nature of the IR in shaping the policy argumentations. As a result, the foreign policy is just one of the public policies alone and therefore the foreign policy is a part of PA for these reasons (Kent Brown and Roux, 2003:60). As mention above together with the NPM the public policy analysis which strengthening its position in the agenda entered into the scope of PA studies. In this respect, the political analysts will study mostly on the program choosing processes in spite of their technical engagement and responsibility with the organizational design and feasibility and finally they must focus on choosing the best policy among the different alternatives (Weimer and Vining, 1989:7-9).

First thing come to mind while mentioning about the public policy analysis is the production of public policies in national and regional level. The basis of this tendency was the public services to be determined by the political decision makers and implementing executives as the best alternative. Nevertheless, this faith cannot be acceptable by the NPM perspective because the decision-makers and implementing executives should be taken together in analyzing the public policies in accordance with the environmental and market circumstances in performing the public service in productive and efficient manner. Moreover this requirement is binding and prevailing over all public policy analysis including foreign policy and IR activities as parts of the public services and naturally PA. In other words, the preferences of the foreign policy must be evaluated as the natural part of the public policies. The place of the policy analysis is vitally significant in public policy studies because these studies contribute to bring service to the citizens, solve the problem and to pursue the public policies made in order to realize the determined goals more effectively and produce much more functional yields. In short, the public policy analysis aims to explain the realities, possibilities, ambitions, demands, resources, and needs related with the public policy and process with data base and much more clearly. The public policy

analysis and studies are mostly estimated as practical and empirical researches. Accordingly these analysis are the research studies which seek the observable and measurable public and social phenomenon, the public policies pertaining with them and how, when, why, where and by whom these policies have been developed by means of much more complicated and complex methods and techniques (Gül, 2015: 11).

The public policy analysis is a complex and sophisticated process involving the conceptual studies, the process and analysis of public policy shaping, the theories of the policy setting and decision-making, the causality manners, normative theory, information narrative, policy research and the method and the techniques of the analysis (Gül, 2015:7). Policy analysis aims not only to transform the essence and methods of various disciplines by unifying them in a melting pot but also targets to produce the necessary information in order to solve the problems emerged in a specific policy environment. The public policy analysis contains the policy advocacy in addition to the pure policy recommendation (Knet Brown and Roux, 2003: 68).

It was already and previously mentioned that there are two parts generally in producing the public policy as one of them is the politicians and the other is government executives as well as the balance mechanism between them. Consequently the aforementioned balance analysis is established between the politician and government executive in accordance with the nature of the public policy. For instance, it is seen that the bureaucrats are dominant actors and leading figures in a decision making process related with the internal policy. Otherwise when the subject matters pertaining with the foreign policy come to agenda, the winds changes for the sake of the political actors because the determiners increases in foreign policy affairs as always such as the national and international environment, ideologies, domestic legal order, expectations, promises, voter initiative.

The foreign policy is a subject matter of the PA as those of the domestic policy. Many kind of policy analysis can be committed on the foreign policy due to the fact that it has some restrictions in comparing with the domestic policy. The foreign policy as an institutional process is made and applied by the foreign ministry even though it has different names such as the department of state, foreign office and the ministry of foreign affairs (Kent Brown and Roux, 2015:80). In general the foreign policy affairs concentrate on establishing the security and sovereignty of a state and maximizing its interests with peaceful

means by installing the diplomacy. The versatility of the aims and targets doesn't remove this peculiarity of the foreign policy indeed (Plono and Olton, 1969:127-130). It is seen that the public policies regarded as the foreign policy is prepared in association with the domestic policy. Substantially some domestic policy issues also are constructed together with the foreign policy such as the environment, tourism, health and transportation policies. Consequently the foreign policy of a state must be addressed in accompanying with its domestic policy targets.

Contrary to what is believed the foreign policy analysis are foreseeable and predictable. What is to bear in mind that is whether the foreign policy produced within the institutional space or not. Apparently a policy cannot transform into a public policy as far as adopted, implemented and executed by some state institutions (Dye, 1981:20-22). This is because all produced policies are legitimized by way of state approval all over the world. In fact the methods of the political powers are the same throughout the n-modern world. Exactly like the domestic policy, the foreign policy refers the same procedures. Primarily a political power acts upon its ideologies, expectations and the voter choices in determining the foreign policy alternatives.

The second stage of the foreign policy determination is the process of being added to agenda of the government or cabinet. The government as the executive body of policy creates the level to transform the idealized policy into the implementable and executable reality. That is point of touching with the government executives. Nevertheless in this point their roles are to provide a balance among the technique information such as the law, foreign policy and other tools and instruments. Top level government executives have limited role in policy making and the primary decisions are taken by the ministers and senior officers.

The other stage in foreign policy analysis is the making process of the executive policies (Botes at all 1997:311). In this stage which is defined as the operational policy determination process all activities are directly relevant with the PA scope. This stage, at the same time, is the implementation aspect of the public policies in which a foreign policy taken in this phase can be justifiable. Nevertheless, it is to bear in mind that the efficient foreign policy analysis can be made just in process of determining its results.

As an overall tendency, the previously public announcement of the produced public policies is a traditional implementation as those of foreign

policy. However mostly the disclosure and presentation of the foreign policy decisions have different procedure because they have secret and authoritarian characters. For this reason, foreign policy analysis is made not previously but retrospective and over its results.

It is essential to produce dynamic policies directed to implement the interpretation of the relatively constant national interest within the framework of the rather variable factors for the international fora in order to make an efficient policy in the foreign policy. The efficient foreign policy process has been made by the definite steps. Briefly they are:

- to constrain the subjects of national interest with the previously determined aims and targets
- to specify the international and local/regional situational factors concerned with the policy aims and targets
- to identify a plan (or strategy) for the sake of serving the state capabilities to tackle with the variable pursued for arriving the targets
- to undertake the necessary activities
- to review and evaluate the taken progress for reaching the demanded results periodically (Plano and Olton 1969: 127-128). During almost all procedures the government executives/PA and politicians are bound to take joint action in producing foreign policy.

It will be evaluated the produced foreign policy argumentations in coordination with the politicians composing the executive body entirely and government executive within the perspective of public policy analysis.

5. Conclusion

In nowadays social sciences realm the fields of interest and specialized topics for every discipline increased but the distance between them not correspondingly increased but decreased. Nevertheless the increase in the subject of study of social sciences prevents informing the researchers from each other. In this context, this study has been allocated to analyze the main points of connection and intercourse between the PA and IR in many respects. Both PA and IR are state-oriented even though they seem taking part in poles apart. In other word the resources of them are state. Therefore they may come together in many

subject matters of study related with the state such as public policies and NPAM only two of them. Accordingly the NPAM has accumulated to the notion of the globalization by gaining a dynamic process for the PA and the public policies have compounded each of two disciplines within a common analysis and evaluation perspective. On the basis of the institutionalized dimensions of these two disciplines, it is possible to have connection and make familiar with them in various aspects.

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CHAPTER V

COORDINATION AS A RESPONSE TO WICKED PROBLEMS AND TRANSBOUNDARY CRISES

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1. Introduction

Coordination is one of the oldest and fundamental topics in public administration and policy. However, as public administration has become an increasingly multi-actor and multi-level entity, cross-boundary working and coordination across levels of government and policy sectors is becoming increasingly important (Christensen, Danielsen, P. Læg Reid & Rykkja, 2016, p. 317). There has been increased interest in the concept of coordination by practitioners and researchers since the early 2000s. The reason for this can be seen as a reaction to NPM that have produced too much fragmentation, self-centered authorities, and a lack of cooperation and coordination by focusing on performance management, single-purpose organizations, and structural devolution, hence hampering effectiveness and efficiency of public sector and public services (Christensen & P. Læg Reid, 2007).

Especially the Anglophone countries (UK, Australia, New Zealand, Canada) have initiated reforms in response to the problem of increased fragmentation of the public sector and a wish to increase coordination capacity. All these initiatives, usually used interchangeably, are labelled as: Joined-Up Government “JUG” (Bogdanor 2005; Ling, 2002; Pollitt, 2003) that primarily applied in British settings; Whole-Of-Government “WOG” (Christensen & P. Læg Reid, 2007) that most commonly used in Australia and New Zealand; Horizontal Government

“HG” that associated with Canadian public administration. Collectively, these approaches all describe a broad range of coordinating and integrating public sector management mechanisms operating at a number of levels (Hunt, 2005, p. 4). A commonly held notion is that more coordination will enable more efficient and/or effective policy development and implementation, service delivery (Christensen, 2012; Christensen and Læg Reid, 2007; Ling, 2002; Pollitt, 2003). Moreover, reform initiatives to increase coordination capacity in many countries were closely linked to tackling wicked problems (Askim, Christensen, Fimreite & P. Læg Reid, 2009; Bogdanor, 2005; Christensen & P. Læg Reid; 2007; Halligan Buick & O’Flynn, 2011; Pollitt, 2003) and an effective response to especially transboundary crises (Christensen & P. Læg Reid, 2007; Christensen, Danielsen et al., 2016; Halligan & Adams, 2004).

This paper focuses on the importance coordinated efforts among various actors, such as government, public agencies, and social actors, in tackling wicked problems and responding more effectively to transboundary crises. Building on theoretical insights and empirical findings in, public administration, disaster and crisis management studies, its goal is to reveal the factors that make coordination difficult and to investigate coordination mechanisms that be used enable horizontal and vertical coordination effectively. The article is organized as follows: First, it explains the notion of coordination, its different dimensions and basic mechanisms. Second, it explores coordination arrangements and mechanisms as a response to wicked problems. Third, it explores basic coordination mechanisms as a response to transboundary crises. Finally it identifies some implications.

2. The Notion of Coordination

Coordination is a concept that can be defined different forms. One can distinguish between governance-centered approaches focusing on policy processes and implementation, and government-centered approaches focusing on coordination and the institutional and organizational dimensions (Christensen, O. M. Læg Reid & P. Læg Reid, 2019; Tosun & Lang, 2017). This paper tends towards the second approach. Some definitions of the concept of coordination are:

“adjustment of activities and decisions among interdependent actors to achieve specified goals” (Koop & Lodge, 2014).

“mutual adjustment between actors or a more deliberate interaction produces positive outcomes to the participants and avoids negative consequences” (Lindblom, 1965, p. 23, 154).

“the instruments and mechanisms that aim to enhance the voluntary or forced alignment of tasks and efforts of organizations within the public sector. These mechanisms are used in order to create a greater coherence, and to reduce redundancy, lacunae and contradictions within and between policies, implementation or management” (Bouckaert, Peters & Verhoest, 2010, p. 16).

These definitions provide us to identify coordination. Coordination can be regarded as both a process through which decisions and activities are brought together and an output when to equate coordination with success and the lack of it with failure (Alexander, 1995, p. 5). Coordination can thus be seen as a strategy that seeks to alignment and adjustment of tasks and efforts of organizations and actors in policy making or implementation in order to achieve a predefined goal, such as tackling a wicked problem.

A number of other terms such as cooperation, collaboration, and integration are often used synonymously with coordination. However, though coordination and these terms are related, they are quite distinct. While cooperation involves less formal and short term interactions, sharing information and little risk, coordination involves more formal and longer-term interaction, increased risk, and shared rewards (Bryson & Crosby, 2008, p. 55–57). While collaboration implies voluntary working together in an interactive process, coordination is not always produced based on agreements, but rather can be the result a coercive mechanism (Bouckaert et al., 2010, p. 17). Therefore, collaboration can be seen as a mechanism of coordination or as enabler of coordination (Halligan et al. 2011), which may produce coordinated action as a result (Gray, 1989, p. 14-16). Integration of working practices and organizations is particular instruments within coordination strategies that sometimes are considered to be more radical than coordination (Bouckaert et al., 2010, p. 18).

There are different dimensions of coordination such as horizontal and vertical coordination or positive and negative coordination. Vertical coordination is concerned with coordinated efforts or structures between different levels of a government. For example, it occurs “where a ministry coordinates its actions

‘upwards’ with EU institutions and ‘downwards’ with local authorities” (Pollitt, 2003, p. 37). Horizontal coordination refers to forms of coordination between organizations units that are not in any hierarchical relationship to one another, such as between ministers. Post-NPM reforms such as JUG or WOG initiatives are mainly horizontal dimension oriented (Pollitt, 2003; Christensen, 2012). These reforms have led to the establishment of new organizational units such as cross-departmental units with the main purpose of getting government units to work better together in policy areas in horizontal dimensions. While positive coordination involves pursuing and utilizing joint strategies, “negative coordination occurs when decisions made in one program or organization consider those made in others and attempt to avoid conflict” (Peters, 2018, p., 2). In an administrative system with strong line ministries, departmentalization and silo arrangements, coordination is often limited to ‘negative’ coordination (Christensen, P. Lægneid & Rykkja, 2015, p. 355).

There are different mechanisms that be used to enable coordination in the public sector. Several typologies are to be found in literature on coordination mechanisms: hierarchical, market and network coordination (Bouckaert et al., 2010); hierarchical, network and collaborative coordination (Peters, 2018); networks, partnership and multilevel governance as supplementing of hierarchical and market coordination mechanisms (Christensen, 2012). In the light of these typologies in the literature, coordination mechanisms can be categorized as hierarchical, market and collaborative (for example, networks, partnerships and multilevel governance) mechanisms.

Hierarchical coordination is the traditional coordination mechanism in public administration that refers to a top-down style coordination. This mechanism primarily concerned with strengthening or reassertion of central government (Christensen & Lægneid, 2007). The center of government has a very large repertoire of structural instruments in hierarchical coordination including central agencies – meaning organizations that supervise and support line agencies –, cabinet committees, junior ministers, super ministries, czars (Peters, 2018: 6-7). Hierarchical coordination can also be enhanced by bringing related activities together by merging organizations. Merger is an extreme level of coordination, where is erased organizations and is replaced of them with new entities (Askim et al., 2009, p. 1008).

Market coordination mechanisms are based on competition and exchange between actors, aiming to create incentives for performance (Bouckaert et al.,

2010, p. 66). Bouckaert et al. (2010) states that “although markets establish ‘spontaneous’ coordination among the market participants, governments can ‘purposefully’ create and guard markets (for example, internal and quasi-markets) to foster coordination by competition among organizations” (p. 66).

Collaborative coordination mechanisms occur mostly through individual interactions and bargaining between the actors involved, which are included network, partnership, multilevel governance mechanisms or softer collaborative instruments such as information sharing, dialogue. Network mechanisms provide coordination by bringing together independent organizations or actors in interactive structures. Networks are neither markets nor hierarchies— they are based on shared values, negotiations, mutual interdependencies and trust, not on a formal authority relationship or on competition and economic exchange within a market (Jackson & Stainsby, 2000, p. 12). Network arrangements are devised to forge coordination when a hierarchical mode of coordination is less viable (Christensen, Danielsen et al., 2016, p. 318). Network structures can occur among civil servants or public agencies and between social actors and government. While most cooperative networks grow ‘spontaneously’ between organizations, governments may create, take over and sustain network-like structures between organizations (Bouckaert et al., 2010, p. 66). Network mechanism scores high on adaptability and flexibility, but accountability may be reduced and ambiguous, and steering may be more difficult (Christensen, 2012, p. 7).

“Partnership” as one of the mechanisms of collaborative coordination makes organizations work together on a shared agenda while keeping their own organizational identity and purpose (Ling, 2002, p., 625). Partnerships may vary in shape from temporally limited structures (e.g., connected to projects) and structures with unclear formal status, to permanent and legally mandated structures (Askim et al, 2009, p. 1008). They can occur as inter-departmentally, inter-governmentally or cross-sectorally. Even though partnerships often are defined based on collaboration between equal partners, one partner can be stronger than the others, for example, where in partnerships between levels of government central government will in many cases be the senior partner and local government the junior partner (Fimreite & P. Læg Reid, 2009, p. 283).

Multi-level governance is a system of continuous negotiation among nested governments at several territorial tiers-supranational, national,

regional, and local (Marks, 1993, p. 392). The concept contains both vertical and horizontal dimensions. ‘Multi-level’ referred to the increased interdependence of governments operating at different territorial levels, while ‘governance’ signalled the growing interdependence between governments and nongovernmental actors at various territorial levels (Bache & Flinders, 2004, p. 3). In multi-level governance, tasks can rarely be treated independently of each other, the different levels have to collaborate, and coordination between levels is an important precondition for coordination between sectors (Christensen, 2012, p. 8).

3. Coordination as a Response to Wicked Problems

“Government officials and public managers are encountering a class of problems that defy solution, even with our most sophisticated analytical tools” (Roberts, 2000, p. 1), such as climate change, migration, unemployment, poverty, environmental problems. These problems are called “wicked” (Churchman, 1967; Rittel & Webber, 1973) because their causes are so complex, their solutions are so unclear and there is the lack of agreement on how to be tackled them. Wicked problems cut across departmental boundaries and permeate large systems (Jackson & Stainsby, 2000, p. 13), which cannot be easily resolved through the actions of a single public organization. Their solutions require the co-ordinated efforts of many different agencies and departments in horizontal and vertical coordination dimensions.

Wicked problems also defy the problem solving approaches of both traditional public administration and NPM. They resist deeply to traditional departmental approaches (Bogdanor, 2005) that are unable to cope with the informational demands of ambiguity, complexity and uncertainty as a result of the complex and inter- dependent nature of wicked problems (Halligan et al., 2011, p. 79). Traditional public administration’s focus on functional differentiation tends to create silos or stovepipes, which limit government’s ability to cope with wicked problems, that tend to transcend existing institutional structures (Karré, Alford, van der Steen & van Twist, 2012, p. 98). NPM practices are ill-suited to tackling wicked problems (Head and Alford, 2015). Thus, by the mid-1990s, it became clear that proliferation and fragmentation of the government apparatus in NPM reforms had reduced the capacity to handle wicked issues (Bogdanor, 2005; Christensen & Lægreid, 2013, Pollitt, 2003).

Tackling wicked problems has been one of the main agenda post-NPM reform initiatives such as JUG, WOG and HG since the 1990s (Askim et al. 2009; Bogdanor, 2005; Christensen & Læg Reid; 2007; Halligan et al. 2011, Pollitt, 2003). The main aim was to provide a coordinated and integrated government response to wicked problems. For example, JUG was popularized by the Blair government in UK for ways to address wicked policy problems straddling the boundaries of public sector organizations, administrative levels, and policy areas (Christensen & Læg Reid, 2007). Thus, the major JUG reforms centred around measures aimed at more broadly overcoming the wicked issues. Coordinating policy units close to the centre of government such as the Social Exclusion Unit and the Performance and Innovation Unit were established and ministers were also appointed with cross-cutting portfolio responsibilities, government departments were restructured and realigned to reflect cross cutting issues (Hunt, 2005, p. 8). The Canadian government launched what were labelled HG initiatives from the mid-1990s to tackle policy issues such as innovation, poverty, and climate change (Bakvis & Juillet, 2004). In the Australian context, the WOG agenda was strongly wedded to a renewed focus on these complex or ‘wicked’ problems (Australian Public Service Commission (APSC), 2007). Thus, WOG attempts were made to bring more coordination to such areas as national security, demographics, science, education, environmental sustainability, energy, rural and regional development, transportation, and work and family life (Halligan & Adams, 2004).

These reforms were included both top-down and bottom-up coordination mechanisms in tackling wicked problems. One coordination mechanism that had a clear hierarchical component in their style of “joining-up” was to adopt a rather aggressive top-down style in implementing WG initiatives and a strengthening or reassertion of the center (Christensen & Læg Reid, 2007, p. 1061). The hierarchical strengthening of the center has led to a stronger core government as seen in the UK, Australia, and New Zealand and also implied stronger audit systems, tightening up financial management and strengthening governance and accountability regimes, as in Canada (Christensen & Læg Reid, 2013, p. 558). The main focus “is on ways of empowering central government to regain control of the various horizontal and vertical levels of administration, ensure effective cooperation across organizationally fragmented and functionally specialized departments and agencies, and provide policy coherence across jurisdictional boundaries” (Daviter, 2017, p. 575).

Post-NPM reforms are often seen as related to working together in a collaborative (or cooperative) effort, such as the use of networks and partnerships that involve all levels of government and sometimes social actors. According to Pollitt (2003) “JUG is cooperative, not something that can be imposed from the top down – not even with the unusually strong central powers possessed by UK central government” (p. 46). Collaborative coordination efforts were observed especially the case in Canada, where working horizontally has been an issue of ongoing importance since the mid-1990s, and in WG reforms in New Zealand, where collaborative service delivery was between the ministries and departments involved in inter-sectoral task forces, programs, or projects, or specialized agencies (Christensen and Lægreid, 2007, p. 1061). Collaborative efforts in tackling wicked problems can also be seen in Australia. The collaborative manifesto was embodied in the “Connecting Government Report” released by the Management Advisory Committee (MAC) in 2004 and this was followed in 2007 by the “Tackling Wicked Problems Report” released by the APSC (Halligan et al., 2011, p. 86). The report focused on working across organisational boundaries at the Australian Government level and making connections outside the Australian Public Service with community organisations, businesses and other jurisdictions (APSC, 2007, p. 21).

Some of the studies focusing on tackling wicked problems in the public administration and policy literature draw on JUG, WOG and HG approaches (Askim et al. 2009; Christensen, Fimreite & P. Lægreid, 2014; Christensen & P. Lægreid, 2013; Lægreid & Rykkja, 2015; Pollitt, 2015). These studies suggest that effective coordination and integration can assist to address wicked problems. For example, Pollitt (2015) emphasized the need for a high level of coordination and partnership between different public institutions and sectors in the development and implementation of successful mitigation and adaptation policies regarding climate change, which is a super wicked problem. Lægreid and Rykkja (2015) showed that horizontal (inter-sectoral) and vertical coordination (between central government and local government) mechanisms play central roles in tackling wicked problems. They addressed the question of coordination by comparing two recent reform schemes in Norway: internal security and the welfare administration that in both cases, reorganization and structural changes resulted in hybrid and complex organizational arrangements. While the welfare administration reform tried to solve a tension between ministerial responsibility and local self-government by introducing One-stop-shops, within the area of

internal security, coordination problems related to lacking ministerial capacity was tackled by introducing a formal principle of collaboration, a lead agency approach and network arrangements (p. 475). They concluded that effective coordination might ease wicked problems by enhancing the understanding of the problem and, increasing the probability of finding agreed-upon solutions and help implementation (p. 475).

While effective coordination is important in tackling wicked problems, there are some administrative, structural and political challenges in the successful implementation of coordination strategies. Administrative and structural challenges are about tensions between coordination and success of performance management, ambiguous of accountability relations, deeply embedded bureaucratic characteristics, high costs and time-consuming processes, unintended risks, ambitious agendas, and uncontrolled consequences (Ling, 2002; Christensen et al. 2014; Christensen & Lægreid, 2007; O'Flynn et al. 2011, Pollitt, 2003). Political challenges are about to political conflicts, and discussions on centralization-autonomy between central government and local governments, and uncertainty in the distribution of tasks (Lægreid & Rykkja, 2015; O'Faircheallaigh, Wanna & Weller, 1999; Peters, 2018). It is argued that the JUG approach is more difficult to successfully implement in federal countries because of involving a large number of government and governance levels (O'Faircheallaigh, Wanna, & Weller, 1999). For example, in federal systems, if different provinces or states are controlled by political parties other than that in control at the national level, there may be coordination problems (Peters, 2018, p. 5). Also, some political conflicts and discussions on centralization-autonomy between central government and local governments make vertical coordination and integration difficult (Lægreid & Rykkja, 2015).

Some examples of coordination failure are caused by such difficulties have been explored in the relevant literature. In their article, Askim et al. (2009) reports a case study of major reform in the Norwegian welfare sector, involving the employment service, the national insurance administration, and the social services. This reform was launched to increase the Norwegian government's capacity to reduce long-term unemployment and exclusion from the workforce (recognized wicked problems in the welfare system) and it involves two common joined-up government reform measures, namely partnerships and mergers. Authors focused on the merger part of the reform that the Norwegian employment and national insurance services were merged in 2006 into a new

national entity, the Norwegian Labour and Welfare Service (NAV is its Norwegian abbreviation). They examine how instrumental problem solving in the reform process was conditioned by external forces, negotiations, and administrative traditions. Their analysis showed that JUG reforms are difficult to implement due to internal and external conflicts and cultural constraints. However, in the implementation process, path dependency and agency-level conflicts of interests struck back and changed the content of the reform (Askim et al., 2009, p. 1023).

Christensen et al., (2014) described and analysed how main challenges have been handled in the first 5 years of the NAV reform. They showed that increasing the capacity of government to cut across existing policy fields and handle transboundary wicked issues are still struggling to be implemented. According to authors this joined-up-government approach poses three main challenges: 1) to get a merged central government agency to work, 2) to establish constructive cooperation between the central and local authorities and 3) to coordinate frontline services with user-oriented employment and welfare offices (2014, p. 439). They first found that cooperation between sectors is easier to achieve than cooperation between levels. The main challenge was to be to establish constructive cooperation between central and local authorities, related to a structural solution that is complex and hybrid. They second denoted that reform counteracted problems with structural and service fragmentation and helped multi-service users, but was probably 'too broad' and complex, creating problems of political control and accountability. They third showed that the challenge of establishing a merged central government agency has, however, been more successfully handled. They concluded that no organizational structure, in this case a new welfare administrative apparatus, has only good or bad aspects or effects (Christensen et al, 2014, p. 453).

How can these coordination challenges be overcome? What can be done? A number of enabling processes or structures to ensure the effective implementation of coordination are presented in the relevant literature. According to O'Flynn, Buick, Blackman and Halligan (2009, p. 248) operating a joined-up model requires: (1) a supporting architecture which resets incentives, provides authority, builds long-term trusting-based relationships, and recognizes and rewards cooperative behaviours, (2) a focus supported by a range of incentives that drive and reward this behaviour, (3) decentralization of power and resources, (4) a craftsmanship approach to leadership, (5) Cultivating and leveraging rich, networked relationships. The MAC report (2004) offers

four enabling structures or processes on working across agency boundaries within the APS: (1) supportive structures and processes, (2) a supportive culture and skills base, (3) facilitative information management and infrastructure, (4) appropriate budget and accountability frameworks. Head and Alford (2015) emphasized that if some changes were made to structures and systems in the public sector, strategies such as coordination and collaboration could be a little more practicable in tackling wicked problems. These enabling structures and processes include: (1) flexible organizational structure, (2) more flexible budgeting and financial systems, (3) more sophisticated or nuanced approach to performance measurement and program evaluation, (4) processes for the recruitment, promotion, and skills development of staff would need to be reconsidered in relation to human resources management.

4. Coordination as a Response to Transboundary Crises

Crisis can be defined as “a situation in which there is a perceived threat against the core values or life-sustaining functions of a social system that requires urgent remedial action in uncertain circumstances” (Rosenthal, Charles & ‘t Hart, 1989, p. 10). A crisis is characterized by uncertainty, severe threat, limited time, and urgent decision making. Uncertainty is the main feature of crises because whose the causes, consequences and possible solutions are simply not fully known in the initial phase of a crisis (Boin & Bynander, 2015, p. 125). Crises are perceived as events in which there is little time for action and require urgent decision making. Although an urgent need for action is perceived, it is not clear what can or should be done. The circumstances in which decisions have to be made are complex, disorganized and dynamic (Christensen et al., 2015, p. 355). Crises also include serious threats that must be managed in order to avoid or minimize the threat. A disaster occurs when the threat has materialized and caused significant damage (Boin & Bynander, 2015, p. 124).

It is clear that many of today’s crises and disasters transcend national borders and policy domains and have become increasingly extreme and transboundary (Ansell, Boin & Keller, 2010; Boin, Busuic & Groenleer, 2014). A transboundary crisis can be defined as a crisis that “affect multiple jurisdictions, undermine the functioning of various policy sectors and critical infrastructures, escalate rapidly and morph along the way” (Ansell et al., 2010, p. 195). Epidemics, financial crises, cyber terrorism, transport bombings, large-

scale natural disasters such as Hurricane Katrina and wildfires are examples of transboundary crises. Transboundary crises are more difficult to manage than other types of crisis and they require transboundary crisis management capacity (Boin et al., 2014). One of the most difficult challenges is to coordinate an effective response across various actors that have never worked together (Ansell et al., 2010, p. 198).

In marked contrast to normal, routine operations, the response to crises often requires the orchestrated coordination of multiple government agencies and other institutions (Christensen & Ma, 2020, p. 20). However, coordination is often problematic during crises and disasters that they pose clear-cut examples of coordination failures. As Quarantelli (1988) has put it, in crises, inter-organizational coordination often is the problem rather than the solution. Moreover, if the larger the scope of a disaster and the greater the number of responders, the less is the likelihood of success (Quarantelli, 1988, p. 83). There are three major coordination problems: (1) lack of consensus among organizations concerning the meaning of co-ordination; (2) strained co-ordination between organizations working on common but new disaster related tasks; and, (3) difficulties in achieving overall co-ordination in a community disaster of any magnitude (Quarantelli, 1988, p. 82). Although coordination is identified as a critical failure in many, perhaps most crises, it is also seen as the solution to such a failure (Christensen, Danielsen et al. 2016, p. 316). Coordination among various actors and organizations during crises is pivotal to crisis management performance (Christensen & Ma, 2020). The efforts of all organizations, and all the people within these organizations, must be coordinated to ensure an effective response (Ansell et al. 2010, p. 198-99). This effective response to crises requires minimum or maximum level of coordination. While at a minimum, crisis coordination involves the timely-sharing of information that different actors involved in crisis management possess, at a maximum, it involves a complete integration of these actors' operations (i.e. in joint command centres and integrated task forces (Boin & 't Hart, 2012).

In crisis management, in maximum level coordination and integration is especially relevant in a transboundary crisis, because such crises can't be solved by organizations working alone (Christensen, Danielsen et al. 2016, p. 317). For this reason, transboundary crisis management can be seen as a typical "wicked problem" (Koppenjan and Klijn 2004), in which coordination between actors and organizations with differing tasks and perceptions is crucial (Christensen,

P. Læg Reid & Rykkja, 2016, p. 891). Most governing procedures and authority structures were not designed with emerging transboundary crises in mind (Ansell et al., 2010, p. 203). Transboundary crises typically challenge existing organizational and management patterns and reveal a mismatch between the organizational structure and the problem structure (Christensen, P. Læg Reid et al., 2016, p. 891). Therefore, they require cross-boundary and often novel response modes and structures.

Over the past two decades, transboundary crises have spurred substantial reforms, including the JUG, WOG, and HG reforms, to increase crisis management capacity in many countries. These reforms have affected the policy area of crisis management, and political leaders and administrators have built administrative structures to facilitate a coordinated response (Christensen, P. Læg Reid et al., 2016, p. 891). As a matter of fact, WG initiatives have also emerged as a reaction to the world is perceived as increasingly insecure and dangerous for a number of reasons (Christensen & Læg Reid, 2007). According to Christensen and Læg Reid (2007) the concerns of many countries about crises, disasters, and threats, including natural disasters, such as tsunamis, or pandemics, such as SARS or the bird flu, has led to a tightening up of government, which includes WG measures (p. 1060). In the same way, concerns raised by terrorist attacks has led to public sector reforms based on coordination and collaboration in countries such as the United States and Australia (Halligan & Adams, 2004; Kettl, 2003). According to Kettl (2003), The September 11, 2001, terrorist attacks created new and unprecedented coordination challenges for public administration in the field of homeland security. It demanded new organizational forms that can react—quickly and effectively—to widely different threats and problems (Kettl, 2003, p. 275). Similarly, Halligan and Adams (2004) noted that Australian public sector change in 2003 was a product of external demands and internal pressures for improvement. Security threats in the international environment such as terrorist attack in Bali registered the importance of a coordinated strengthening approach to counter-terrorism, which was included three elements: the WOG agenda, enhancing central agency roles in coordination, improving implementation and capability (p. 85).

Failure to respond to terrorist attacks such as the attack of 11 September 2001 or natural disasters such as hurricane Katrina has also increased interest in crisis management in public administration research (Christensen, P. Læg Reid et al. 2016; Farazmand, 2007; Kettl, 2003). In most studies, a lack of coordination

is seen as the main cause of failure to respond to effectively such transboundary crises. For example, according to Farazmand (2007) the Katrina crisis revealed a total inter-governmental management failure. The author stated it thus:

“This failure was at the local, state, and federal levels, in addition to horizontal coordination failures in coordinating nongovernmental, non-profit, and volunteer organization networks present on the scene; in fact, coordination and leadership constituted the biggest failures during Katrina crisis mismanagement” (p. 155).

Crisis management studies are mainly focused on the most effective coordination mechanisms in crisis response. Two opposing schools of thought dominate the literature. The first one is the top-down or ‘craftsman’ approach views coordination as an outcome of directive efforts (Boin and Bynander, 2015, p. 132-33). This approach argues for establishing in advance of a crisis a system for creating authority structures across organizations and jurisdictions (Ansell et al., 2010, p. 203). It also includes strong leadership, clear command and control structures, centralized planning and clear-cut responsibilities. In this hierarchical version, strong and top leaders are dominate, whose roles as commanders are to take the required decisive action about what needs to be done (Grint, 2010, p. 172). The centralization imperative for crisis response is associated with limited time for decision-making and action. Responders need a central coordinating mechanism to direct resources and resolve conflict in a timely fashion (Moynihan, 2009, p. 898). “lead agencies model” for crisis management such as Incident Command System (ICS) at the center of the U.S. disaster response system is an example of hierarchical coordination (Ansell et al, 2010; Boin et al., 2014). ICS offers a common operating philosophy and architecture that can help disparate entities work together (Ansell et al., 2010, p. 203). As it limits the number of actors that have a final say over the use of capacities, this model is often thought to facilitate a decisive response to large-scale disasters, enhances the speed and efficiency of the decision-making process and lessens the transaction costs of coordination (Boin et al., 2014, p. 428).

The second is the bottom-up or ‘network’ perspective views coordination as spontaneous collaboration in crisis response. Network approach maintains that hierarchical approach only works reasonably well in routine circumstances. Crisis situations are complex that they cannot be managed or even coordinated in

a top-down fashion from some central office and, require networks and multiple organizations working together in coordination of numerous emergency and recovery activities (Ansell et al. 2010, Kapucu, 2006; Koppenjan & Klijn 2004; McEntire, 2002; Moynihan, 2009). Network mechanisms and collaborative efforts are presented as very effective in especially responding to transboundary crises, as the capacity and authority for response is distributed across multiple organizations and jurisdictions and the crisis itself creates difficult patterns of interdependence among the actors involved (Ansell et al. 2010, p. 204). In according to Ansell et al. (2010) transboundary response networks may produce both robust and adaptable responses in transboundary crisis. As a result of this approach, multi-organizational, trans-jurisdictional, polycentric response networks, including even cross-national and supranational interfaces and actors have become the norm in especially transboundary crisis response (Boin & 't Hart, 2003).

Apart from pure hierarchical and network coordination approaches, there are also hybrid coordination approaches consisting of different combinations of the two. In according to this approach, crises may require a network of responders that needs to be managed by hierarchy (Moynihan, 2008). Especially in unpredictable and complex situations, for example in transboundary crisis, hierarchical coordination is supplemented by horizontal coordination through networks (Christensen et al, 2015, p. 356). In recent years, various hybrid coordination arrangements in crisis management have been observed in many countries. For example, Christensen, Danielsen et al. (2016) analysed organizational structures and coordination mechanisms for crisis management in six European countries: Denmark, Germany, the Netherlands, Norway, Sweden and the United Kingdom. They found that coordination in these countries is achieved neither through hierarchical nor through network-administrative features alone; rather, hybrid institutional administrative arrangements have been established. Although previous treatments of the ICS focus on its hierarchical aspects, some articles suggest that it is a combination of network and hierarchical characteristics (Christensen, P. Lægreid et al., 2016; Moynihan, 2009). Moynihan (2009) argued that the ICS is better understood as a highly centralized mode of network governance, designed to coordinate interdependent responders under urgent conditions. Although the ICS seeks to coordinate multiple organizations using a hierarchical structure, the network setting significantly affects the operations of the ICS (Moynihan, 2009, p. 912).

According to Christensen, P. Læg Reid et al. (2016) lead agency model is an example of hybrid coordination arrangements. The authors state it thus:

“The notion of a lead agency as an intermediate form between traditional hierarchy and networks is drawn mainly from U.S. government crisis management arrangements, where a lead agency is responsible for organizing interagency oversight of the day-to-day conduct of policy and activities related to a particular operation. The lead agency has network qualities in that it typically chairs an interagency working group established to coordinate policy. At the same time, it is associated with a traditional hierarchical approach to coordination because its function is to impose control on others within a network” (p. 893).

In some studies is emphasized that there is no one best solution or universal coordination formula in the effective response to transboundary crises. According to Kettl’s (2003) contingent coordination concept, coordination should be adapted to existing problems. Christensen, Danielsen et al. (2016) suggested that hierarchical instruments and network solutions are complicated and context-dependent. National context and the specific challenges from different types of crises influence crisis management capacity profoundly (p. 316). Boin et al. (2014) discussed the possible advantages and disadvantages of a decentralized, network model and compare it with a more centralized, lead-agency model at the EU level. They concluded that there is not “one best model” to organize transboundary crisis management capacities at the EU level. They stated that:

“The network model, as assessed against the three performative dimensions of transboundary crisis management – sense-making, coordination, and legitimacy – has clear strengths. Yet our discussion also suggests that a certain degree of centralization or, rather, concentration – elements from the lead-agency model – may help to enhance the EU’s crisis management capacity” (p. 430).

Nowell and Steelman (2019) argued that improving the U.S. capacity to respond to large-scale, complex disasters requires moving beyond the “hierarchy versus networks” debate to understand the conditions under which governance

structures can best serve disaster response goals. They stated when Command Organizational Structure (COS), hybrid and network governance structures might be appropriate as follows (Nowell and Steelman, 2019, p. 3-4):

- COS is a very powerful tool. However, it is appropriate ONLY in operational domains wherein a superordinate authority exists to delegate commands to an incident commander. As such, COS should be viewed as a policy tool for governing specific operations that are part of a complex incident. Whenever appropriate, it should be used, but it is never sufficient for complex incidents.
- Hybrid governance is appropriate for multi-jurisdictional operations involving more than one agency administrator where issues of joint action, coordination, and/or cost sharing are paramount. Because these governance mechanisms have legal and bureaucratic elements, they tend to require time to negotiate and are limited in the number and diversity of agency administrators/executives that may be governed in these arrangements.
- Network governance is appropriate for incident-level governance, superordinate to COS, hybrid, and other hierarchical governance structures. Network governance provides the mechanisms for facilitating information flow, coordinating efforts, and establishing rules and norms of engagement for an incident among legally autonomous responders. It is appropriate and necessary in any operational domain in which COS and hybrid structures are not feasible either due to the scope and jurisdictional autonomy of actors involved and/or the speed at which coordination must occur.

5. Conclusion

This chapter has emphasized that wicked problems and transboundary crisis can't readily be managed through the actions of any single organization, and require the coordinated efforts of all actors involved. It has shown that reform initiatives to increase coordination capacity in many countries and increased academic interest in coordination is very closely linked to tackle wicked problems and an effective response to the especially transboundary crises. It also revealed that these reforms were included both top-down and bottom-up coordination mechanisms such as hierarchical, network and various hybrid arrangements that be used enable horizontal and vertical coordinations.

It has been observed that despite numerous attempts to enable that government agencies responding to wicked problems and transboundary crises more effectively, however, There is no a best practice or an universal administrative mechanism. The effectiveness or success of coordination mechanisms appears to depend upon context or different types of crises and wicked problems. For example, network coordination mechanisms work effectively in some settings or in problem types but not in others, and that is true for all the options available (Peters, 2018, p.9). In addition, there are some administrative, political and structural challenges in implementation that can make coordination difficult. Therefore, effective coordination can only be achieved by overcoming these challenges and by choosing the most appropriate coordination mechanisms from a problem-oriented and situational perspective.

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CHAPTER VI

THE EXPERIENCE STRATEGIC PLAN IN LOCAL GOVERNMENT IN TURKEY

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1. Introduction

Both the gradual increase of public requirements and the public pressure arising from the unending discussions of efficiency in the use of public funding make the use of more effective new management methods in public administration. In the frame of this necessity, we are faced with some new concepts including privatization, public-private partnership, strategic planning, performance-based budgeting, customer satisfaction, governance, etc. The strategic planning, which is a part of this process and had come into the agenda in 1970s in Western countries, was made mandatory for public institutions in Turkey through a legal regulation in 2003.

In the discussions held on the concept of strategic planning in Turkey, while it is stated such plans are indispensable for the efficient local government understanding in the public sector on the one hand, it is also claimed that such methods cause the loss of public identity on the other hand (Leblebici and Erkul, 2008/ Güler, 1994/ Karasu, 2004/ YAYED, 2006/ Akdoğan, 2007/ Kurt, 2020/ Akman and Öztaşlan, 2018). While these discussions are going on with all the heat, the question of how these strategic plans currently being implemented are successful waits to be answered yet.

The purpose of the study is to find the answer to this question through the analysis of the strategic plans implemented in Turkey in the scale of local governments. Strategic plans prepared by seven metropolitan municipalities, each

representing one geographical region, among the 30 metropolitan municipalities in Turkey has been subjected to an analysis for two separate period based on 41 questions under 4 headlines.

Strategic plans shall be subjected to a comparative analysis based on the determined questions, and also shall be evaluated for the periods between 2010 and 2014 and between 2020 and 2024. This way, it shall be determined that a) to what level these plans meet the measures required, and b) what the advancements and deficits in the strategic plans are for separate periods.

The concept of strategic plan shall be focused on in the first place. Legal grounds of strategic plans shall be handled in the second section. Results of the research carried out shall be shared in the following section. The study shall be concluded with a general evaluation.

2. Conceptual Framework

Use of strategic plans were started by the private sector in 1960s for the first time. Strategic planning aims at creating new goals by designing the future based on a basic strategy and calculating the most rational ways to reach these goals, and has played a significant role in preparing the establishments for the competence required by the market (Gardner, 1986: 21). Strategic plan prepares the establishments in advance to carry out what actions at what times, just like preparing a war plan, and teaches them to use the resources at hand at the right time and according to a certain strategy (Ülgen and Marzi, 2014: 21).

The escalating financial crisis and inefficiency and increasing waste of resources in 1970s brought up new plans, models and production techniques to the agenda in the public sector (Eadie, 1983: 450). The competency between the public institutions with private establishments made use of techniques and plans unique for private establishments mandatory. Strategic management and strategic plan, which is a part of strategic management has been started to be adapted to the public sector with this idea (Mintzberg, 1994: 19).

The new public administration reform in the 1970s foreseeing a serious change in the idea of public administration encouraged the use of strategic plans in the public sector (Hood, 1991). Competition of the public administration with private operations and more efficient use of public resources were started to be accepted in the general sense. Strategic governance including the strategic plan was started to be used in the public institutions in the USA and Britain, and then it was spread worldwide (Gardner, 1986: 31).

Strategic planning is designing the situation wished for the future and ways to reach it (Barry, 1986: 16). Strategic planning is the plan to be implemented after determining the mission and overall goals in relation with the future of the institution and structural changes, and selecting one among the implementable alternatives by also taking the status of the institution within its environment and activity area into consideration (Plant, 2006).

Strategic plan is defined in article 3 of the Law Act numbered 5018 concerning the Financial Management and Control of the Public Sector as “The plan including the mid- and long-term purposes of public institutions and organizations, basic principles and policies, goals and priorities, performance criteria, methods to be followed to achieve these and distribution of resources” (O.G. 24.12.2003, Issue number: 25326).

Strategic plan means the pathway between the current position of the organization and the desired position. Strategic plan is the disciplined efforts of an organization carried out to achieve the formative actions and basic decisions to provide guidelines for the organization in the issue of what is done to what purpose (Bryson, 1995: 4). In other words, strategic plan is the definition, implementation and supervision of the achievements aimed at by an organization within a certain period of time and the way of achievement (OFM, 2010: 3).

Strategic plan has different characteristics as compared to other understandings of planning (Gardner, 1986/ Bryson, 1995/ Mintberg, 2005/ Plant, 2006/ Berry, 1994). Such characteristics can be listed as follows:

- Strategic plan focuses not on inputs, but it focuses on outputs and results. Therefore, the wish to achieve the target always takes place in the core of the plan.
- Strategic plan is the planning of the change brought up by the future. However, future does not involve unclear goals. An institution with a strategy constructs the design of the future based on the vision it has determined and calculate its cost in advance.
- Strategic plan is based on facts. It takes the internal and external environmental conditions of the institution into consideration. Vision of the institution will be determined in a realistic way based on the conditions of the institution.
- Strategic plan is a management tool and includes all the functions expected from the discipline of management. Organizing, implementation, coordination and supervision will be intermingled.

- Strategic plan supports participation. Common sense and jointly undertaken targets are important in the construction of a plan. The process of strategic planning ensures the participation from the top management to the lowest units internally and the stakeholders and the target masses externally.
- Strategic plan is dynamic. It will be renewed according to the changing conditions and will adapt itself to such conditions. It is based on expertise and analysis of information.
- It improves the quality, and provides the each and every level in the institution with the perfection since it foresees the ability of strategic thinking, decision-making and starting the action.
- It is a process of selection and prioritization. Selecting and prioritization of strategies and determining the targets accordingly will ensure the optimum use of resources.

The purpose of strategic plan is to guide the management activities of the institution and show the pathway to be followed. Strategic planning is not a purpose in itself, but it is a tool to be used by the institution to improve its performance (Mintzberg, 1994: 5). Strategic planning consists of the participation of individuals in all levels having duties in an institution and the entire portion of efforts targeting the results with the full support of the managers of the institution. In this sense, it means the needs and expectations of the stakeholders and active roles undertaken by the stakeholders and policy-makers in determining the mission, goals and performance measurement of the institution.

In the frame of strategic plan, to following four questions that closely involve the results, the program or the product, resources and processes come to the front:

- Where are we?
- Where do we wish to reach?
- How can we reach the position we wish to be in?
- How can we measure and assess our success? (FGDC, 2009: 7/ DPT, 2006: 5/ Eren, 1990).

An ideal strategic plan must include the mission, vision and values of the institution, keywords explaining the outputs and priorities, a good analysis on the capabilities of the institution, standards determined for the efficient

implementation of services provided by the institution, performance assessment criteria measuring whether or not the determined targets have been achieved or not, and participation of leaders, managers, employees and stakeholders (OFM, 2010: 7). Strategic targets and the budget of the institution must be in conformity with each other.

Strategic plan plays an important role in the issues of stability and development of the organization, assessment of outputs and results thanks to the follow-up and supervision mechanisms it provides for, developing new programs, and bringing forth systematic ideas involving the future (Mckay, 2001:1).

Strategic plan indicates a process. As a matter of fact, strategic plan is not a movement that is carried out and comes to an end, but is a movement that is started and continues as long as the organization continues with it. Strategic planning uses all the existing resources of the organization, and ensures the most economic achievement of the targeted position through planning. At this point, it involves the current position of the organization, the targeted position, and the assessment of the position achieved.

Strategic plan is tool ensuring the efficiency, economy and effectiveness by making long-term plans concerning the future by also taking into consideration the opportunities and threatens that the organization faces (Coulter, 2002: 122).

Strategic planning is highly beneficial for institutions that implement it. In the first place, strategic plan analyzes the social, economic and political situation and formulates long-term goals. It shows the institution's problems together with the solution, and makes thinking jointly within the institution a systematic activity. It continuously analyzes the strong and weak sides of the institution and questions the goals and purposes. Lists the priorities of the institution and creates a connection between the institution's targets and financial structure.

Strategic planning directs the attention to beyond the daily problems and businesses. Preparations are made for expected changes, and it is also considered that there also can be unexpected changes. Probabilities ND and alternatives are created (Caulfield and Schultz, 1989: 7).

Taking the strategic plans during the preparation of budgets means that a connection between the priorities of governments with source allocation has been established. Strategic plans being functional depends on purposes and targets with certain costs among those included in the strategic plans find a place in budgets (Kesik, 2010: 30).

3. Legal Dimensions of Strategic Planning in Turkey

Strategic planning was included in the agenda of the Turkish public administration through the 1st Programmatic Financial and Public Sector Adjustment Loan (PFPSAL-1) signed with the World Bank on 12th July 2001. The necessary measures related to the efficient use of public resources are listed in the said agreement. In this frame, strategic plan was made mandatory for public institutions through the Law Act Concerning the Financial Management and Control of the Public Sector numbered 5018 that was passed on 24th December 2003. In the same year, State Planning Organization (DPT) issued the document titled “Strategic Planning Guidelines for Public Administrations” with the purpose of guiding the public institutions going to make strategic plans.

Under the Law Act Concerning the Financial Management and Control of the Public Sector numbered 5018, the public institutions a) prepare their budgets in conformity with their missions, visions, strategic targets and goals mentioned in their strategic plans and based on the performance principle, b) strategic plans and improvement plans must be harmonious, c) predicate their budgets and project-based source allocations on their annual purposes and goals and performance indicators in order to render the public services in the required levels and qualities.

According to the article 17 of the same law, public institutions shall base the determination of allowance caps and implementation of multi-annual budgeting understanding on their strategic plans and performance targets of public institutions. Furthermore, under the Law Act numbered 5018, public institutions have the obligation of issuing activity reports annually in the frame of accountability.

The Law Act numbered 52018 was amended in the legal sense through the Law Act numbered 5436 and dated 2005, and strategy development units were created in public institutions. Strategy Development Units were authorized for the implementation of strategic planning works through the Regulation Related to the Working Methods and Principles of Strategy Development Units issued in 2006.

With the purpose of ensuring better implementation of strategic plans and preventing any difficulties during implementation, DPT issued the Regulation Related to Methods and Principles of Strategic Planning in Public Administrations in 2006. With this regulation, methods and principles related

to the preparation of the calendar related to the strategic planning process and establishing the connection between the strategic plans with the improvement plan and programs.

The Regulation Related to the Performance Programs to be Prepared by Public Administrations prepared by the Ministry of Finance was published in the Official Gazette in 2008. In this Regulation, preparation of performance programs by public administrations, delivery to relevant administrations, declaring to the public and other methods and principles are included (Nohutçu and Balcı, 2003: 15).

Together with the establishment of Ministry of Development in 2011, and transfer of the duties and authorities of DPT to this Ministry, duties and authorities involving the strategic planning were also transferred to the Ministry of Development. Under the light of the twelve-year experience in the area of strategic planning, the Ministry issued the Regulation Related to Methods and Principles of Related to Strategic Planning in 2018 with the purpose of improving the strategic planning applications of public administrations and abolished the Regulation issued in 2006 (Coşkun and Almalı, 2020: 18).

The state administration in Turkey underwent a radical change in 2018, and presidential system was shifted to. Together with this change, some ministries were also changed, and the Ministry of Development was abolished. Duties and authorities of the Ministry and transferred to the Departmental Presidency for Strategy and Budget under the State Presidency through the Presidential Decree No. 1. Later, duties, authorities and responsibilities of the Departmental Presidency for Strategy and Budget were regulated under the Presidential Decree No. 13. Duties and responsibilities related to strategic planning were also delegated to the same Departmental Presidency.

Creation of strategic plans in Turkey applied to local governments as well as the central governments. The necessity of making strategic plans were imposed on local governments through separate legal regulations at different dates. The first of these is the Law Act Concerning Municipalities numbered 5393. According to the Law Act numbered 5393, it is not mandatory for municipalities with populations under 50.000. However, municipalities with populations over 50.000 have the obligation of preparing strategic plans. The Law Act numbered 5393 stipulates that discussion and accepting the strategic plan are included in the duties of the city councils. One of the municipal boards is to examine the strategic plan and to submit their opinions to the city council.

Under the Law Act numbered 5393, the mayor has the obligation of preparing and submitting to the city council a strategic plan in accordance with the development plan and program and with the regional plan, if any, within the six months following general elections for local governments, and an annual performance program before the relevant end-of-the-year. Strategic plan shall be prepared after obtaining the opinions of universities, if any, and professional chambers and shall come into force after accepted by the city council.

According to the Law Act numbered 5393, one of the duties of the mayor is to manage the municipality according to the strategic plan. In the same Law, it has been adjudged that the activity reports and budgets issued by municipalities must be compliant with the strategic plan. Strategic plan and the performance program shall be taken as the basis in the preparation of the budget, and shall be discussed and accepted in the city council before the budget.

Similar obligations also apply to metropolitan municipalities. Preparation of the strategic plan of the metropolitan municipality is included in the duties of metropolitan municipality according to Law Act Concerning Metropolitan Municipality numbered 5216. Mayor of the metropolitan municipality has the obligation of managing the municipality in accordance with the strategic plan. The same Law also adjudges that activity reports and budgets to be prepared by municipalities must be compliant with the strategic plan.

The Law Act Concerning Special Provincial Administrations numbered 5302 includes the obligation of discussing and finalizing the strategic plans among the duties of the provincial councils. Examining the strategic plan and submitting their opinion to the provincial council is among the duties of the standing provincial committee. One of the duties of the provincial governor is to manage the special provincial administration according to the strategic plan.

Under the Law Act numbered 5302, provincial governors and local governments have the obligation of preparing and submitting to the provincial councils the strategic plan compliant with the development plans and programs and regional plans, if any, within six months following the general elections and the annual performance plans before the relevant end-of-the-year. Strategic plan shall be prepared after taking the opinions of universities, if any, and professional chambers, and shall be come into force after accepted in the provincial council. The strategic plan and the performance plan shall be the basis for the preparation

of the budget, and shall be discussed and accepted in the provincial council before the budget.

4. Purpose and Method of the Research

Strategic plan was included in the Turkish legislation through the Law Act Concerning the Financial Management and Control of the Public Sector numbered 5018 for the first time in 2003. It is expected that the concept of strategic plan will be adopted by the bureaucracy and give rise to positive results in the social life. On the other hand, inclusion of a new plan type in the law and its implementation in the public sector can give rise to different and unexpected consequences.

The aim of this study is to find out the level of success of strategic plans prepared by metropolitan municipalities in practice. With this purpose, strategic plans of metropolitan municipalities selected from seven geographical regions of Turkey using the sampling method shall be examined for two periods, namely the periods between 2010 and 2014 and between 2020 and 2024. Data and results related to the years 2010-2014 have been taken from another study of the author that was published previously (Karasu, 2012).

Kayseri, Adana, İzmir, Sakarya, Samsun, Erzurum and Diyarbakır are the metropolitan municipalities that strategic plans will be examined in the scope of this study. Each strategic plan in the scope of the study shall be analyzed according to the 41 criteria annexed to the text. Generally, strategic plans seek the answers to questions “Where are we?”, “Where do we wish to reach?”, “How can we achieve the position we wish to achieve?”, and “How can be measure and evaluate our success?” With this reason, these 4 questions were the starting points in the examination of the strategic plans prepared by metropolitan municipalities, and assessments were carried out using the criteria under these 4 questions.

Apart from this analysis, strategic plans shall be compared for periods of time based on the periods between 2010 and 2014 and between 2020 and 2024. This way, each strategic plan will be subjected to two different evaluations both based on the questions determined and on the periods of time

The question “Where are we?” is the first question of the strategic plan. The current status analysis prepared by municipalities is greatly important as the answer to the question “Where are we?” In the current status analysis, care was

given to whether or not realistic and accurate analyses have been carried out on the legal obligations, capacity, possibilities and problems of the municipality and its own consistency. Furthermore, relationship of the strategic plan prepared with upper-scale plans is another important detail. In the stakeholder analysis process, the issues of to what level public participation was included, whether or not communication channels have been formed, and which measures have been taken in this direction by the institution. Inclusiveness and factuality of the SWOT analysis shall be focused on.

The question “Where do we wish to reach” was investigated in the second section. With this purpose, vision, mission, basic values, goals and targets were evaluated in the strategic plans. In the scope of this evaluation, both consistency of concepts in itself, and the relations of concepts with each other are handled. In the plans prepared, the relationship of the current status with the targets and activities in the plan, and the relationship between the determined goals and targets and the basic issues have been handled.

The starting point of the third section was the question “How can we achieve the position we wish to achieve?” The institution will reach the determined goals and targets by way of strategies. With this reason, determining the strategies is an important issue. The activities and projects in the direction of strategies determined, their overlapping with the targets, financial and administrative practicality of the determined projects and their relations with the budget shall be handled in this section.

The question “How can we measure and evaluate our success?” constitutes the fourth section. Performance criteria prepared by institutions were handled to find the answer of this question. Accurate determination of these criteria according to goals and targets concretely and clearly together with the inclusion of time criteria are mandatory for the implementation of the strategic plan and for an assessment after the implementation. Performance criteria must be simple, easily understandable and relevant for the daily works, must reflect the status with all the factuality, and must show whether or not the required services are rendered efficiently and effectively.

5. Results of the Research

The studies conducted for two different periods, namely, the periods between 2010 and 2014 and between 2020 and 2024 have given different results regarding

the strategic plans. These results shall be evaluated for the two periods under the titles of the four basic questions.

“Where are we?”

Period between 2010 and 2014

The current status analyses prepared in order to answer the question “Where are we?” differ from one municipality to another. In the analyses prepared by Erzurum, Sakarya and Samsun Metropolitan Municipalities, while the legal obligations of the institution, its corporate capacity and activity areas have been included, no analysis has been carried out. Diyarbakır Metropolitan Municipality did not include a separate current status analysis in its strategic plan, but only explained the status of the corporate structure in the introduction section of the plan.

No connection has been established in the current status analyses Kayseri, Samsun, Diyarbakır, Erzurum and Sakarya Metropolitan Municipalities between the analysis made and the environmental conditions and external condition. In the current status analyses of Adana and İzmir Metropolitan Municipalities have been carried out, and a connection was established between the current status analyses and environmental conditions and external conditions. Analyses on the gradually regressing economic power of these provinces come to the front place in Adana and İzmir Metropolitan Municipalities.

It is stated in the article 9 of the Law Act numbered 5018 that development plans and strategic plans must be compliant with each other. The Regulation Related to Strategic Planning in Public Administrations includes this phrase: “Strategic plans of public administrations are prepared in compliance with the improvement plan, mid-term program and other national, regional and sectoral plans and programs relevant for the activity area.” The metropolitan municipalities included in the sample except for the İzmir and Diyarbakır Metropolitan Municipalities did not include a section in their strategic plans they have prepared for the presence or absence of parallelism with the targets in the development plans, and no connection with the upper-scale plans was established.

There are significant differences between the municipalities as regards the determining of internal and external stakeholders during the preparation of strategic plans. While the Kayseri Metropolitan Municipality preferred its own institutions and organizations as internal stakeholders like other municipalities,

it restricted the external stakeholders extremely, and included no other stakeholders other than the provincial governorship and district municipalities of the metropolis. Diyarbakır Metropolitan Municipality imposed some criteria such as being influential on the municipality, being influenced by the activities of the municipality, and being important got the municipality when selecting the stakeholders. Erzurum, Sakarya and Adana Metropolitan Municipalities have accepted everyone benefiting from municipal services and activities directly or indirectly as stakeholders. These municipalities have carried out only one survey each in relation with the participation of stakeholders.

The municipalities examined mostly listed the classical issues of municipalities in the SWOT analysis. In this frame, a common language can be talked of. Among these issues, scarcity of financial possibilities of municipalities, difficulties arising from legislation, deficiencies of the infrastructure, and illegal structuring arising from lack of planning. Areas that municipalities are powerful however, differ greatly. While Sakarya Metropolitan Municipality included its harmonious works with the Government among its strengths, Adana Metropolitan Municipality includes the selling of inexpensive bread among its strengths. However, the aim of SWOT in the strategic plan is not this.

Period between 2020 and 2024

The question “Where are we?” no doubt requires a detailed status analysis. This analysis made must be realistic, and must include analyses concerning the corporate structure of municipalities, their financial strength, and human power, and area of influence of the municipality. Geography, economy and socio-cultural structure of the city inhabited, and level of effectiveness within the country must be included in the analyses.

The situation analysis in the strategic plan prepared by the Erzurum Metropolitan Municipality includes only the geographical and cultural data of the city. History of the city was told with cumbersome details; however, an analysis has not been carried out. Similar applies to the plan prepared for Samsun. The status analysis prepared by the Samsun Metropolitan Municipality appears as a tour guide rather than an analysis. Status analysis of the Diyarbakır Metropolitan Municipality however, remained very limited.

Status analysis of the Adana Metropolitan Municipality is realistic and rather detailed. City economy and socio-cultural structure have been analyzed.

The question of level of success of the strategic plans made in the period between 2015 and 2019 was answered in status analyses prepared by İzmir and Sakarya metropolitan municipalities, and comprehensive status analyses were carried out.

A connection was established between the strategic plan and the upper plans prepared by all the metropolitan municipalities and we have studied for the period between 2020 and 2024, and care was given to ensure harmony between plans as regards goals and policies.

It is seen that meetings have been held with stakeholders, some events have been arranged, and plans have been owned by managers and employees of the institution. Stakeholders have been divided as the internal and external stakeholders, and mostly participate through polls. On the other hand, it is a fact that polls do not reflect the reality much, and it is not possible to find out the needs of a city only through the polls. Trial of different ways to ensure participation is necessary for the success of strategic plans.

SWOT analyses of all the metropolitan municipalities examined are mostly similar to each other, like in the period between 2010 and 2014. Metropolitan municipalities continue to carry out SWOT analysis through their daily corporate problems. However, it is seen that some threats and opportunities have been added to the SWOT analysis.

İzmir Metropolitan Municipality added earthquake and migration as threats in the SWOT analysis. Erzurum, Adana and Samsun metropolitan municipalities are other municipalities that perceive migration as a threat. The increasing immigration to Turkey had made municipalities more sensitive against migration.

The climate change and spreading of social media were perceived as threats by the Kayseri Metropolitan Municipality. Kayseri, İzmir, Adana and Diyarbakır metropolitan municipalities perceive renewable energy generation as an opportunity.

All the metropolitan municipalities but Adana Metropolitan Municipality among those examined for the period between 2020 and 2024 had carried out a PESTLE analysis in addition to the SWOT analysis. PESTLE analysis is an analysis method recently used more frequently, and is a more advanced analysis technique since it includes all the existing dynamics of the city. Inclusion of this analysis in the plans is a correct step taken.

“Where do we wish to go?”

Period between 2010 and 2014

The answer to the question “Where do we wish to go” was sought in the second section of strategic plans. It was seen that municipalities shared almost the same ideas about the issues of mission, vision and values to give an answer to this question, and used the same terms to express mission, vision and values. While the terms environmentalist, just, fast and high-quality have been used frequently when defining the concept of mission, the terms high-quality, efficient, participator and environmentalist come to the front place when defining the concept of vision. Terms including participation, transparency, just, high-quality, efficient, trust, courage, environmentalist and customer satisfaction have been used frequently when defining the values. Efforts to explain the concepts of mission and vision with the same terms gives rise to suspicions that metropolitan municipalities have not comprehended the contents of strategic plan concept fully.

What carries an institution further and makes it different and special among other institutions is the mission and vision it creates. While mission explains the reason of existence of an institution, vision is the basic starting point that makes the future hopeful, fires the employees and ensures quality and success. Vision is the simplest expression of the strategic plan, and is almost at the core of the plan (Tek, 2010: 4/ Dinçer, 2003: 5/ OFM 2010: 7/ Puu, 2009). Use of this concept with such importance by each of the municipalities in the same way raise suspicions about the quality of the plans.

There are important similarities also between the goals and targets of the seven metropolitan municipalities examined. All the municipalities aim at creating a city that is more livable, more environmentalist and more planned. At this point, it is possible to say that the goals included in the land use plans prepared by municipalities are continued in the strategic plans also. Although the plan type has been changed, the goal has remained the same, the issue of improving the lower quality of life experienced in our country because of the encountered deficits of the infrastructure continue in the strategic plans. However, strategic plan and development plans have very different structures.

The framework of the strategic plan is made by the strategic goals. As a whole, goals determine the strategic direction of the organization (Kılıç and Erkan, 2006: 81). Strategic goals and targets must be supported by policies and project in practice by all means, actions must be taken in integrity to obtain

the outputs expected by the organization within the determined periods of time (Mckay, 2001: 9).

Kayseri, Sakarya and İzmir metropolitan municipalities have taken the municipal service units as the basis when determining the goals and targets, and have developed separate strategic goals, targets and strategies for each service unit. Erzurum Metropolitan Municipality determined 12 focus areas and 15 strategic goals in better harmony with the understanding of strategic plan, and developed targets and activities for these strategic goals. Likewise, Adana Metropolitan Municipality also determined 10 strategic areas, and established targets suitable for these. While Samsun Metropolitan Municipality has determined two basic strategic goals, Diyarbakır Metropolitan Municipality has determined 5 basic strategic goals.

On the whole, it can be said that a certain compliance exists between strategic goals-targets included in the strategic plans of metropolitan municipalities examined, and the strategic goals and targets declared have realistic constructs.

Period between 2020 and 2024

It is seen that the concepts and terms including vision, mission and values used by the seven metropolitan municipalities examined for this period are rather close to each other, like in the period between 2010 and 2014. On the other hand, some new concepts have started to take place depending on the changes in the public administrations. Concepts including being solution-focused, multi-participation, quality in management being a brand, accessibility, sustainability and similar have found places under the titles mission, vision, and also values. The concept of social municipalism is included in the values section by almost all the municipalities. This is an output of the AKP municipalism.

Some subjective expressions are found in the strategic plans prepared for the period between 2020 and 2024. Kayseri Metropolitan Municipality has stated in its vision, “the understanding of municipalism of the Kayseri model” shall dominate. However, this model of municipalism is unclear. Diyarbakır Metropolitan Municipality used the expression “respect to science and technique” as a value. The expression “municipalism of the bosom” has been used in the section of values of Samsun Metropolitan Municipality.

Samsun Metropolitan Municipality has included the phrase “a city respectful to the environment, a brand city with its industry” when describing its vision. However, it is clear that a city claiming to a brand in industry will

experience difficulties in the protection of the natural environment. Each of the vision and mission definitions of the Erzurum Metropolitan Municipality is half page in length. However, it is a well-known fact that such definitions must be brief and to the point.

Strategic goals have been determined very clearly in all the plans examined. Diyarbakır Metropolitan Municipality has determined 8 strategic goals and 32 targets. İzmir Metropolitan Municipalities determined 7 strategic goals and 26 targets, Kayseri Metropolitan Municipality determined 10 strategic targets, and Erzurum Metropolitan Municipality determined 26 strategic goals (for each item of services), Adana Metropolitan Municipality determined 8 strategic goals, and Sakarya and Samsun metropolitan municipalities determined 10 strategic goals. Although the numbers of strategic goals and targets differ in each strategic plan prepared, strategic goals are comprehensible.

“How can we achieve the position we wish to achieve?”

Period between 2010 and 2014

Targets in accordance with the strategic goals, and activities and projects in accordance with these targets must be created during the strategic planning works. Targets, activities and projects must be shown after determining a strategic goal. Furthermore, projects must be connected to performance criteria and certain periods of time, and estimated costs of projects must be determined, and the strategic plan and the budget must be made harmonious.

We can answer the question “How can we achieve the position we wish to achieve?” only this way. Only targets have been explained in some of the strategic plans belonging to metropolitan municipalities examined after determining the strategic goals. However, activities and projects are needed to make the targets real. Although strategic goals and targets in Adana, Sakarya and İzmir metropolitan municipalities, there are no activities or projects. Strategic plans of the Erzurum, Samsun and Diyarbakır metropolitan municipalities are more qualified in this issue. Kayseri Metropolitan Municipality however, has used the goal-target-strategy sequence in contrast with all the other municipalities. However, it is seen that the term strategy has been used instead of the term activity.

Interaction of activities and projects included in the strategic plans with each other were taken into consideration only in the plan of the İzmir Metropolitan Municipality.

No connection was established between the activities and projects to be implemented and the financial realizations in any of the strategic plans examined. Only Erzurum Metropolitan Municipality carried out a study handling the estimated costs of the strategic goals and targets it had determined. This is an important deficit.

Before everything, strategic plans are designed to ensure the limited public resources are spent according to the priorities determined. Costing aims at strengthening the connection between the strategic plans of public institutions and their budgets and provide guidelines for expenditure (Karasu and Demir, 2012: 342). This financial connection is missing in the plans examined. Therefore, the benefit expected from the strategic plan, correct planning of priorities and expectation of efficient use of public resources remain hanging in the air.

Period between 2020 and 2024

In the plans examined, the question, “How can we achieve the position we wish to achieve?” was answered using the strategic goals and targets developed in relation with these goals. Each metropolitan municipality has determined strategic goals and related targets in different numbers. No matter that the numbers are different, it is seen that a connection has been established between the strategic goals and targets in all the strategic plans covering the period between 2020 and 2024.

Furthermore, projects required for these targets have been fixed clearly and comprehensibly based on years in the strategic plans examined. Units responsible for the realization of the determined targets, performance criteria for these units and estimated costs are included in these plans.

Targets and the periods, within which these targets are to be achieved, have been handled consistently. Even, the activities to be carried out annually and their estimated costs have been included in all the plans. Sakarya, Adana, İzmir and Diyarbakır metropolitan municipalities prepared target cards in their strategic plans to show the goals, targets, responsible units and costs. The target cards are important for both the follow-up of the success of activities and adoption of the determined goals and targets by the personnel.

Costing was handled under a separate title in all the plans made in the period between 2020 and 2024. This is a significant and pleasing development. The improvement in this issue, which created a significant deficiency in the previous strategic plans is a positive development. Separate costing tables

were prepared for each year in Kayseri, Diyarbakır, İzmir, Adana, Sakarya and Samsun metropolitan municipalities, and a connection was established between the strategic plan and the budget. This connection the strategic plan and the budget only in the strategic plan of the Erzurum Metropolitan Municipality among all the metropolitan municipalities examined.

“How do we measure and evaluate our success?”

Period between 2010 and 2014

The answer to the question “How can we measure and evaluate our success?” is sought in the fourth section. With this purpose, follow-up and assessment mechanisms must be created and performance criteria must not be set for supervision. Various performance criteria have been adopted with the purpose of following the activities and projects in Erzurum, Diyarbakır, Samsun, Adana and İzmir Metropolitan Municipalities. In Kayseri and Sakarya Metropolitan Municipalities however, there are no performance criteria. Therefore, the distance covered by the strategic plans belonging to these provinces and the level of achievement of targets by the plan becomes more difficult to see.

Among the strategic plans examined, follow-up and assessment mechanisms were not included in the plans of Adana, Kayseri and Sakarya Metropolitan Municipalities. In this case, questions involving the following up of the strategic plans, level of the realization of proposals of stakeholders, whether or not the activities and projects implemented are accepted by the public, and effects of public resources spent on the urban quality of life and level of success of the institution remain unanswered.

Diyarbakır Metropolitan Municipality created a follow-up and assessment system for the employees, managers and stakeholders. Erzurum Metropolitan Municipality has not determined a separate structure or a new model for follow-up and assessment. Although there is no separate place in İzmir Metropolitan Municipality for follow-up and assessment, it is the only municipality that had prepared a separate action plan for the goals and targets included in the strategic plan. The most qualified strategic plan in relation with follow-up and assessment is the one prepared by the Samsun Metropolitan Municipality. A system for follow-up has been created in the plan for both stakeholders and inside of the institution.

Period between 2020 and 2024

In the strategic plan of the Erzurum Metropolitan Municipality included in the strategic plans examined for this period, there is a table titled Performance Assessment Analysis. Performance criteria are included in the table very clearly and comprehensibly. The success criteria are shown by the Sakarya Metropolitan Municipality in percentages based on years. The same have been applied by the İzmir Metropolitan Municipality also.

Both performance and success criteria for each strategic goal have been determined by the Adana Metropolitan Municipality. Kayseri Metropolitan Municipality determined its goals, targets and success criteria for each year.

None of the metropolitan municipalities has designed a separate mechanism for follow-up and assessment. It is stated in all the strategic plans prepared that follow-up and assessment are indispensable parts of the strategic plan process, and activities are followed all the time. İzmir Metropolitan Municipality has decided to hold periodic meetings every six months with the purpose of follow-up and assessment. Sakarya Metropolitan Municipality aims at arranging follow-up meetings quarterly for this purpose. All the municipalities have stated that reports will be prepared in the issue of follow-up and assessment.

6. Overall Assessment

Differing results has been reached regarding both strategic plans and also different planning periods have been obtained in the study evaluating the strategic plans prepared by the Turkish metropolitan municipalities. In the first place, serious self-repeat is present in vision, mission and values in all the strategic plans. This applied to both periods. Some concepts that were popular at the times that plans were made in public administration or in the academic world have frequently taken place in the plans.

For example, while the terms including transparency, quality, just, efficient and trust were used frequently in the period between 2010 and 2014, the terms including solution-focused, multi-party participation, quality in management, being a brand, accessibility and sustainability were given weight in strategic plans prepared for the period between 2020 and 2024. In particular, inadequacy of metropolitan municipalities being original and creating different ideas is seen clearly.

Although there are some deficiencies in SWOT analyses, it can be said that the current status analyses included in the strategic plans of the municipalities examined show the statuses of the city and municipality. Strategic plans prepared for the period between 2020 and 2024 are more comprehensive and realistic in this issue. Furthermore, municipalities have started to use the PESTLE analysis in addition to the SWOT analysis in the period between 2020 and 2024.

It is seen in both periods that metropolitan municipalities were meticulous for the compliance of strategic goals and targets in their strategic plans. The relations between strategic goals, targets and activities have become clearer and more comprehensible in plans prepared for the period between 2020 and 2024. Furthermore, estimated costs of activities in this period are also included in plans.

Only İzmir and Diyarbakır metropolitan municipalities established a connection between the upper plans and the strategic plan among the metropolitan municipalities examined for the period between 2010 and 2014. This connection was established in each of the plans prepared for the period between 2020 and 2024. In this sense, advancement and improvement can be talked of.

Except for the Erzurum Metropolitan Municipality, the biggest deficiency in the strategy plans prepared in the period between 2010 and 2014 is the lack of connection between the goals and targets of the strategic plan and the budget. In other words, no costing analysis was carried out as the connection between the strategic plan and the budget. However, the most basic purpose in the preparation of strategic plans is to use the public resources efficiently. Any strategic plan not correlating the facts of the budget and goals is null.

Costing is handled under a separate title in all the strategic plans prepared for the period between 2020 and 2024. Together with this, activities and their costs have been handled together, and were expressed in tables. In this sense, a comparison between the two periods shows that the biggest advancement was encountered in the costing of the strategic plans.

In the overall sense, it is possible to say that plans of the period between 2020 and 2024 are more qualified and comprehensible as compared to the plans for the period between 2010 and 2014. While some deficiencies in Turkey are going on, it can be said that strategic plans have become more qualified gradually within the years.

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ANNEX: (List of Questions to be Asked during the Examination of Strategic Plans of Metropolitan Municipalities)

I – WHERE ARE WE?

- 1 – Is the status analysis present in the plan realistic and inclusive?
- 2 – Are the legal obligations, corporate capacity and activity area sufficiently included in the current situation analysis in the plan?
- 3 – Have the environmental conditions and external conditions that the organization is having its activities under have been taken into consideration adequately in the current status analysis of the plan?
- 4 – Has a relation been established in the plan with upper-scale plans?
- 5 – Have the senior managers of the institution shown adequate support and owned the plan during the preparation process of the plan?
- 6 – According to which criteria and how the stakeholders were selected?
- 7 – What are the measures taken to ensure participation and contribution of stakeholders to the plan?
- 8 – Have the opinions of the stakeholders were taken adequately, and the required evaluations been carried out?
- 9 – Have the strong and weak aspects been accurately analyzed in the SWOT analysis carried out in the scope of the plan?
- 10 – Have opportunities and threats been shown against the internal and external factors as a result of the SWOT analysis?
- 11 – Are the opportunities and threats found in the SWOT analysis realistic and consistent?
- 12 – Were opportunities seen in the SWOT analysis were cost-analyzed?

II – WHERE DO WE WISH TO GO?

- 13 – Do the mission stated in the plan explain the corporate responsibility sufficiently?
- 14 – Has the vision in the plan a corporate identity and does it have qualities capable of carrying the institution to future?
- 15 – Do the basic values included in the plan have qualities adequate for guiding the development of the institution and its employees?

- 16 – Are the goals and targets in the plan are clear and comprehensible?
- 17 – Are the vision and mission included in the plan consistent with the goals and targets?
- 18 – Are the goals and targets included in the plan are consistent with applications?
- 19 – Do the priorities in the plan and analysis of the existing situation overlap?
- 20 – Do the targets of the plan have clear and measurable qualities?
- 21 – Do the targets of the plan define the position wished to be achieved?

III – HOW CAN WE ACHIEVE THE POSITION WE WISH TO BE IN?

- 22 – Are the strategies in the plan are harmonious with the institution's vision?
- 23 – Are the strategies in the plan harmonious with the goals and targets determined?
- 24 – Are the activities and projects included in the plan sufficiently comprehensible and realistic?
- 25 – Has the interaction between the activities and projects included in the plan been taken into consideration adequately?
- 26 – Is there consistency between the targets and strategies of the plan and the activities being implemented?
- 27 – Do the projects and activities included in the plan overlap with the priorities determined by the institution?
- 28 – Is the budget of the institution is harmonious with the targets, strategies and activities included in the plan?
- 29 – Has the relation between the plan and budget been ensured through the performance programs?
- 30 – Has any resource requirement for the projects and activities included in the plan been determined and has any costing study been carried out?
- 31 – What are the resources to be used in the implementation of the plan? Whose responsibility is the use of these resources?
- 32 – Have alternative resources been determined against any possible resource cuts during the implementation of the plan?
- 33 – Are the units responsible for the activities and projects stated in the plan and duties of these units determined?

IV – HOW CAN WE FOLLOW UP AND ASSESS OUR SUCCESS?

- 34 – Are there any performance assessment criteria required for the understanding of the success of the plan in implementation?
- 35 – Do the performance assessment criteria included in the plan have comprehensible, clear and measurable values?
- 36 – What kind of a mechanism has been created with the purpose of following the responsibilities of stakeholders?
- 37 – Does the plan include a follow-up and assessment mechanism?
- 38 – Has the process of follow-up and assessment mechanism been fixed to a calendar in the plan?
- 39 – Does the plan include any action plan concerning the projects and activities implemented for the realization of goals and targets?
- 40 – What kind of a supervision is foreseen in the plan?
- 41 – Have the frequency and form of the supervision on the plan and the way of assessment of the results of this supervision been determined?

CHAPTER VII

DIGITAL TRANSFORMATION IN LOCAL GOVERNMENTS: DIGITAL MUNICIPALISM

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1. Introduction

Developments in information and communication technologies pioneered the development and implementation of new methods in the provision of public services. Thus, it has become possible for citizens to access public services faster, cheaper, transparently and easily. The e-government approach, which can be defined as the understanding of transferring public services to the electronic environment and providing them independently of time and place, and e-municipality practices, which are a reflection of this approach to local government units, are widely used by citizens today with the online provision of many public services.

Municipalities, which are the administrative units closest to the citizens, make an intense effort to use information communication technologies effectively and to benefit from the opportunities provided by these technologies, especially during the delivery of local public services. Local government units need to be equipped with information communication technologies and smart applications more than ever due to global problems such as pandemic and climate change in order to solve problems such as unplanned urbanization, sewage, transportation

and infrastructure problems that arise with population growth. As a matter of fact, the process experienced all over the world due to the covid-19 pandemic has once again revealed the importance of the effective use of technology, especially the prevalence of public services and smart applications offered electronically.

Although the covid-19 pandemic experienced worldwide since the beginning of 2020 has had many negative effects, it has been an accelerator for both the adoption and widespread use of digital applications by citizens. The field of technology has expanded even more and it has become much more visible and even mandatory for citizens who have not been very interested in technology until today in the fields of e-government, telemedicine, distance education and e-commerce (Yıldız, 2020: 2). In this process, citizens have become able to follow many jobs from their homes in order not to be affected by the pandemic, making the use of digital services a necessity rather than a preference. In this context, institutions that can offer their services electronically have taken a step ahead in the eyes of citizens, especially due to the advantages of having smart technologies and applications, they have also mobilized units that do not have these technologies in digitalization.

With the effect of the pandemic, the transfer of many public services that were not previously provided in electronic environment to digital platforms has accelerated, thus it has become possible to provide many services in an efficient, fast and cost-effective manner. As a result, a significant increase has been observed in the utilization of the services currently offered in electronic environment and the rate of use of these services. Specifically for Turkey, the number of e-Government Gateway entries, which was 1.1 billion in 2019, exceeded 2.3 billion in 2020; The field of e-government applications, which started with the participation of only 9 institutions and 22 service areas in 2008, has now reached 722 institutions, including 112 private, 238 public institutions, 372 municipal organizations, and 5,456 service areas (Digital Transformation Office of the Presidency of Republic of Turkey, 2021). These statistics show that the level of digitalization in public services has increased significantly.

In this context, the aim of the study was determined as the examination of digital transformation in local governments and the concept of digital municipality that emerged as a result. In this framework, first of all, the concepts of digitalization, digital transformation and digital state are mentioned in the study, and general information is given about the development process of digital transformation in the public sector. Then, the services offered by Konya

Metropolitan Municipality to the citizens have been examined in the context of digital municipality. The study has been created with a qualitative method.

2. Conceptual Framework: Digitalization, Digital Transformation, Digital State

As a result of the opportunities provided by information communication technologies, after this period called Industry 3.0, with the use of these technologies in all areas of our lives, there has been a transition to the Industry 4.0 era, where new concepts such as “big data, cloud computing, internet of things, block chain” emerged. The transformation need brought by the Industry 4.0 era, which aims to integrate existing technologies with each other, has seriously affected the public sector as well as the private sector. According to Scholl (2020), the transformation in the public sector has just begun and the coming years will lead to important developments. The digitalization of public services has become an imperative for many governments around the world. For this reason, it will be useful to clarify the concepts of digitalization and digital transformation before talking about the digital transformation process in the public.

When the literature on digital transformation in the public sector is examined for the last five years, it is seen that the need to adopt the “*digital state*” understanding by going beyond the provision of services only with the use of information technologies in e-government applications is mentioned (Aktolun ve Oktay, 2019: 7; Karasoy ve Babaoğlu: 2020: 126). The understanding of “*digital state*” aims to serve the goal of countries to become an important actor in global competition by evolving the digital transformation process towards a process that will provide added value to the country (Karasoy ve Babaoğlu: 2020: 116).

In the Glossary of Information Technology of Gartner, the concept of digitalization is defined as “*the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business processes*” (Gartner, 2021). The concept of digitization, which differs from the concept of digitalization, which refers to the digitization of analog data, can be expressed as the process of revealing value using data. In a different definition, digitalization has been conceptualized as “*the ways in which social life is organized through and around digital technologies*”

(Leonardi ve Treem, 2020: 2). Based on this definition, it can be stated that digitalization is not only limited to the use of digital technologies in services, but also represents an approach that aims to transform the sector and services (Plesner, Justesen ve Glerup, 2018).

The concept of digital transformation is defined as “*the process of using digital technologies and revealing the capabilities to create a new digital business model*” (Gartner, 2021). The entire evolution of digitized information and digitalized processes is called the digital transformation process. Unlike digitalization, which focuses on increasing the effectiveness and efficiency of services, digital transformation aims to redesign and restructure services (Mergel vd., 2018: 1). In this context, digital transformation emerges as a concept that includes a holistic transformation of organizations in personnel, business processes and technology elements (Taş vd., 2017: 2306-2307).

Beyond the technology and tools used, digitalization comes to the fore as a means of public value creation for states in environments where digital services are provided (Report on Turkey advancing in digital transformation). Lindgren and Veenstra (2018: 1), state that digital government is seen as “*a factor or a driving force that enables the transformation of public administration in order to create public value*” and that digitalization in services is a tool of this transformation. In this process, effective use of data becomes very important.

Nowadays, with the digitalization of administrative institutions, management processes and their interactions with the public, it is seen that they have a tendency to transform into digital institutions (Buffat, 2015: 150). Based on this view, it is stated that the concept of e-government has evolved towards the digital state (Karasoy and Babaoğlu, 2020: 130).

According to Scholl (2020), “*digital government refers to the use of information technology to support government transactions, involve citizens and provide government services*”. In summary, the digital government focuses on the delivery of user-centered and innovative services to the public, facilitating interaction between public institutions and citizens (Allessie vd. 2019: 4).

3. Digital Transformation Process in Public Administration

In the 21st century, important paradigm shifts that affect public administration are experienced. Developments in information and communication technologies

have initiated a digital transformation process in the provision of public services. In this process, technology offers new opportunities for restructuring public administration (Uçkan, 2003: 43). With the effect of new public administration perspective, speed of access to services has become an important criterion (Taş vd., 2017: 2304).

The most important indicator of the digital transformation that started in public service delivery is the transition to e-government applications (Göçoğlu, 2020: 619). E-government is conceptualized as “*the state’s use of information and communication technologies and its integration with organizational change to improve government structures and operations*” (Field vd., 2003). E-government, which refers to the full-time and uninterrupted provision of public services, is a process that includes the restructuring and modernization of public administrations by using technological opportunities (Şahin ve Örselli, 2003). At the same time, it is an expression of innovation in the understanding of the state with information and communication technologies (İnce, 2001: 12).

It is known that e-government applications, which have a history of about thirty years, first emerged in the USA with the introduction of some public services via the internet (Karasoy ve Babaoğlu, 2020: 120). The increase in the number of services transferred to the internet environment over time has accelerated the adoption of the e-government approach. With the e-Europe initiative in 1999, this transformation spread to the European continent. Today, e-government efforts are carried out at different levels in different countries, and the development status of countries in this regard is followed with the e-government development index.

It is seen in the literature that various stages related to e-government applications in the world are mentioned. While West (2004: 17) made a classification as “billboard stage, partial service delivery stage, portal stage and interactive democracy stage”, Layne and Lee (2001: 123-125) made a classification of e-government as “cataloging, transaction, vertical integration and horizontal integration”. In Turkey, it can be said that the development phase of e-government studies in general started in one-way, in the form of creating a web page and giving information, however, over time, it has become two-way (Yıldırım, 2015: 24; Yurbay vd., 2015: 1).

It can be stated that electronic transformation in services in Turkish public administration started with the strengthening of the telecommunication

infrastructure in the 1980s, reached a strategic point between 1990 and 2000, and thus the transition process to e-government started. In this process, with the positive effects of the reforms carried out within the scope of European Union candidacy, many public services have started to be provided through web-based Technologies (Karasoy ve Babaoğlu, 2020: 117). With the “e-Turkey” initiative launched in 2001, the “e-Europe Action Plan” was adapted to Turkey, then the “e-transformation Turkey” project was initiated under the responsibility of the State Planning Organization in 2003 and the studies on information and communication technologies were combined under this Project (Tarhan, 2011: 175; Taş vd., 2017: 2307). In 2006, by combining the e-government studies carried out by public institutions, an “e-government portal” was established, and it was aimed to offer public services to citizens more securely through a single portal (Şahin, 2014: 118). Then, with the “Information Society Strategy and Action Plan” covering the years 2006-2010, “citizen-oriented service transformation” and “modernization in public administration”, which are among the actions of e-government, were adopted (Arıkboğa, 2017: 1625). “E-Government Gateway Project” (<http://www.turkiye.gov.tr/>), was launched in November 2006. It was envisaged that all e-government applications such as the Identity Sharing System and the National Judicial Network Project would be included as sub-systems. In 2011, the Ministry of Transport, Maritime Affairs and Communications was designated as the ministry responsible for e-government policies, and the Department of e-Government Services was established. The “2016-2019 National e-Government Strategy and Action Plan” was prepared within the framework of the “Information Society Strategy and Action Plan” prepared for the third time in 2016 and covering the years 2015-2018. In 2018, the Presidency of the Republic of Turkey Digital Transformation Office was established within the scope of the Presidential Decree to ensure coordination between the ministries.

Today, in Turkey, many services such as institution services, municipal services, company services, access to university and other institution portals are available to citizens through the website “<http://www.turkiye.gov.tr/>”. In addition, many e-government projects such as “Central Population Management System” (MERNIS), “National Judicial Network Project” (UYAP), “Pharmacy Provision System” (MEDULA), “Presidency’s Communication Center Project (CIMER) are available.

4. Digital Municipalism and Digital Municipality Applications

Today, cities try to cope with the problems that arise as a result of population growth by using the opportunities provided by information and communication technologies. In this context, it would be appropriate to say that municipalities, who realize that technology is a value, make a lot of efforts to improve their technological capabilities.

Local governments invest more in information technologies in order to increase service quality and to provide efficiency and productivity in services by expanding their service areas (Kaypak, 2010: 1505). On the other hand, the opportunities offered by information technologies not only offer fast and effective solutions to local problems, but also provide important opportunities for citizen-state interaction. Digitalization in local services plays an important role in increasing public participation by contributing to the development of local democracy (Karasoy ve Babaoğlu, 2020: 120). Local governments, which closely follow the developments in the world thanks to digital facilities, can provide services to the public with a more democratic, transparent, accountable, effective and efficient management approach (Kaypak vd., 2017: 1801). Digital public services reduce the burden of institutions by enabling fast, cheap and easy interaction between the administration and the public (Karaman, 2020: 1). In addition, municipalities can reach wider audiences through digital tools and save time and cost in service delivery (Henden ve Henden, 2005: 59).

By using information and communication technologies, municipalities have the opportunity to transform urban data into important information for citizens and use this information to increase the quality of service provided to citizens (Henden ve Henden, 2005: 52). Municipalities can reach not only local people but also all masses during local service delivery thanks to digital tools (Pektaş, 2011: 70). In addition, information technologies provide convenience to local governments in providing information flow with central government (Şahin, 2007: 168).

With the “e-Transformation Turkey project” that started in 2003 in Turkey and the IXth Five-Year Development Plan (2007-2012), it is aimed to improve the service provision of local governments in the internet environment and to ensure data sharing by establishing standards. The municipalities, which started to carry out e-municipality studies by opening web pages and for promotional

purposes, have progressed in the digitalization process by moving their services to the electronic environment over time. Competition and examples of good practices between municipalities have had a positive effect on this development process (Arıkboğa, 2017: 1619-1620).

In Turkey, a wide range of new technologies from tax collection to public transportation, from water and sewage to city guides and tourism, from public relations to social media are used by many municipalities in the provision of local services. There are 112 mobile applications offered to citizens by metropolitan municipalities. Metropolitan municipalities offer the services they provide through mobile applications under the titles of online transactions or e-municipality tabs on their web pages (Gürsoy ve Ömürgönülşen, 2020: 40-41).

Today, via the e-Government platform, “In addition to the services provided by 367 municipalities in 81 provinces, information and application services provided by 26 local service institutions that provide transportation, water, sewage and similar services affiliated to municipalities can be used” (<https://www.turkiye.gov.tr/belediyeler>). Among the services offered in electronic environment, there are many services such as license, address, document tracking, petition, marriage, cemetery, transportation, air and road conditions, debt inquiry and bill payment.

e-municipality is “the use of the goods and services provided by the municipalities via the internet by the citizens within the borders of the local government.” (Alodalı vd., 2012: 6). The use of information and communication technologies in municipal services has led to the emergence of the concept of e-municipality. e-municipality “means a structuring that is more transparent, efficient and effective, closer to the citizen and more open to citizen participation through the use of information and communication technologies” (Arıkboğa, 2017: 1620). However, this concept is not just about the digital delivery of local services. It is a concept that includes a change in management and bureaucratic procedures towards a more citizen-oriented approach. Digital municipality is defined as “a local government that aims to increase performance, efficiency and quality in service with an effective local government by using information technologies in information, service and product trade” (Erdoğan, 2019: 67-68). In other words, digital municipalism refers to the activities that involve the management of the whole process through information and communication technologies and the storage of information in the interaction between

local government, citizens and stakeholders by changing its scope with the development of information technologies (Çapar, 2015: 1).

Murphy et al. (2018) lists the focus areas of the digital municipality as follows:

- Open data,
- Digital municipal services,
- Progressive development,
- Municipality websites,
- Recruitment and training courses,
- Citizen portals,
- Online municipal reporting,
- Cloud computing
- Customer-centered service delivery,
- Internal workflow.

Aksu (2018: 145) noted that the benefits of digitalization will occur in various ways depending on the increase of technological opportunities over time, and stated that three main purposes of digitalization will emerge as: efficiency, efficacy and good governance.

Today, a state's business and processes carried out in the traditional working environment based on bureaucratic procedures become independent of time and place thanks to the electronic service environment (Aydın ve Kiracı 2014: 34). The development of digital technologies that have started to take place in our lives, concepts such as the internet of things, cloud computing, block chain, and robot applications enable citizens to receive services independently from the place, but also bring some difficulties because they require some equipment that they have never been used to before. Aksu (2018: 151) expressed this process as a new "cyber physical space" entity.

Today, the concept of "smart city", as it is widely accepted in Europe, has gained an increasing reputation through digital solution software produced for municipalities with the increase in the number of technology-supported companies (Çapar, 2015). In smart cities, urban living spaces are digitized, and all objects are connected to each other with the Internet of things, thereby increasing the quality of life of citizens (Armağan, 2018: 395). Considered as the world's first digital municipality, Molenwaard Municipality has increased the smart applications of local governments, leading to an increase in research

on whether municipalism “without buildings/spaces” will be possible in the future or not (Karaca ve Öztürk, 2019; Erdoğan, 2019). Smart city concepts, which emerged with the adaptation of technology to urban life, implement many smart applications. Thus, while providing services that will facilitate the lives of the city residents, it can also bring some negativities with it. The costs of these smart systems for information and the risks in ensuring cyber security can be considered among the negativities (Babahanoğlu, Bilici ve Örselli, 2020: 255).

There are many exemplary cities such as Barcelona, Singapore, Francisco, Vienna and London, which stand out with their features of being a digital city - or smart city with its other preferred use - around the world. These cities attract attention with their smart applications in many areas such as transportation, environment and energy. However, the example of municipalities realized in “cyber physical space” is only available in the Netherlands in the world. In the South Holland, all municipal services are handled digitally by the Municipality of Molenwaard, at people’s homes or in the closest places, without the need for a physical town hall (Bletz, 2016; Karaca ve Öztürk, 2019; Erdoğan, 2019). In the next phase of digitalization in local governments, the existence of municipalities that offer services “without buildings” seems possible in the future, but there are still some problems that e-municipality can pose in some countries of the world with different development levels. These problems include the security of personal data, regional differences in access to information technologies, the existence of personnel resistant to change, lack of legal infrastructure, lack of qualified personnel, budget problems (Pektaş, 2011: 75).

5. Digital Transformation and Municipalities in the Pandemic Process

Digital applications, which used to be preferred due to cyber security concerns and whose usage levels differed between regions, have now gone beyond being an option and have led organizations to quickly develop solutions to resolve their concerns. Mobile workforce, digital identities and many other applications have begun to be adopted by citizens more than ever, and this has begun to form a foundation that will facilitate the establishment of digital mentality in the public sector.

The covid-19 pandemic, which has been effective worldwide since the beginning of 2020, has caused many people to move their jobs to their homes,

and public institutions have accelerated digital transformation processes in this process. Local governments, which put crisis management processes into action, have adopted the approach of upgrading their equipment in order to eliminate the long-term effects of the crisis and to cope with similar crises while working to maintain their services without any disruption. While municipalities using newly developing technologies ensure continuity in service, municipalities that already use smart city applications effectively have adapted to this process more quickly.

It can be said that the municipalities in Turkey play an effective role in the implementation of the decisions taken as the closest service organizations to the public in the process of fighting the pandemic (Ömürgönülşen, 2020).

The pandemic process has shown how critical it is to support the municipality-citizen relationship in the digital environment and with systems that will provide based on mutual interaction (Çakır, 2020:5). Çakır (2020:5), expresses the opportunities of the pandemic on municipalities as follows:

“The corona pandemic showed how critical it is to place the municipal-citizen relationship on a digital platform, supported by algorithms, that will work in both directions. We need platforms that operate between municipal administrations and digital citizen groups formed on the basis of neighborhoods or streets. Municipalities have to work in cooperation with many public institutions, make decisions and ensure implementation coordination. The digital transformation process can create opportunities to fundamentally change it here, as well.”

The Covid-19 outbreak has once again demonstrated the vital importance of digital governance, demonstrating the benefits of using digital tools in management processes in times of crisis, where rapid decision making has become very important. Units, which carry data to the decision-making process by using data effectively, and that can see and design the needs correctly in accordance with the city residents, have had the opportunity to succeed in the crisis period.

Today, municipalities have become structures that produce technology-based products and services by determining citizen demands more effectively with the opportunities provided by information and communication technologies.

During the pandemic period, the importance of smart urbanism has increased, and smart cities with strong technological infrastructure have been able to solve their problems faster in this process.

6. Konya Metropolitan Municipality in the Context of Digital Municipalism

Konya is the largest city in Turkey in terms of acreage and the 7th largest city in terms of population. and the 7th largest city in terms of population. Konya Metropolitan Municipality has become a Metropolitan Municipality with the Law No. 3399 dated 20.06.1987 and consists of a total of 31 districts, 3 of which are central districts (Selçuklu, Meram and Karatay).

Although Konya Metropolitan Municipality is behind other examples in the world in terms of e-municipality and smart city applications, it can be stated that it is at a good point in Turkey. It is considered as an integrated smart city candidate, especially due to the number and quality of the services it offers digitally and the smart urbanization approach it adopts (Bilici ve Babahanoğlu, 2018: 137).

Table 1. Services Offered through Konya Metropolitan Municipality's E-Government Gate

General Services	
Pharmacies On Duty Inquiry	This service can be used without logging into the e-government system.
Document Tracking	Documents processed in the municipality can be followed.
Death Information Inquiry	Death information of people who died on a certain date can be questioned.
Personal Services	
Declaration Information Inquiry	Declaration inquiry service.
Application for Information and Inquiry	Informing Service.
Accrual Information Inquiry	Debt information inquiry service.
Request / Suggestion Application and Inquiry	Open door application service.
Registry Information Inquiry	Registry inquiry service.
Collection Information Inquiry	Collection inquiry service.

Source: <https://www.turkiye.gov.tr>

A total of 9 different services, 3 of which are general and 6 of which are individual, are provided through the e-state gate by Konya Metropolitan Municipality (<https://www.turkiye.gov.tr/konya-buyuksehir-belediyesi>, 12.04.2021). When evaluated in terms of the services offered through the e-government gate, it can be said that Konya Metropolitan Municipality is at a better level than many municipalities in Turkey.

Table 2. Konya Metropolitan Municipality e-Municipality Applications

e-Payment	Citizens can pay their debts arising from their activities safely and quickly.
e-Petition	It is a system where citizens can easily apply to the municipality with a petition on the internet.
e-Address	Office activities for address transactions carried out based on the Population Services Law No.5490 and the Metropolitan Municipality Law No.5216 have been transferred to the internet environment due to the Covid-19 measures. Address transactions are provided through the internet address “numtaj.konya.bel.tr”.
e-fellow citizen	The ehemsehri.konya.bel.tr portal was created within the scope of Digital Citizenship. Bulk mail and bulk sms can be sent to citizens in Turkey through the panel and mails can be sent to those abroad.
e-License	Businesses can submit their license application request and the documents required for the license online to the municipality.
e-Paw System	“Within the scope of the Volunteer Animal Friends Project, while stray dogs have a home, the health status and development of the animals are constantly monitored through the e-paw program. With the e-Paw application, which is compatible with mobile devices, the teams constantly monitor the dog’s vaccinations and health conditions.”
Cemetery Information system	The system, which is implemented in the cemeteries in the center of Konya and in the cemeteries in all district centers, can be accessed from the interactive kiosks with touch screen in the cemeteries, from the address konmeb.konya.bel.tr and the Cemetery Information System.
Disabled Information System	It is a system established to gather the disabled people residing in Konya under one roof, to establish closer relationships and to create a social tissue map of the disabled and to determine their needs.

ATUS	With the Intelligent Public Transportation System, it is possible to reach where the public transportation vehicles are, how many minutes they will arrive at the station, the public transportation lines passing through the bus stop, the route and bus stop information.
MUBİS	MUBİS enables the requests of 1,154 neighborhood representatives working in the center and districts of Konya to be conveyed to their addressees in the most effective and efficient way. With the system, which also keeps statistics on how much demand for which investments from which district, neighborhood representative can convey their demands, complaints or thanks without the need for face-to-face meetings.
Transport Card Kiosk Automat	It is a vending machine where citizens using public transportation can do transactions such as obtaining new Transport Card (Elkart), Transport Card balance loading, Transport Card balance inquiry, subscription loading, HES code matching, money loading by credit card.
Transport Card - HES Integration	HES matching system has been written for Personalized and Full Cards on the Web. In this way, citizens can make HES inquiries online over the defined Transport Card (elkart) while getting on public transportation vehicles.
Transport Card (Elkart) e-loading	During the pandemic period, citizens load money online via the internet instead of physically loading money to their transportation cards from Transport Card dealers.
Tourist and Traffic Cameras	Citizens who cannot go out during the pandemic period watch Konya over the internet. There are about 35 cameras installed at certain points in the city.
Open Gate	It is a system established by Konya Metropolitan Municipality to communicate with citizens and to intervene in problems instantly.
Rubble Hotline	The rubble of those who make minor renovations in their homes and workplaces are collected by containers. In addition, the excavation tracking system has been established and the excavation vehicles belonging to the enterprises in Konya can be monitored instantly with the system.

Source: <http://www.konya.bel.tr>

When Table 2, which includes the services offered by Konya Metropolitan Municipality in the context of e-municipality, is examined, it is seen that many local public services are offered online. Among these services, Konya

Metropolitan Municipality used security cameras to ensure the safety of the city and developed the Neighbourhood Representative Information System (MUBİS) application in order to facilitate communication between the neighborhood representatives and the municipality and its affiliated units. In the context of smart economy, the “e-design” project has been initiated with the cooperation of Konya Metropolitan Municipality, Selçuk University and Mevlana Development Agency. A website in the form of <http://www.konya.com.tr> has been established for the promotion of Konya and information about the historical and touristic places of the city, accommodation, education and health are provided to the users through this site (Yıldız ve Özçubuk, 2020: 179). In this context, it can be stated that Konya Metropolitan Municipality is at a good level in terms of e-municipality.

During the pandemic period, municipalities as the closest administrative unit to the public have had to fulfill their current responsibilities in the best way and undertake new responsibilities. Local governments have played an important role in combating the pandemic in many areas such as health, education, social welfare, culture, and arts activities. As Altay (2020) stated, “*the pandemic period has changed both the activities and working habits of the municipalities as it affected the lives of cities and all people*”.

Table 3. Konya Metropolitan Municipality e-Municipality Usage Statistics

Local Public Services	Year	
	2019	2020
Smart Public Transportation System (number of daily usage)	701.000	150.000
e-payment (yearly)	226.000	153.000
e-petition (monthly average)	398	70
MUBİS (number of requests-yearly)	3854	2521
e-loading (number of loadings)	230.455	153.431
e-license	183	201
Open door application	20.678	29.600

Source: <http://www.konya.bel.tr>

Table 3 shows the usage rates of e-municipality services offered by Konya Metropolitan Municipality between 2019 and 2020. In this context, it is seen that the Smart Public Transportation System ATUS, which is offered by Konya

Metropolitan Municipality and is used more than 55 million annually, and decreased to 150,000 per day in 2020. It can be stated that this decrease is due to the fact that citizens do not prefer public transportation due to the pandemic, the prohibition of the use of public transportation vehicles by certain age groups and the absence of university students in Konya. Among the services usage rate of which increased in 2020 compared to 2019, there were e-licenses and open door services. It is seen that the e-payment statistics have decreased due to the fact that there are business taxpayers within the Metropolitan Municipality and the ease of delay of payments due to pandemics is provided for them.

Konya Metropolitan Municipality carried out some social projects for citizens during the pandemic period. Approximately 300,000 people participated in these projects. Some of the projects can be listed as follows (<http://www.konya.bel.tr>):

- **“Let the balconies be a garden”:** With the project, a web application was developed to distribute free vegetable and flower seedlings, flower soil and pots to 10 thousand housewives.
- **Whoever Produces the Best Content Wins - Video Sharing Contest App:** A video sharing website has been built where videos of at least 1 minute, maximum 3 minutes in length, prepared on platforms such as Youtube or Tiktok, can be sent.
- **Heritage from Masters - Photo Contest:** It is an application where the award-winning photo contest with the theme “Heritage from Masters, Professions Facing Extinction” is held.
- **My World Fairy Tale Writing Contest for Children:** A fairy tale writing contest with the theme “My World” was organized for primary and secondary school students.
- **Road and Travel Photo Contest:** Konya Metropolitan Municipality started an award-winning photo contest with the theme “Road and Travel” on the internet within the scope of celebrating the arrival of Rumi and his family to Konya and a web application was made for the applications.
- **International Islamic Arts Competition Application System:** With the web application made for the International Islamic Arts Competition, applications were received for the contest where qualified works from Turkey and the world would participate in the branches of “Calligraphy, illumination, miniature and tile”.

- **Mefahir-i Ecdad (Our Proud Ancestors) Composition Contest Application System:** Konya Metropolitan Municipality organized a Mefâhir-i Ecdâd (Our Proud Ancestors) Composition Contest in order to raise new composers and to transfer national and spiritual values to future generations through music. A web application was developed to receive and evaluate the competition held electronically.
- **Article Contest Application System on “Hagia Sophia and Conquest”:** An application system was organized for the award-winning article contest on “Hagia Sophia and Conquest” among the students studying at high schools in the center and districts of Konya.
- **Quiz Program about Konya System and Digital Transportation:** A quiz web application consisting of questions asked about Konya was developed in order to enable our citizens traveling by public transportation to spend an efficient time during their travels.
- **Basketball Tryouts Online Registration System:** Applications made for the basketball infrastructure of Konya Büyükşehir Belediyespor Club were received through a web application developed.
- **Komek, Young Komek and Asem Applications:** Due to the pandemic, Konya Metropolitan Municipality Vocational Courses and Family Arts and Trainings were carried out through the distance education system. In this context, an online system that students can enter and applications that teachers can follow up students have been developed.
- **Career Center Application:** For citizens who want to apply for a job in the municipality, there is a web application that publishes job postings and works online. Citizens can enter and change their own information and follow up their applications.
- **Internet Password Distribution:** Cards were issued to give “gift internet” to students who needed internet due to the distant education of schools due to the pandemic, and a web application was developed to enable people to activate their internet.
- **Social Support Center Application System:** It is the system where applications are received for the aid made by our Municipality to our citizens who cannot continue their work and workplaces are closed due to pandemic.
- **Wise Men Houses System (Bilgehaneler Sistemi):** These houses, which serve within the Konya Metropolitan Municipality, continued its new education period with distance education due to the coronavirus pandemic.

Conclusion

Today, the issue of digital transformation is at the top of the agenda of many governments and government institutions around the world. In the upcoming years, it is thought that the interaction of citizens with the state will increase with the development of existing technologies and the addition of new ones. For this reason, it is of great importance that municipalities have and adopt the equipment required by the digital age in terms of structure, process and personnel elements. In this context, digital transformation should not be considered only as a process, but as an element that concerns the entire organization. In order for the change to make a return in the whole organization, it must first be embraced in a cultural sense.

It can be said that digital services, which are intended to serve to increase the value of public services, depend on the realization of digital transformation in public services with all its elements and the completion of digital literacy trainings in this process. In this process, necessary arrangements should be made for citizens to adapt to a digital world where everything is done remotely. Efforts should be made to improve the digital skills of citizens.

When the issue of access to digital technologies is evaluated, all sensitivities on this issue arise in relation to the issue of social inclusion. It will serve the purpose of removing obstacles to internet access of especially disadvantaged groups and ensuring that services are transferred to the digital environment. On the other hand, it is very important to properly manage data privacy and reliability concerns caused by increasing data use.

In summary, the only way municipal administrations in the global world can adapt to the new demands of the digital information age society is through being the best in digital vehicle use. While the pandemic has brought up the role of e-government in crisis management, it has also showed that there is not much time to remove the obstacles to digital transformation. For this reason, it is indispensable for municipal administrations to quickly follow digital transformation trends and learn about their opportunities and challenges for the future. In the digital transformation process, the number of studies analyzing the situation and needs of municipalities should be increased.

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CHAPTER VIII

REFLECTION OF DIGITAL TRANSFORMATION ON CITIES: SMART CITIES

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1. Introduction

The globalization process has changed social, cultural and economic systems all over the world, and the rapid developments in information and communication technologies have penetrated all areas of life and started the digital age. The dizzying pace of progress on digitalization and the widespread use of the internet with each passing day force cities to change. This situation has led to the emergence of new ways and methods in technology-based transforming urban management. Local administrations and, in this context, local service delivery took new forms in a technology-oriented manner with the necessity of the age. City managers who want to please their citizens have had to make progress in providing online services with new forms of service and constantly renew themselves. The change of urban services is based on efficiency and productivity through smart applications. In this context, it is seen that cities have started to provide services as smart cities in a sustainable development effort.

First, the concept of digitalization is included in this study which aims to look at how digitalization transforms cities and urban services and how the service deliveries take up a place. The path followed by digitalization in the axis of globalization and how it spread to the world and how the concept was included

in urban administrations were mentioned. With digitalization, the Internet of Things (IoT) used in urban services was explained, and the concept of smart city and its basic components were given in detail. In addition, some examples of smart cities in the world and in Turkey and smart applications used in these cities were mentioned. It is an undeniable fact that smart city applications, which have become the key to sustainable development today, have gained a quality desired by all city administrations. In this context, the transformation of cities with the 'smart' forename and the citizens' adoption of this transformation started to be at the top of the task list of city administrations. This technology-based and sustainable urban change, which has gained momentum all over the world, has started to be of vital importance for the citizens living in the cities.

2. The Way of Digitalization and Digital Transformation in a Globalizing World

The foundation of a worldwide communication network was laid with First Industrial Revolution in England starting with the invention of the steam engine in the 18th century, the construction and expansion of railways, the invention of the telegraph and the telephone and with the laying of copper-wire telephone cables between the oceans. In the 20th century, when different inventions that were the continuation of each other developed, Second Industrial Revolution (Industry 2.0) started with the change and development of agriculture after the discovery of artificial fertilizers, with the development of mining after efficient mining techniques, the development of construction industry with the rapid increase of common and compulsory structures such as railways, bridges and canals, and with the change of production methods after the invention of electricity. Especially, the invention of electricity linked the human, animal and natural power in production to inputs such as coal, natural gas and oil, and as a result, mass production became widespread. The spread of mass production and consumption caused transformations in social structures and accelerated urbanization. The fact that people were aware of each other and the developments in the world helped them to change and to become democratic mechanisms that pay attention to efficiency and effectiveness by affecting the administrative and political structures (Toffler, 1980: 22-25 as cited by Gül, 2017: 7-9).

Industry-oriented development and enrichment emerged in many parts of the world, especially after World War II. In the 1960s, the period called the

3rd Industrial Revolution (Industry 3.0) was entered, and energy crises were experienced during this period due to the decrease in scarce resources (coal, natural gas, oil) and as a result, environmental awareness and sensitivity began to increase. With the population density shifting from rural areas to urban areas, the socio-economic demands of people increased, and fast and quality service delivery became up-to-date in administrative terms. All these conditions led to computer technologies, digitalization, the need for information generated and disseminated virtually, the obligation to process and store the data, and the proliferation of personal computers. The unavoidable and unpredictable development of digital transformations started the 4th Industrial Revolution (Industry 4.0) in the early 2000s, and as a result, it is stated that a digital age started all over the world (Gül, 2017: 9-10).

These structural, functional, cultural, administrative and technological developments and changes that the world has gone through have introduced people to a basic concept called digitalization, which affects the whole structure and functioning. Digitalization is literally expressed as the process of transferring and storing existing resources and new information produced by processing these resources into a virtual environment by a computer in a way that can be accessed (<https://www.dinamikcrm.com/blog/dijitallesme-nedir>). Another definition of digitalization that can be accepted is defined as the digital acquisition (production-consumption) or renewal of existing resources with high efficiency by making little physical effort (<https://www.dijitalles.com/blog/dijitallesme/dijitallesme-nedir/>). The element that should be underlined in digitalization is making the data visible electronically by digitizing (via 0's and 1's). The concept of digitalization is functional in all matters that can come to the human mind. With globalization, it has managed to be included in all areas of life in every way. Developing technology has made it obligatory for states, citizens, businesses, local governments and many other structures to be in the digital environment. Today, the most basic requirement of being up-to-date and perhaps surviving is considered to be keeping up with the pace of digitalization.

There is a consensus in the context of all stakeholders on the benefits of digitalization related to the transfer of data from the world to the digital platform. The cost of accessing information is reduced by making existing data digitally stored and accessible. Thanks to digital data production, the data can be copied very well, providing effective access to information from one end of the world to the other. It is stated that the search, analysis and reproduction of the data

transferred to the digital environment increases the usability and efficiency of the data much more (Şeker, 2014: 7).

Globalization became a concept that all humanity frequently used towards the end of the 20th century. This concept, which deeply affects the lives of societies in all areas, eliminated the concept of distance on the world with great advances in technology and communication (Keleş, 2017: 63). The world has evolved from an agricultural society to an industrial society, and then from an industrial society to an information society. This evolutionary development has transformed society in many areas including socio-economic, political, administrative and cultural, and has changed the means of production and consumption patterns every day (Bayraktutan, 2004: 48). With the Industry 4.0 era, which is called the new age, although the way people do business, technological discoveries and all digital advances such as developing, storing and sharing these discoveries have changed rapidly, their costs have decreased. In other words, in addition to becoming widespread after a while, it is stated that digitalization has created big data in every field like machinery, learning, wearable-perceptible technology devices, processors with artificial intelligence and the internet of things, and it has made technology a dominant role in human needs (Gül, 2017: 11).

This digital revolution, which is experienced based on industrialization and globalization worldwide, has not only brought communication a global character, but also led to the personal acquisition and use of information and communication technology products (Güngör, 2012: 3). Thus, people have started to access the data from their personal computers or mobile devices and transmit the data to the sources they want. Nowadays, people spend a considerable part of their time in digital media in front of computers and mobile devices. The rapid path of digitalization, the revolution in the internet field and its strong integration into daily life have also created people who take care of their work on the screen with digital tools (Kaypak, 2017: 913), try to use all the products of technology and increase their demands on this issue day by day.

With digitalization, reaching and transmitting information has become increasingly cheaper and easier, and accordingly, it has continued to gain value every day in terms of productivity. In the globalizing world, thanks to the digital age, the rapid circulation of information with communication devices (Güngör, 2017: 2260) has based the dynamics of the economy, social and cultural life on information in the digital age (digital revolution, internet

revolution, telecommunication revolution, etc.), unlike the scarce resources of the industrial society. As a result, digitalization has progressed rapidly all over the world with the effect of globalization, and the advances that took hundreds of years in the times of the industrial revolution have occurred in much shorter time. Especially after the 1970s, the tremendous developments in information and communication technologies were involved in all areas of human life.

As a result of the rapid development in information and communication technologies and the rapid increase in usage areas depending on this development, the forms of relationships between individuals have also changed. In addition to individuals, state institutions started to shape their relations with their citizens in these changing ways. This transformation is being carried out by the state to meet the expectations of citizens and private businesses. It is stated that these digital-based transformations, which greatly affect social relations and institutional structures, are used with the forename ‘-e’ (Güngör, 2012: 10).

The widespread use of the Internet has deeply affected the field of public administration, as it is in every field. Public administrations, which are in an effort to keep up with development, have used technology to ensure efficiency and productivity in service delivery over time. Public institutions that want to meet the needs and demands of citizens effectively have started to use information technologies intensively to both strengthen their administrative structures and reduce the costs of services. This process, also called e-transformation, continues to gain importance day by day (Arikboğa, 2017: 1620).

The effect of globalization and the dizzying change in information and communication technologies have reduced the operability of existing management structures and created the need for new structures. Traditional administrations, which have a strict bureaucracy and hierarchy, try to switch to entrepreneurial, flexible, harmonious and localized service delivery for effective and efficient service delivery, since they cannot provide the satisfaction of the citizens. In this context, all institutions related to the provision of public services aim to maximize citizen satisfaction by removing obstacles to effective service delivery. To achieve this goal, decision-making mechanisms are trying to open to all stakeholders and it is stated that organizational structures are also restructured (Korkut, Acar and Tetik, 2015: 131).

As a result of the digital transformation process, private or legal persons who are the subjects of the public service, the personnel providing the service, non-governmental organizations and private sector organizations that may

be involved in service delivery have become important stakeholders of the public service. With the rapid development of information and communication technologies, electronic service applications have emerged for the responsible, legal and participatory service delivery that prevents waste of resources and ensures efficiency and productivity. These applications are called e-government for services provided by the center and e-municipality for local services. These electronic service applications, which are used to provide service in a fast, uninterrupted, cheap and high quality manner, give importance not only to form but also to the content. E-applications are called applications that act with the aim of providing an interactive service between the e-government and e-municipal services and the recipient of the service (Mercek, 2017: 1816). In summary; the new form of effective and efficient service delivery for the citizen, together with the citizen, has transformed into applications with forename -e-. Within the scope of digitalization, public services have radically changed, or rather transformed. The basis of this transformation is the information and communication technologies that affect the whole world with globalization. Nowadays, people carry their relations with the state to the online environment as well as in all areas of life, this changes the methods and forms of public service delivery and reshapes them on a technological basis.

3. Smart Cities as a New City Form and Its Components

Before it comes to what smart city applications are, which are the most important reflections of digital transformation in urban life, it will be useful to talk about the concept of the internet of things that form the basis of this transformation. As it is known, with the developing technology, almost all routine works of daily life have started to be carried out over the internet. With the help of new technologies that contribute to smart city applications, service delivery has begun to occur when objects connected to each other and people use the internet over a network. For this reason, the visibility of digital transformation in cities is smart city applications and the digitalization of smart city applications is the Internet of things defined as the simultaneous connection of multiple objects to the internet and each other.

The concept of Internet of Things (IoT) was first expressed in 2015 as “connectivity for everything, anytime and anywhere”. The concept, which has a wide range of applications, is of great importance both for industrial production

areas and for the general population. The reason why the concept is gaining importance day by day is that the technological tools such as computers, tablets, smart phones interact with people and these objects at any time and anywhere (Petrolo, Loscri and Mitton, 2015: 1).

Internet of Things (IoT) is the name given to all services that operate over a network with the help of devices that enable people to monitor and control all kinds of events in their environment. Devices in the established network can communicate between people and machines as well as between machines and machines (Gökrem and Bozuklu, 2016: 47). The Internet of Things is seen as the most modern way for many different objects (devices) to perceive information, to process and analyze the perceived information via the Internet. With the rapid development of technology, the number of objects within the scope of IoT is increasing day by day (Mehmood et al, 2017: 16).

The Internet of Things (IoT), which does not have a single definition due to its wide scope and the diversity of the objects involved, can be defined as the data exchange between objects that are a part of daily life and the continuation of this information exchange in an harmony. In addition, the concept is perceived as the basic building block that provides living space to smart systems to facilitate human life. It is stated that objects that are connected to each other with internet networks around the world have their own addresses and are in constant interaction by observing certain rules, and this provides the necessary data exchange in the fulfillment of daily routines and helps to speed up the works and transactions (Gündüz and Daş, 2018: 328).

The Internet of Things is a set of systems that connects many objects and includes sensors and activators. The fact that physical objects are included in the system as both sensor and activator is an important point that makes the system functional. This system is expected to have certain criteria in order to achieve the specified goals. These criteria can be listed as usability, reliability, portability, scalability, heterogeneity, interoperability, security-privacy and performance (Çavdar and Öztürk, 2018: 41-42).

The internet of objects, which are expected to spread to a wider area in the future, is used in many areas today. The leading ones in these areas are smart home applications, smart city applications, scientific study applications, information sector applications, energy applications, daily use applications, security applications, manufacturing / production applications, construction applications, public sector applications, health applications, service provider

applications, agricultural applications, transportation practices, and trade applications (<http://www.beechamresearch.com/article.aspx?id=41>).

Internet of Things technology is generally shaped over four components. These tightly interconnected components are in the form of object, data, human and process. Applications shaped around these four components may also differ in the context of individuals, institutions and countries. When it comes to objects, the internet and connected devices; when it comes to human, the element that uses these objects; when it comes to data, the circulation of information produced between objects, and when it comes to the process, all the correct access situations between these components should come to mind. It is stated that these components are a whole and cannot be considered separately (Gündüz and Daş, 2018: 329).

In summary, this Internet of Things Technology, which is included in all areas of life, has caused radical changes in the way local governments provide services to the citizens of cities that claim to be smart cities. Many traditional city services such as cleaning public spaces, transportation, parking, lighting, garbage collection have transformed into urban IoT. This technology used by local governments to reduce costs and increase service quality has made many public services simple and accessible. IoT, which constitutes the infrastructure of a transparent, open and responsible city management, has become attractive for smart cities, and has become the trigger of providing citizen satisfaction and fast service delivery (Zanella et al, 2014: 23).

As a result of the rapid urbanization in the 20th century, nature and human faced some negativities. The rapid concentration of the population in urban areas revealed the necessity of re-planning of the cities. Since the 1990s, this planning has shown itself with many initiatives such as livable city, eco city, digital city, smart city. It is stated that the smart city concept has become the most functional among these terms (Kaygısız and Aydın, 2017: 59). Today, the cities that have a command of technology and have made innovation a vision can get one step ahead in service delivery thanks to the savings they make in time and resources. The fact that urban services are carried out through information and technology-based applications for the main purpose of satisfying the citizens and ensuring a sustainable development (Erkek, 2017: 58), has revealed the concept of smart city as a new application area. Rapidly increasing urban population and unavoidable urbanization movements have revealed many problems such as inability to meet the costs in infrastructure systems and public servicedelivery

in cities. Smart city applications were needed to meet the lack of resources in the delivery of all kinds of local services from energy to water, from transportation to health, and to satisfy need for technology used actively in the delivery of these services. However, this concept emphasizes not only the use of technology in local service delivery, but also the increase of the life quality of city dwellers and also the economic, humanitarian and legally livable urban life (Mirghaemi, 2019: 39).

The necessity of using the infrastructure capacity and urban resources in accordance with the needs of today and the future on the basis of efficiency and productivity for all world cities has made it necessary for cities to become smart structures. The concept of smart city, which has many different names, basically means providing services in the light of technological developments in order to ensure environmental sustainability. Since the process of making cities smart means having the technological systems required by the day in terms of planning, operation and implementation, it requires the local governments and even the central government to make innovative moves. In order for cities to turn into smart cities, it is of great importance to clearly define the needs of the city, the opportunities available and the desired goals (Varol, 2017: 44). In this context, in the process of transformation of already functioning city structures with the emphasis smart; developing technological infrastructure, determining strategies, making plans, creating application areas and processing the data through analysis and selecting and disseminating appropriate applications are the main issues. It is stated that these new applications created by information and communication technologies facilitate the functioning of urban life, increase service quality and increase citizen satisfaction with the speed factor (Nair, 2019: 526).

In recent years, cities and people living in cities have been digitized, and accordingly, while living standards are increasing in urban areas, practical solutions are brought to the problems with the widespread use of technology. In this context, smart city applications are developing and becoming widespread. The sustainability of cities is shaped depending on the production tools and technology of the current period. The concept of smartness in urban life is geared towards creating new application areas in the long run rather than solving instant problems. Therefore, cities with future concerns aim to become smart cities. It is possible for the smart city approach to work if both city administrators and citizens adopt this approach. The concept of smart city is not a one-dimensional

concept. Information communication technologies, innovation and problem-solving capacity are considered as basic features that smart cities should have. Collaboration and digital infrastructure tools are important elements for cities to use smart applications and achieve their goals. The smart city approach, which enables the communication and service delivery methods between the rulers and the ruled to shift from traditional to modern, ensures urban services to become more efficient and widespread and faster than ever before (Örselli and Akbay, 2019: 229).

It is predicted that smart cities exist to create solutions to some current or future problems. In this context, areas where smart cities will benefit can be listed as follows (Memiş and Babaoğlu, 2018: 153):

- Correct analysis of urban problems,
- Effective coordination,
- Instant data flow and fast decision making,
- Plans for the future,
- Change in local government approach,
- Sustainable development,
- Solution of urban problems (energy, infrastructure, zoning etc.),
- Increasing the quality of urban life,
- Citizen-oriented, participatory management,
- Improving service delivery, expanding service areas.

There is no single definition agreed on the concept of smart city, which is gaining importance and spreading day by day. The definitions of the concept may differ according to the components it contains, the geography it is defined and even the time. Although it has emerged to solve the mentioned problems above, the constant change of technology and the existence of unique features of each city on the road to becoming a smart city differentiate the definitions made. Before coming to the basic components of smart cities, it would be useful to take a look at some of the definitions in the literature.

Smart cities are urban living spaces where security is ensured, resources are not wasted, the environment is protected, all infrastructure systems (transportation, energy, water, etc.) can be monitored, and have technologies that can update and repair themselves when necessary (Hall, 2000: 1). According to another definition, they are cities built on citizen participation

and technology infrastructure to show a better performance in many fields of activity such as industry and education (Giffinger et al, 2007: 10). Smart city is a set of technology-based applications in which the components that make up the city such as information communication technologies, physical structure and social structure are connected and offered for common use to increase the infrastructure efficiency and service delivery quality (Harrison et al, 2010: 2). The concept of smart city can also be defined as a form of city that focuses on the solution of today's and future problems, where new services are created using communication via smart systems and wireless sensor technologies (Clarke, 2013: 1). In summary, smart cities are interpreted as a set of systems where the information obtained by creating a database is integrated with each other, services are provided by using advanced technologies, and that satisfy its citizens in an intense competitive environment (Akdamar, 2017: 200).

When the definitions in the literature are examined, the common emphasis used in defining the concept of smart city can be summarized as effective and efficient resource use, time and cost savings, high living standards, clean environment, participatory and democratic city management. At the same time, it is seen that there is a search for a more livable city in all of these definitions. Definitions underlining a functional and competitive urban life that can use new technologies are distinguished from other cities with innovative structures that can process information and manage it as the data (Erkek, 2017: 60).

It should not be forgotten that the development process of the smart city concept can be shaped according to the use of technologies at different levels, management-governance structure, diversity of social-economic-cultural structure and business life. In other words, each city is on its way to becoming a smart city according to its own characteristics, future goals, resources, opportunities and threats (Kaygısız and Aydın, 2017: 61). Understanding this is of great importance in terms of grasping that smart city applications do not occur in the same way all over the world and the diversity of policies implemented. The main reason why the concept is used in different terms such as information city, sustainable city, digital city in the literature is seen as this diversity.

There are six basic components that contribute to the development of smart cities: smart economy, smart people, smart governance, smart mobility,

smart environment and smart life. Scopes of these components are specified as follows (Giffinger et al, 2007: 12):

- 1- Smart economy; innovative spirit, entrepreneurship, economic image and brands, flexible labor market, efficiency, transformation ability,
- 2- Smart person; lifelong learning, social and ethnic majority, flexibility, creativity, open-mindedness, participation in public life,
- 3- Smart governance; participation in decision making, public and social services, transparent management, political strategy and perspective,
- 4- Smart transport; local transport, national-international transport, availability of information and communication technology infrastructure, sustainable innovative and safe transport systems,
- 5- Smart environment; attractiveness of natural conditions, pollution, environmental protection, sustainable resource management,
- 6- Smart life; cultural facilities, educational facilities, health conditions, individual security, building quality, tourist attraction, social structuring.

If the application areas of these components are summarized, what is meant to be emphasized with the smart economy is the development of production and supply chain using technology and the providing of competitive economy with applications such as e-commerce. Smart people refer to the active social structure that learns and uses information and communication technologies. In smart governance, decision-making mechanisms are mentioned in which information and communication technologies are used to effectively involve all stakeholders in management. Smart mobility means that transportation systems are in coordination and presented with technological infrastructures. Smart environment includes services such as developing environmentally sensitive systems, using renewable energy and measuring air pollution with the help of information and communication technologies. Finally, the smart life component mentions that the urban environment becomes safe and healthy and that the lives of the citizens are made easier thanks to the technologies used (<https://medium.com/iomob/blockchain-cities-and-the-smart-cities-wheel9f65c2f32c36>, Akşit, 2018: 8-9).

Smart cities decide on their own which of these components to use in the light of the roads and methods they follow. In addition, the contents of the components may differ on the basis of cities. A smart city can contain one of

these components or can include more than one. Determination of service areas and selection and implementation of smart applications are entirely under the initiative of city administrations (Erkek, 2017: 61). Cities are trying to switch to smart applications in these service areas and change the way of service delivery according to their resources, goals and problems.

Houses, cars, transportation systems, to which the title of smart is added, can gain new forms every day and make life in the city easier. Smart communication and transportation systems developed for the effective and efficient use of urban resources, warning systems activated in case of emergency, systems that minimize energy use, smart waste systems and smart infrastructure systems enable citizens to save time and energy. The providing of urban services through these smart applications makes urban life environmentally friendly and human-centered (Babaoğlu, Bilici and Örselli, 2019: 1301- 1302).

The smart city approach has a dynamic structure all over the world. Accordingly, the economic, social and environmental motivations for becoming a smart city change day by day. While the first examples of smart city applications were for the use of technology for efficiency, day by day these applications have had a line that increases the quality of life that enables the participation of citizens. Until 2013, the applications were based on economy, but after this year they became more social and environmental. Smart city applications around the world differ from country to country and even from city to city. Practices across Europe seem to be on reducing carbon emissions, protecting the youth, supporting the elderly, reducing costs and improving infrastructures. In the United States, it is at the forefront of improving economic conditions, developing digital product options and making management more open with information communication technologies. In Asian countries, branding of cities, increasing efficiency in consumption and increasing service quality are the main objectives. In the Middle East and Africa, creating business areas using new resources and eliminating financial deficiencies constitute the agenda of smart city applications (Ministry of Environment and Urbanization, 2020-2023 National Smart Cities Strategy and Action Plan, 2019: 25-26).

4. Examples of Smart City Applications from the World

There are many cities in the world that are examples of being smart cities, and new ones are added every day. Los Angeles with smart transportation systems,

Oslo with smart street lighting systems, Barcelona with smart garbage collection systems, Songdo with smart building systems are just some of them (Köseoğlu and Demirci, 2018: 44). Some cities trying to deal with the carbon emission problem with smart applications are Toronto, Copenhagen and Vienna (Erkek, 2017: 64). The cities of London, Barcelona, Vienna, Singapore and Copenhagen, which try to prevent the rapid depletion of ecological resources due to the increasing population, have gained the smart city identity in the world with the environmentalist investments they make for sustainability (Istanbul Technical University Foundation, Smart Cities, 2017: 4).

Barcelona, which started the efforts to become a smart city a long time ago, has significantly increased the quality of life by using smart individual and smart governance components effectively. The city, which set out with the idea of presenting its services in an effective, effective and open way, has created smart applications by using information and communication technologies thanks to the importance it attaches to participation and has been a good example of the smart urbanization process. Measures are taken thanks to sensors that measure air pollution and noise levels in the city. In addition, the education of citizens is supported with distance education systems. Smart systems are used in gas and electricity consumption in the city, efficiency in electricity consumption is achieved with smart lighting systems, and heating, cooling and wastewater management is carried out thanks to the smart systems used in buildings. It is stated that cities that see information and communication technologies as a tool, not the aim of becoming a smart city, have achieved success because they are based on citizen participation and satisfaction (Örselli and Dinçer, 2019: 109-111).

In Amsterdam, which is a unique and good example for smart cities, important steps were taken to solve environmental problems, create sustainable urban areas and facilitate urban life with the 'Amsterdam Innovation Motor' organization. Thanks to the 'Amsterdam Smart City Foundation' established in the city, projects were produced and various partnerships were established to become a smart and sustainable city. While these services and collaborations were presented to the public on the website called 'Amsterdam Smart City', management practices were made transparent by giving the rights to the local people for ideas and complaints. The stadium named Amsterdam ArenA, built in the city, offers football lovers technological opportunities, connecting the stadium and people with the internet of things, ensuring the satisfaction of

the citizens. In addition, it is stated that with the “Climate Friendly Street”, one of the important projects of the Smart City Platform, many activities were implemented from electricity savings in lighting to energy savings of waste collection vehicles to prevent waste of resources (Uçar, Sühal and Nilüfer, 2017: 1791; Nair, 2019: 530).

Santander city of Spain collects data in many areas such as air pollution, climatic conditions, traffic density and energy consumption in a single center by using camera and sensor technologies, and enables citizens to access these data from their smart devices. In Vienna, with the City Vision 2050 and Roadmap 2020 projects, carbon emissions are tried to be minimized, and studies are carried out for the planning of the city and the use of renewable energies in urban transportation. With the aim of minimizing carbon emissions, Copenhagen encourages its citizens to use bicycles, distributes free bicycles and offers bicycle rental everywhere with the help of smart applications, and tries to solve the most important problem of cities with environmentally friendly ways by controlling carbon emissions until 2025. In Tokyo, solar energy, storage panels and mobile applications created to save electricity draw attention with the emphasis on clean environment (Nair, 2019: 532). In the United States, Oakland with the use of renewable energy, San Francisco with recycling projects such as biogas, solar energy, hydropower, Los Angeles with smart solutions for transportation, Colombia with smart counter technologies that save money and Santa Cruz with smart security programs that optimize security expenses draw attention (www.cityofsantacruz.com, cited in Nair, 2019: 532).

Smart city solutions from buildings to urban infrastructures are produced in Reykjavik, the capital of Iceland and another world example, to save energy and prevent waste of resources. Arrangement of transportation vehicles with environmentally friendly applications, the biggest source of greenhouse gas emissions in the city, is the primary goal. Working with the motto of making carbon neutral by 2040, the city administration is trying to increase the number of public transportation vehicles and make these alternatives more attractive in urban transportation by providing the comfort of pedestrians and cyclists. In addition, all electricity in Reykjavik is produced by hydroelectric energy and the houses are heated by geothermal water. Installing charging stations for electric vehicles in city parking lots is also an example of a smart solution against fossil fuels to prevent greenhouse gas emissions. Reykjavik emerges as an exemplary city in the world smart city rankings, which produces smart urban solutions to

the conditions of the day with the slogan ‘A city for its people’ and underlines climate change while doing so (<https://reykjavik.is/en/reykjavik-and-climate>).

South Korea’s Seoul city, which started smart city applications and infrastructure works a long time ago, is home to many technology brands with the vision of building a fiber network city where the concepts of time and place are abolished. Smart city strategies created with a unique style increase their service quality based on technology, and being accessible at any time of the day and everywhere has greatly facilitated the life in the city. Seoul, which integrates technology into the city in the best and rational ways, offers its citizens all the advantages of living in a smart city with free wi-fi, a fiber network where public services are collected, roads that charge electric vehicles, owl buses providing transportation day and night, smart stops and many other applications (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 157- 163).

Smart city visions and applications also differ according to the regions where the cities are located. Dubai, which develops and rises rapidly due to the oil resources in the region, has become a trade and tourism center today. The smart city vision of the city was created as ‘making Dubai the happiest city in the world’. The city has established many regions that offer smart city services from scratch by using resources in the most efficient way, providing daily services in a connected and fast way, protecting the citizens and their personal information, and ensuring the satisfaction of the citizens through social life and business life. In this context, Dubai has brought new dimensions to smart city applications with its design and sustainable urban areas and has managed to make a name in the world (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 203- 207).

Many more cities, such as Chicago, Singapore, New York, London, Paris, Barcelona, Amsterdam, Berlin, Manchester, Edinburgh, Hamburg, Guayaquil and Bath, add new technology-based services to smart city utilities and infrastructure to be more livable, sustainable smart cities. All areas like streets, buildings, education and health are transformed thanks to digital transformation and provide data to citizens, so this brings quality to public services in cities (Herzberk, 2017: 21 cited by Örselli and Akbay, 2019: 234).

Based on the abundance of examples of smart cities in the world and smart city applications used in these cities and the limitation of the study, it is thought that it would be useful to include one of the latest smart cities rankings here. According to the ranking published by The Cities in Motion Index (CIMI), the

2020 smart cities rankings are London, New York, Paris, Tokyo, Reykjavik, Copenhagen, Berlin, Amsterdam, Singapore and Hong Kong (IESE Business School, IESE Cities in Motion Index 2020: 28). The ranking has been created by paying attention to the visions determined depending on the strengths and weaknesses of the cities, the life quality of the citizens, and sustainability on economic, social, environmental and technological foundations (<https://www.smartcity.press/top-10-smart-cities-of-2020/>). In order to see what advantages smart city applications add to a city and to the people of that city, it is thought that the examination of the first 3 cities in this list, whose ranking did not change in 2018-2019-2020, would be an efficient assessment to make a collective analysis of the issues mentioned so far in this study and to find an answer to the question of how a smart city should be in this regard.

4.1. London

London's adventure of being a smart city goes back a long way. The fact that a doctor named John Snow, who lived in the Soho district of London in the 1850s, investigated the cholera epidemic that took many lives in the city in a very short time and created a map showing the deaths is the basis of the practices that are seen as smart today. It was revealed that the epidemic spread from the water pump, thanks to the doctor who examined the households in the city and the proximity of these households to the water pump. Providing data to local governments with the cholera epidemic map he created and playing a key role in solving the problem, John Snow is seen as the person who made London the world's first smart city. The doctor, who technically revealed the first example of a smart city with the map he created, emphasized the importance of data, which is the focus of today's smart city applications, and underlined how smartly created projects were and will be of great benefit to the city and the city dwellers even at that time (Görmez, 2018).

One of the most important factors in London's steady steps towards becoming a smart city is Mayor Sadıg Khan, who took office as of 2016. Thanks to the mayor who has a great vision of making the city smarter, the foundations were laid for a new £ 1.6 million formation called Better Futures for a clean and smart city. The solution of the current economic, social and environmental problems in the city with technology-based applications reflects the smart city understanding of the mayor. It is also one of the thoughts of the mayor that the use of modern technological devices on issues such as air pollution, lack of

housing, transportation and clean energy will facilitate urban life and ensure a sustainable development. It would not be wrong to say that the mayor, who aims to make London the smartest city in the world by spreading the use of rational ways and practices in solving existing problems, has reached his goal as of today (<https://www.xtrlarge.com/2017/06/25/londra-dunya-bir-numara-akilli-sehir/>). The city that was previously behind New York in the smart city rankings is now at the top of the list. It seems that the mayor is still working to make London

The first of the projects implemented by the Mayor of London for a smarter city is the establishment of the Smart London Board. The main purpose of the board is to ensure that all citizens use digital technology as well as monitoring the development speed of the city. The board, which is responsible for creating innovative solution proposals to solve the problems, includes experts from different fields, up-to-date data and technologies. The fact that the government, citizens, universities and the private sector cooperate as stakeholders seek solutions to urban problems make the board participatory solver. Working to solve the problems experienced in all public services (health, transportation, energy, etc.) in the city, the board works to increase the life quality of Londoners and implement the best smart applications with the participation of their citizens by using information and communication Technologies (www.smartcity.press).

Mayor Sadig Khan, working to make London a digital technology center, appointed a digital transformation director to The Post of Chief Digital Officer for London in 2017. The director, who works with the main purpose of providing public services with technological and innovative applications by ensuring the participation of the public and encouraging public-private partnerships, is a clear indicator of the importance given to digitalization in the city (Canlı, 2019: 62). It is stated that the working areas of the digital transformation director are to make a digital transformation project proposal to the mayor, to estimate the destructive impact of technologies within the scope of digital transformation and to take measures, to seek innovation in service delivery and to increase efficiency, to determine new public service delivery methods and standards, to develop smart city technologies and IoT and to represent the digitalization of London in the national and international arena (A Chief Digital Officer For All Londoners Defining and Scoping The Role, Center For London, p. 5-6).

Talk London, established as a digital platform in London, offers citizens and administrators online participation opportunity in the process of urban policy development. The platform, which serves the public to communicate

with the administrators to find solutions to the problems of the city, provides a more participatory management approach as well as improving the digital skills of the citizens. Thanks to this platform, citizens can convey their opinions to the community on many issues such as housing, environment, transportation and security. These ideas and recommendations are used in determining future policy decisions (<https://www.london.gov.uk/talk-london/>).

London Datastore, which was launched in 2010 by the Metropolitan Municipality in London to share information free of charge to citizens, is a digital platform where data sets are combined and sensor networks are interconnected in order to improve public services and solve existing problems. The platform, which is an important infrastructure for London, is an important service that needs to be developed in terms of accessibility of service data, interoperability, including open data providers and collecting data secured by IoT in a center (Canlı, 2019: 66-67). London Datastore, which enables every citizen to connect to every event in the city, provides access to statistical data on all subjects from real estate to crime. Thanks to the platform that connects the developed society to the data of the city with the awareness of urbanity, blogs are written and forms are created in which citizens can participate with open data. Accessible local data presentation is made available to mobile phones with smart applications. In addition, London Datastore can help discuss and even emerge new smart city applications with the participatory environment and data flow it creates (<https://www.smartcity.press/londons-smart-city-initiatives/>).

Smart transportation, one of the components of smart cities, is of vital importance for a crowded city like London. It is seen as a great advantage that the people, who are constantly active and change their places during the day, save time and energy during this mobility. In smart city applications, London prioritizes transportation which is seen as the biggest problem. Accordingly, the current traffic density was tried to be eliminated with the traffic congestion tax in 2003. With the decrease in the number of vehicles in traffic through the application, all transportation networks in the city were transferred to contactless payment by Transport for London Company in 2014 for a more convenient transportation system (<https://www.ebelediye.info>). Oyster Card, which is a smart chip system used in subways and buses, provides great convenience to citizens. Thanks to this smart card, citizens load money into the card from automatic machines and pay their fees automatically by tapping on the reader in transportation vehicles. Those who use this system benefit from both the time

and the reasonable price provided by the card. The Oyster Card, which is valid in all regions of the city enabling automatic loading and payments, is an active usage system in urban travels. In London, which makes smart transportation a vision of the city, there are smart stop applications that show the entrance and exit of vehicles at metro, bus and train stops. Thanks to these smart stops that can be connected via some mobile applications, citizens can follow the hours of the vehicles on their mobile devices (Canlı, 2019: 81).

While looking for a solution to the traffic problem that reduces the quality of life in the city, Gocycle company started to produce and sell rechargeable e-bikes to prevent air pollution. Employees of many companies in the city were encouraged to use these bicycles to avoid traffic congestion because it is a more environmentally friendly mode of transportation. Richard Thorpe, the founder of Gocycle company, stated that air pollution, which is the main factor for transportation in cities, causes premature deaths and various health problems, so all citizens should be directed to alternatives such as e-bikes (Reid, 2019).

Another step taken in the field of smart transportation in London is smart parking systems. In the system, which was created to provide drivers with information about available empty parking spaces, empty parking spaces can be determined with the battery-powered wireless sensor, and drivers using the application are directed to these parking spaces. Putting an end to the problem of searching for parking spaces, the app helps drivers save time as well as money (ARUP and GLA, 2016: 39-40).

One of the important smart city projects in London is the Smart Energy Management Project, which has been used since 2011. Contributing to the reorganization of infrastructure systems with economic and environmental policies, the project helps low carbon emission and resource savings with the use of renewable energy (<https://www.ebelediye.info>). Smart applications structured with information and communication technologies are used to eliminate the negative effects of global warming in using renewable energy. In London, smart systems are used in homes, workplaces and transportation vehicles to minimize carbon emissions that consume low energy and renewable fuel with the help of smart counters (UK Climate Action Towards 2050 Achievements and Advancement, 2019).

In London, which is aware of the fact that energy saving and efficiency are the most fundamental parameters in the sustainability of a city, smart street

lighting is made with the help of the Starfish application of Silver Spring Networks with the help of IoT systems. Smart street lights are dimmed when people are not there with the help of sensors, and illuminated when people are present. Thus, an efficient smart city application that works in need replaces the energy-wasting lighting that illuminates empty streets (<https://www.smartcitiesworld.net/news/news/london-expands-smart-lighting-1978>). At the same time, smart city strategies in the city are divided into subtitles that cover many technological solutions. The most prominent of these solutions, which are based on access to open data and transparency, are the continuous observation of the interventions of police officers on duty with the cameras they wear on their uniforms, navigation systems created for visually impaired citizens in the metro network used by the majority of the city and Wayfinder applications to guide these citizens (Ayataç, 2020).

Making its name at the top of the list with its steady steps towards becoming a smart city, London attracted attention by transforming 'Bird Street, a branch road on Oxford Street, into the world's first smart street. The street includes an air purifier that cleans the air as well as tiles that generate energy when walked on. Thanks to IoT systems, the energy obtained from the ground is used in the lighting system of the street. Various discounts are applied to citizens who contribute to energy generation by walking on the street to support the smart street application in shops located on the avenue. Pioneering rational practices in solving social, economic and environmental problems, the city also analyzes technology and infrastructure that will shape the future urban structure with its smart street application (<https://www.haberturk.com/dunya/haber/1589049-dunyada-bir-ilk-londra-da-akilli-sokak-enerji-uretmeye-basladi>).

With its smart city vision, London primarily tries to raise the living standards of the city. Thanks to this citizen-oriented approach, citizens also adopt the smart city vision and help the development of the city with participation. London, which sets an example for smart cities with many more applications, improves its vision with technology and infrastructure works day by day, and strengthens its place at the top of the list of smart cities in the world as a modern and smart city far beyond the classical city structure.

4.2. New York

New York has been in the second place in the smart cities ranking for the last two years. The city, which was previously at the top of the list, has been

experiencing some problems in the issue of social cohesion which is one of the criteria of smart cities in recent years. To put it more clearly, the city behind London in this dimension, which is based on the difference in demographic characteristics among the inhabitants of the city and on the management of this difference, actually ranks first in many other issues. This situation reveals that technological advances are not the only criteria for being a smart city. Equal improvement in the living standards of all individuals in the city is of great importance for a comprehensive smart city development (<https://www.smartcity.press/top-10-smart-cities-of-2020/>). Smart city technologies are tried to be used in appropriate areas to solve the urban problems encountered in New York today and to become a sustainable smart city. The primary problems of the city are the rapid population growth resulting from its attractiveness, the new industrial areas and economic inequalities in these areas, the infrastructure requirements that are trying to respond to the population increase, the urban environmental problems that are getting worse day by day and it is climate that is changing rapidly. The goal of becoming a smart city where these problems in the city are solved is maintained by the incoming administrations and the initiatives taken are supported (Ulusoy, 2017: 122).

New York's initiatives to become a smart city started with the strategic plan called PlaNYC, which was created in 2007. Within the scope of this plan, the smart city vision of the city, valid until 2040, was created. Systematic data collection has begun to implement smart applications in ten different areas, from transportation to energy, from solid waste to climate change, from water supply to air quality (<https://en.wikipedia.org/wiki/PlaNYC>). In New York, one of the most crowded and densely populated cities in the world, it was not logical to establish an office belonging to a smart city only as it was necessary to provide services and develop applications in many different areas in order to become a smart city, and instead, some of the municipality's offices were held responsible for solving problems, creating strategies and developing smart applications. Defining the task of making and managing policies for the smart city as the duty area of more than one office instead of a single office makes a great contribution to New York's smart city vision. If this holistic progress is to be exemplified, opening the arrival and departure times of buses to citizens with smart stop applications in urban transportation is used as a means of coping with the rapidly growing urban population as well as increasing the satisfaction and comfort of the local people (Boz and Çay, 2019).

Instead of a smart city office, New York has the Municipal Technology and Innovation Office, which acts with the vision of developing and transforming the city with technology-based smart applications in an equitable manner. By 2015, the city experienced a population growth that had never been seen before, and the OneNYC plan was implemented to deal with the infrastructure needs, climate change and income inequalities that emerged. The plan, which aims to make New York sustainable smart city, has determined the primary objectives such as reducing greenhouse gas emissions, producing new business areas, regulating waste management and reducing air pollution and promised the local people to solve these problems. Within the scope of this commitment, the sub-headings of the OneNYC plan were created as the growth and development of the city, fairness and equality, sustainability and flexible management (Ministry of Environment and Urbanization, Smart Cities White Paper 2019: 151- 152). With this plan, solutions were tried to be found to the problems in the city in a holistic manner, and the way was paved for the implementation of fast and active smart city applications in necessary areas.

It is the duty of the Department of Transportation (DOT) to ensure safe, efficient and environmentally friendly mobility of people and goods in New York. Responsible for preserving and improving the urban infrastructure in order to maintain the economic vitality of the city and the life quality of the citizens, DOT also considers the dissemination of smart applications. With the DOT Strategic Plan published in 2016, the basic parameters of urban transportation, which became bigger and more active than ever before, were determined as safe, green, smart and fair. In this context, the plan fights against climate change, increases urban transportation options, encourages the use of environmentally friendly means of transportation such as bicycles, and protects highways and streets and improves them with smart applications. The development of the bicycle network throughout New York, the construction of bicycle paths and the addition of bicycle stations to almost every part of the city increases the use of bicycles by the citizens and decreases the carbon emissions caused by vehicle traffic. With the DOT studies in New York, the transportation network of the city was made safe, efficient and environmentally sensitive. In addition, traffic mobility increased and traffic congestion across the city reduced. Air pollution was reduced as a result of the promotion of public transport and sustainable means of transport. At the same time, DOT projects make streets safe for visually, hearing and cognitively impaired citizens, in line with increasing safety for all

New Yorkers. In this context, in addition to producing parking areas, pedestrian ramps and bicycle paths for the disabled, their safety is ensured by providing guidance service with accessible text messages and voices. At the same time, within the scope of the CityBench application, attractive and durable benches were placed considering the disabled and elderly citizens at the crowded points especially in areas where public transportation is used, and the comfort of the citizens was provided in this way. Another outstanding service carried out by DOT is the Greenlight project, which is used in sustainable urban lighting. With this project, LED lighting devices were used, greenhouse gas emissions were reduced and energy efficiency was achieved (NYC DOT-About DOT <https://www1.nyc.gov/html/dot/html/about/about.shtml>).

A sensitive traffic management system was created with the project called Midtown in Motion, which was implemented to reduce traffic congestion in New York. Thanks to the application where traffic information is made accessible to the public through simultaneous data that can be viewed on the DOT website, smartphones and tablets, the current status of the traffic became observable and intervenable. Traffic congestion was reduced by collecting and processing the data with the help of microwave sensors at intersections, traffic video cameras and E-ZPass readers. These innovative smart applications reduced traffic congestion, enabled the relaxed movement of New Yorkers, and also decreased air pollution. Even in the first year of use, the application had a quality of guiding for the city administration by providing 10% traffic relief (Ministry of Environment and Urbanization, Smart Cities White Paper 2019: 153). Winning the Smart Solution Spotlight award, Midtown in Motion is of great importance for New Yorkers to live their daily lives more effectively without getting stuck in traffic. Applications like this, which keep New York alive and active at all times, develop and change the city to be a smart city (https://www1.nyc.gov/html/dot/html/pr2012/pr12_25.shtml).

A bike sharing system called Citi Bike was put into service in 2013 in order to bring daily activity in the city to a much healthier and more economical level. Thanks to this system, citizens can rent bicycles from stations established in many parts of the city and provide daily transportation. Citi Bike, which makes urban transportation fun, cheap and healthy, has also attracted great attention with its availability 7 days a week and 24 hours a day. Bicycles, which can be rented using credit cards if needed, provide both practical and economic benefits as they can be left at the desired station on the network. Thanks to this

application that people frequently use to go to work, school and appointments, traffic congestion and air pollution caused by vehicles has decreased. As of 2020, Citi Bike provides services across Manhattan, Brooklyn, Queens and Jersey City with 15,000 bikes and more than 1000 stations. In addition, it is aimed to serve with at least 200 bicycles in each neighborhood with the Dockless Bike Share Pilot Program to meet the bicycle demand in the city. The applications, which attract great attention by New Yorkers, both serve the sustainability of the city and offer opportunities for the citizens to live an easy and healthy life with these smart city applications (Citi Bike: NYC's Official Bike Sharing System Citi Bike NYC <https://www.citibikenyc.com/>).

Taking decisive and firm steps towards becoming a smart city, the New York administration continues to facilitate the lives of its citizens, thanks to the applications it produces with new technologies every day. LinkNYC, which has been put into service in five districts of the city instead of pay phones, is a unique example of these new applications. The links, which are established in many points, provide fast and free wi-fi service to citizens, as well as services such as making a phone call and charging personal devices thanks to their tablet screen. City maps and directions provided with a smart screen both facilitate the daily lives of New Yorkers and help tourists. The technological communication network LinkNYC, which replaces traditional pay phones, offers free wi-fi to personal smart devices, includes online city services, road maps and directions, provides free phone calls, makes it possible to reach 911 in emergencies, and charge personal devices via USB, and provides advertisement opportunity to local and national companies with 55" HD two screens in its design. The advanced smart city platform supports a smooth smart transportation for trains, buses, subways, taxis and pedestrians. With the smart application called Intersection-Crossroads within the body of LinkNYC, the smart city of New York connects the city with people commuting to work by public transport, information with people, consumers with brands, and the digital world with the physical world. At the same time, this platform uniquely connects residents and guests together and maintains their interactions, thanks to its partnership with CIVIQ kiosk company, which uses the first and only private network working with public infrastructure. Due to all these features, the smart city application, which is the first of its kind, serves completely free of charge as it is financed by advertising funds. Since the appeal of effective advertising in a metropolis like New York attracts the attention of national brands as well as local companies, the city can

generate millions of dollars in revenue thanks to the platform (<https://www.link.nyc/>).

One of the most effective factors in making New York's smart city is the official website of the city, which serves under the name NYC311. The site attracts the attention of citizens with its up-to-dateness and rapid response to requests. On the site, which provides online information about all urban services from A to Z, there is a transparent and open accessibility in all matters from businesses to courts, from education to business life, from environment to health, from housing to public safety, from taxes to transportation (<https://portal.311.nyc.gov/>). The fact that the services, resources and expenditures of the municipality are clearly included in a platform accessible to the citizens with up-to-date data is the biggest indication that the city is a participatory city open to governance. Today, this situation is important for citizens. The fact that local public services can be controlled with mobile devices increases the service quality and the satisfaction of the citizens. In addition, bills and service charges can be paid online with the CityPay application on the website. The city management, which carries out environmental protection with many more studies like this, designs smart applications with projects such as sustainable green roofs and rain gardens with the NYC Green Infrastructure Plan, and works to minimize the environmental damage of the city in a very comprehensive way. PUREsoil, a project aimed at protecting the soil against climate change, was developed as a solution proposal to environmental problems in NYC (<https://portal.311.nyc.gov/kacategory/?id=311-49>). As can be seen, New York is emerging as a stable and important city in the aim of being a sustainable smart city for the future, which can effectively use many original and efficient applications about the smart city.

4.3. Paris

Paris, along with London, is one of Europe's most important financial centers. In addition, Paris is a worldwide tourist destination and ranks third in the smart cities ranking after London and New York. In the city where there is constant human mobility, smart applications are designed by actively using the Internet of Things (IoT) and the circulation of people and vehicles in the city is optimized (IESE Business School, IESE Cities in Motion Index 2020: 58). Known as the "City of Light", the city owes this feature to the innovation it embodies. Many service deliveries in the city takes place open to the access and control

of the citizens. Accordingly, Paris has an exemplary vision that has gained the smart city identity and integrated innovative technology into urban management (<https://www.smartcity.press/top-10-smart-cities-of-2020/>).

Paris has built its strategies on becoming a smart city on the main objectives of encouraging mobility, enabling the society to be lively and entrepreneurial, and establishing partnerships with other smart cities around the world. Paris, which wants to be a sustainable smart city with international connections, has created a unique and innovative method while doing this. The chosen method is an integrated strategy, called Open Innovation, that includes three smart city models based on the open city, the talented city, and the connected city. The strategy fundamentally includes The Open City which is based on the cooperation of the economic elements and management in the city with common sense; Talented City which aims to save resources and efficiency from the establishment to the use of urban networks; and finally Connected City which provides digital services and platforms to all users throughout the city and supports infrastructure systems that are a technological modernization tool. (Ministry of Environment and Urbanization, Smart Cities White paper, 2019: 185- 186).

In order for this smart city strategy to be successful, some important steps were determined by Paris administration. Some of these can be listed as being a smart city by 2020 with the digital city plan to be created by the city council, providing the energy of smart applications such as information-advertisement panels, lighting systems, USB-powered chargers in the whole city, increasing the number of established digital-based laboratories, detecting malfunctions in urban services, gathering information with smart sensors to save energy and improve the smart network, activating the employees of Paris Municipality in social media, supporting open data through websites and making digital investments, extending free wi-fi in public, adding fiber optic qualities to the existing internet network in the city and working to create technology-based economic cooperation for national and international development (Gül and Atak Çobanoğlu, 2017: 1552).

The Paris administration supports a number of national and local strategic plans to become a smart city. One of them is the Future Industry Strategy in France, which is at the national level. The strategy is based on the revitalization of the industry. Accordingly, smart city, digital systems, eco-mobility and many other areas are tried to be renewed and supported on a technological basis

throughout France to support innovation and national economy. The Digital City Master Plan, on the other hand, is the information and technology strategies carried out at the local level together with the Smart and Sustainable Paris Plan. Conducting studies to minimize digital inequality across the city, providing diversity in access to urban service channels and personalizing these access channels, following an open data policy and finally increasing the efficiency of the new smart services while reducing their costs are listed as the main objectives of these two plans (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 186).

To be a sustainable, active and connected city, ‘2050 Paris Smart City’ project was prepared in 2014. The smart city project following the Paris Climate Energy Plan which aims to reduce greenhouse gas emissions by 75% until 2050 was developed for high-rise buildings to provide plus energy generation (BEPOS). It is thought that the ‘2050 Paris Smart City’ project, which is a smart city strategy that is rare in the world, will make Paris unique if it reaches the specified goals. In the project developed to meet urban density and reduce the negative effects of global warming in the future, it is a matter of blending renewable and convertible energy with innovative smart applications. Thanks to the 8 prototypes of mixed towers built within the scope of the project, it is aimed to develop a self-sufficient and eco-responsible lifestyle that respects the nature in the heart of the city (https://vincent.callebaut.org/object/150105_parissmartcity2050/parissmartcity2050/projects).

Using natural processes such as heating and cooling, clean air, rainwater accumulation and waste management, each of the towers adapts to nature. The green areas added to the towers and the opportunity to grow agricultural products in the towers not only bring the peace of the countryside to the city, but also offer a sustainable lifestyle for the citizens. The project, which includes many state-of-the-art smart applications such as the ability of the outer surfaces of the towers to convert thermal load to heat, to generate energy from sunlight through light-sensitive buildings and to produce their own bio-fuel and to provide energy for lighting, provides solutions to multiple urban problems for the future. With this project, it is underlined that the smart city in Paris can expand and at the same time preserve the unique character of the city, and a greener and healthier smart city is possible (<https://www.arch2o.com/paris-smart-city-2050-vincent-callebaut/>). This project, which has a longer road, holds out hope that can be considered effective for Paris by 2050. In Paris, which seeks smart solutions for

the mobility of tourists and citizens, thanks to the Velib bike sharing program implemented since 2007, citizens have been given the opportunity to rent a bicycle quickly and securely with a bank card and to use a new form of travel in the city. Velib, the smart and interconnected bicycle system that makes it easy to travel to every corner of the city, helps to eliminate air pollution caused by traffic and to increase air quality in Paris. Bicycles, which significantly reduce the duration of urban travel, are also a healthy practice that serves the citizens to gain exercise habits. In addition, 30% of the bicycles in the Velib fleet consist of electric bicycles. In this way, electric bicycles with a maximum speed of 25 km per hour are a real alternative to the use of motor vehicles that pollute the atmosphere. Velib application continues to improve the data transfer and security of bicycles in accordance with new technologies every day (<https://www.velib-metropole.fr/en/service>). In 2011, in addition to the Velib application, an electric vehicle rental system called Autolib was started. The main purpose of the application, which appeals to many smart city combinations such as smart transportation, smart energy and smart infrastructure, is to reduce the number of Parisians using personal cars in the city and to reduce carbon emission in an environmentally friendly manner. It was thought that Autolib service, which has vehicles whose locations are tracked with GPS and charged in about 4 hours with a driving range of 250 km, could not achieve the desired success and as of 2018, it withdrew approximately 22,500 vehicles from traffic. The Municipality of Paris terminated the project carried out by Bolloré Group on the grounds that it did not achieve the envisaged success (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 192). Another effective smart city application that should be mentioned for the city of Paris is the medium-sized smart living space with a population of 69,000, created in the Issy-les-Moulineaux region. The region, briefly called Issy, was established with four main objectives: modernizing the public administration of the city, providing innovative services to its population, ensuring participation through digital platforms, and including citizens in political decision-making mechanisms (Issy-les-Moulineaux- <https://www.issy.com/en>). IssyGrid2, the first smart zone network of France, was established in Issy-les-Moulineaux region of Paris. IssyGrid, a smart grid research and development project, started working actively in 2012. The primary goal of the project, which includes 2,000 houses, 5,000 inhabitants, 10,000 employees and 160,000 m² offices, is to activate the consumers in energy management by optimizing consumption. The IssyGrid

project, developed with the task of managing the network between resources in a smart way and with the goal of reducing carbon footprint, was awarded the ‘Sustainable Infrastructures’ Green Solutions Award in 2017. In the project, energy diversity is tried to be achieved with methods that serve energy savings such as solar panels and co-production units. In addition, thanks to this smart grid project, technical, economic, sociological and regulatory data of the city can be collected and the network continues to be developed with analysis. The IssyGrid project, which is seen as the harbinger of the neighborhoods of the future, is seen as the most effective way to manage energy savings well and efforts are continuing to spread it to all regions of Paris (<https://www.issy.com/en/smart-city>). Citizen participation is at the forefront in smart city strategy of Paris. In fact, this participation was programmed with the Paris Participatory Budget Platform, and citizens were enabled to express opinions in 12 basic categories via the digital platform for an open, transparent and accountable municipal administration. The E-Health Incubation project, which the Municipality is conducting with the Paris & Co economic development agency, also fulfills the task of bringing entrepreneurial ideas and investor companies together to solve many health problems. In addition to these, the Municipality of Paris provides free trainings to its citizens with the Mass Open Online Course (MOOC) Factory for the progress of information and communication technologies and active use of the Internet of Things (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 187-189).

Taking its steps towards becoming a smart city in a citizen-oriented manner, Paris acts with the principle of respect for human and nature in all of the smart city applications it implements and is considering to implement in the future. The city administration of Paris, which tries to protect the green, seeks solutions to carbon emissions, believes that the city can take on a smart shape without losing its soul and promises hope for both residents and tourists in this sense. Its place in the smart city rankings around the world supports this view.

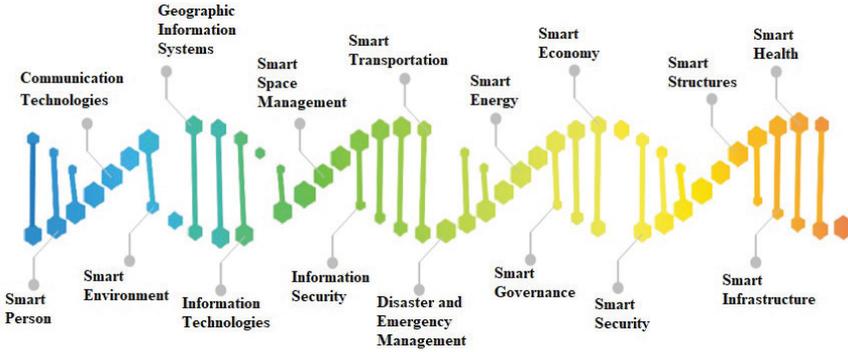
5. Current Situation and Examples of Smart City Application in Turkey

In addition to the rapid development of information and communication technologies, globalization and rapid population growth have made it necessary

to develop some measures in our country, as in the whole world. Accordingly, Turkey started its activities in the early 2000s with the basic goal of equipping the cities with smart forename. The transformation of a city from traditional structure to smart status is considered as a dynamic process based on the acquisition of smart city applications that work with new generation technological systems. The main determinant of this process is city administrations. In this context, the realization of the goal of becoming a smart city is seen in direct proportion to the adoption of a multi-actor management approach in this long process. In addition to the public sector and private sector organizations at the city level, it is of great importance that the NGOs where citizens are represented cooperate in administrative terms in the realization of the smart city vision (Uçar, Şemşit and Negiz, 2017: 1792).

Based on the assumption that there is no single definition of the concept of smart city, and the definition should be made by countries in the context of needs and resources, a smart city definition specific to Turkey was made by the Ministry of Environment and Urbanization. According to this definition, the smart city is defined as “a more livable and sustainable city that is implemented with cooperation between stakeholders, that uses new technologies and innovative approaches based on data and expertise, and produces solutions that add value to life by foreseeing future problems and needs.” (Ministry of Environment and Urbanization, National Smart City Strategy and Action Plan, 2019: 20)

In our country, where special attention is paid to the smart city, besides drawing the framework of the definition of smart city from a comprehensive and original point of view, studies have also been carried out on smart city components. Additions were made to the six smart city components, which are accepted in many parts of the world and previously included in this study, taking into account the needs and opportunities of Turkey, and the number of smart city components were increased to 16. Smart City Guidance package for Smart City Applications held by the Ministry of Environment and Urbanization on December 4, 2020, smart city components are presented as follows (<https://www.akillisehirler.gov.tr/akilli-sehir-uygulamalarina-yonelik-rehberlik-etkinligi-gerceklestirilmistir/>):



Source: www.akillischirler.gov.tr

As a result of being analyzed together, these smart city components, which were increased to obtain livable and sustainable cities, produced solutions to major problems, and revealed some other problems as well. In this context, the need to integrate the data provided from all components and to make the data available as input and output between each other increased the technology and digital transformation needed. Accordingly, it has become of vital importance to transform the city visions with smart forename, to make information and communication technologies functional on smart city applications, to provide simultaneous data communication between the machines used and to make real-time data analysis between these applications (Ministry of Environment and Urbanization, 2020 Smart Cities and Connected Data Guide, 22).

Since the 2000s, Turkey has taken many steps both nationally and locally to be involved in the process of smart city applications together. Works such as the Smart Municipal Summit, the Smart Cities Congress, the Smart City Fair, which are based on the cooperation of the public and private sectors, are just some of them (Varol, 2017: 47). 2015-2018 Information Society Strategy and Action Plan, 2016-2019 National e-Government Strategy and Action Plan, 2010-2023 KENTGES Integrated Urban Development Strategy and Action Plan, 2016- 2019 National Cyber Security Strategy and Action Plan, National Energy Efficiency Action Plan 2017-2023 and National Smart Transportation Systems Strategy Document and Action Plan can be given as examples for strategies and programs that deal with the smart city thematically in Turkey (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 32). In addition, the effort to carry out smart city applications (Metadata, Atlas, Plan GIS, E-Plan, Urban Information Systems etc.) covering the country in particular

by the General Directorate of Geographical Information Systems, which works under the Ministry of Environment and Urbanization, explains the importance given to the issue of smart cities in Turkey. In the planning phase of smart cities, the Ministry has developed the determination of the current situation of the cities, the determination of the original smart city vision of the city, the determination of future goals and objectives, and the determination of the roadmap in which the control mechanism will become operational as a management perspective (<https://www.akillisehirler.gov.tr>).

The first example of smart city application in Turkey is the project called the Informatics Valley Project which was established in Yalova at the beginning of 2000 where a vital area was created, and ecology and technology were blended. Bursa, Eskişehir, Ankara and Kocaeli put this informatics-based project on the agenda as a smart city step (Xsights, 2016: 38). As the first integrated smart city application, the project called Smart KenTT is seen, which was prepared in cooperation with Türk Telekom in Karaman and integrates approximately 20 smart city services. The project, which is managed by a Smart City Operation Center and produces solutions with smart applications for almost all the needs of the city (traffic, health, infrastructure, etc.), bears great hopes for the efficiency of scarce city resources. At the same time, the project has an important place in terms of showing the necessity of spreading the scope of smart city applications to a wide range in this way (Örselli and Dinçer, 2019: 104).

In our country, smart city applications are generally applied more actively in big cities. Cities of Istanbul, Ankara, Konya, Bursa, Antalya are implementing smart applications, especially in areas such as transportation, health, energy. Being aware of the fact that citizens face many problems such as traffic, air pollution and emergency intervention in the daily routine of urban life, city administrations develop projects where smart applications are used as a solution tool. In this context, accurate analysis of how a city has acquired smart city vision is of great importance because every city has its own problems and it has to solve these problems on the basis of the resources it has and the opportunities it can produce. Therefore, it should be understood that the adventure of being a smart city is unique to cities. To put it more clearly, a smart application that produces great solutions in one city should not be expected to provide the same benefit to another city. As a result, it is essential to create the smart city vision based on sustainable use of resource according to the basic problem areas of the city.

Istanbul, which is known as the metropolis with its socio-economic status and population, leads the smart city applications in our country. Istanbul is the most populous city of Turkey with a population of 15,519,267 (<https://www.nufusu.com/il/istanbul-nufusu>). In the city with a lot of daily activities, transportation-traffic is the leading urban problem. The Traffic Density Map applied in Istanbul is important because of its function and because it makes Istanbul one of the first cities in the world. Another smart application pioneered by the city in our country is the White Table line with a number 153. Thanks to the application where citizens reach the urban services offered and these data are transmitted to the necessary city units, effective communication between the citizens and the city administration is ensured (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 35). Istanbul attaches great importance to smart applications, especially in transportation. In addition to the fast public transportation and online balance loading service it provides, the Istanbul card, whose usage areas have been expanded, can also be used as a means of payment by the citizens of the city. Thanks to the IMM Traffic application, citizens are provided with instant data by Mobile Traffic mobile application on many issues such as live road cameras, instant bridge status, parking points, live traffic density. In addition, with the Transportation Management Center, citizens are informed about urban transportation and traffic 24 hours a day. With the Adaptive Traffic Management System, real-time traffic density is detected and the number of vehicles is determined with the help of sensors, and traffic flow is accelerated. With the Ispark Mobile application in Istanbul, city-wide parking information and the occupancy rates of these parking lots can be accessed. Many applications such as IETT and Istanbul Metro make Istanbul transportation a smart city component worthy of the city (<https://www.ibb.istanbul/SitePage/Index/128>). Environmental Control Center, Air Quality Monitoring Center, Istanbul New Airport, Başakşehir Living Lab, Electronic Inspection System Control Center, Zemin Istanbul are some of the smart applications in the city (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 38-53). Smart counters, smart buildings, smart drinking water distribution system, Mobile Electronic System Integration and Digital Library can be given as examples of smart city applications that are carried out successfully in Istanbul (Yılmaz, 2016: 8). In addition, it should be noted that Istanbul Metropolitan Municipality continues its e-municipality services up-to-date and actively through its official website. Istanbulites are just a click away from local services

with applications such as e-inquiry, e-payment, e-declaration, e-information and e-application (<https://www.ibb.istanbul/SitePage/Index/122>).

Another city where smart city applications have gained momentum in Turkey is Ankara, the capital. Smart and sustainable energy management is particularly emphasized in the city. With the Integrated Solid Waste Management System, the wastes collected at the stations established in Mamak and Sincan districts are separated with the help of mechanical systems and electrical energy is obtained from these wastes by using gasification-combustion systems (<https://www.ankara.bel.tr/>). The amount of energy recovered from wastes corresponds to approximately 5% of the daily use of the city and this is considered a great smart application for recycling (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 58). Ankara Metropolitan Municipality, which wants to keep up with the rapid development in information and communication technologies and to ensure citizen satisfaction in urban service change, is at the service of citizens 24/7 with its technological infrastructure and expert personnel for a better Ankara with Başkent 153 Smart Solutions Mobile application (<https://www.ankara.bel.tr/index.php?cID=2123/>). In addition, the municipality administration, which is trying to increase its e-municipality services day by day, shares many data with the citizens in an open and transparent manner with e-Ankara application on its website, from Urban Information Systems to tender notices, from 153 Blue Table service to what the Metropolitan is doing today. In addition, the application contains information about General Directorate of Ankara Water and Sewage Administration, Electricity, Gas, Bus General Directorate and mobile applications (<https://www.ankara.bel.tr/eankara-uygulamalari>).

Another city that attracts attention with its successful steps in becoming a smart city is Konya. Developing many applications especially in smart transportation, Konya is the first city in Turkey to use the smart card application called elkart (handcard) developed with Smart Public Transportation Systems. In addition, making the debit card available as an alternative to the elkart in smart systems in public transportation vehicles is a first in the world (Mangır, 2016: 31). Tramway without overhead wires, Smart Bicycle System (Nextbike), Electronic Inspection Systems and empty Parking Lot systems with mobile devices are other smart transportation applications that are actively used in the city (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 72-74). These applications are of great importance in terms of providing

daily mobility in time-saving without having traffic problems in the city. In addition, various studies are carried out on the smart environment component in the city. Generating electricity from methane gas in the solid waste facility, establishing an Environmental Management Information System Center, using the SCADA System (Supervisory Control and Data Acquisition) for monitoring drinking water are just some of these (<https://akillisehir.konya.bel.tr/>). The Smart City Branch Directorate, which was established in Konya as of 2018, is an indication of the importance given to the development of the smart city vision in the city (Örselli and Dinçer, 2019: 104). The municipality website, which is actively used for the delivery of e-municipality services, provides services for the use of smart applications such as City Cameras, City Tour, Virtual Tour, as well as urban applications like Konya Science Center. Again on the website, Smart Stop Screens, Smart Public Transportation Systems, Smart Intersections, Elkart (handcard)Application, Smart Bicycle Systems, Icing Tracking System, Floor Heating Intersections and Pedestrian Overpasses, Noise Control Monitoring and Warning Systems, Solar Energy Lighting Systems, Electric Buses, Purple Network, Konya Mobile Applications, 360 Konya, Mobile Mesnevi Applications and many other smart applications serve citizens and tourists under the title of Smart City Konya Applications (<https://akillisehir.konya.bel.tr/uygulamalarimiz?page=1>).

Antalya draws attention in smart health with Patient Tracking System, in smart energy with Solar Energy Power Plant, in smart life with City Information Screens, in smart environment with Smart Lighting and Smart Irrigation Systems, in smart security with Circle of Trust Project, in smart energy with Antalya Stadium and Solar Power Plants in Agriculture (Ministry of Environment and Urbanization, Smart Cities White Paper, 2019: 83-88). In addition, the smart urban transformation project called MAtchUP focuses on smart buildings and sustainable transportation in the city. Within the scope of the project, the Urban Climate Adaptation Plan continues to be implemented in 2021 (<https://www.antalya.bel.tr/>).

Another city that develops the smart city vision in Turkey is Bursa. Developing applications for smart city components such as environment, people, transportation, life and governance under the name of Bursa Smart City, the Metropolitan Municipality presents its projects to the citizens of the city. Some of these interesting projects are the Three-Dimensional Tourism Atlas Project which serves in three languages to facilitate touristic trips, the Love Chip Project

which ensures that Alzheimer's patients and mentally disabled citizens do not break their contacts with their relatives, Bursa's Smart City Transformation Project to become a smart city, Bursa Mobile Project for mobile applications and Public Secure Wireless Internet Project for free internet in public places (<http://akillisehir.bursa.bel.tr/>).

As Murat Kurum, Environment and Urban Planning Minister, stated in "Third Turkey 2023 Summit", Turkey is trying to connect 81 provinces with smart city applications. The last prepared 2020-2023 National Smart Cities and Action Plan is the 4th plan prepared in this context in the world, and it is of great importance in terms of efficiency and savings. As stated by the Minister Kurum, the share of smart city applications in the world market is increasing day by day, and Turkey has the goal of taking part in this market for years to come. In this context, good analysis of the last action plan and development of the control mechanism are of great importance. Only in this way, it is thought that a sustainable urban life will be possible with the new technological opportunities required by the time (<https://www.akillisehirler.gov.tr/2020/10/23/2020-2023-ulusal-akilli-sehirler-stratejisi-ve-eylem-plani-ile-tum-sehirleri-birbirine-baglayacagiz/>). Only in this way is it thought that a sustainable urban life will be possible with the new technological opportunities required by the age.

6. Conclusion

Digitalization and digital technologies have caused fundamental changes in the way public administrations provide services. Thanks to the developing technologies, costs have fallen rapidly, access to services and the quality of services increase, and a citizen-oriented service understanding emerges. Public services, which citizens can access more easily and quickly, have become competitive in terms of quality. In addition, the new service delivery that encourages the participation of citizens has also helped citizens to become a customer that gets the services they demand, instead of consuming only the services provided to them.

Many public services, which have been transferred to the internet as required by the time, have become a tool that provides citizen satisfaction by increasing their quality. Service transformation especially in urban areas has revealed the smart city approach as a completely different area in the world. Smart cities work with a perspective that produces solutions to existing urban

problems and improves the quality of life. As a result of rapid urbanization and unavoidable population growth, cities experience a lack of resources. To solve this problem, developing rational policies and a new structuring based on information and communication technologies is taken as a basis. Cities all over the world adopt the smart city approach to find solutions to urban problems and a sustainable development. Since the smart city is a comprehensive approach with many components, it is experienced as a long and variable process, not instantaneous or short-term.

Each city continues its smart city journey in line with its own resources and opportunities it wants to create. However, major cities in the world have become an example of being a smart city. The common denominator in these cities is to consume today's resources considering the future and to keep the citizens one step ahead of other citizens thanks to the branded service delivery. Today, taking the smart city form is a must for cities. It should not be forgotten that citizens and their desires are as determinant as technology in becoming a smart city.

London, New York and Paris, which have a successful place among smart city examples, have adopted smart city applications by using digitalization correctly and have made their applications more successful by not ignoring the human factor. These cities, which are based on participation, have formed a community that acts with the awareness of the city and protects the city by evaluating the attitudes of the citizens in dealing with problems. Realizing that being a smart city is not only related with technology, city administrations underlined the importance they give to nature and people with their studies. It is seen that carbon emissions, renewable energy, traffic congestion and many other urban problems that the mentioned city administrations emphasize are effectively solved thanks to the importance given to digitalization. The importance and willing attitude given by the municipal administrations to the subject also affected the citizens and an effective smart city vision was achieved in which urban actors have a share. Therefore, London, New York and Paris are at the top of the list as successful examples that should be evaluated and followed for many world cities that are at the beginning of the adventure of becoming a smart city.

Turkey is one of the countries where the first examples of the smart city concept were encountered especially in the 2000s and that made efforts at national and local levels to develop these applications. In this context, a special

importance is given to smart urbanization in every roadmap, from development plans to future vision strategies. Republic of Turkey, Ministry of Environment and Urbanization frequently underlines that smart cities are one of the most important factors underlying sustainable development and that a special effort is made to spread smart city applications in 81 provinces. It is also a fact that in Turkey, big cities such as Istanbul, Ankara, Konya, Bursa, Antalya have taken important steps to solve existing urban problems from transportation to health with many smart city applications and have developed these steps over the years. Turkey continues to work without slowing down with the main goal of making its cities smart cities and taking part in the smart city technologies market.

The fact that the New Coronavirus (COVID-19) epidemic, which affected the world in 2020, was declared by the World Health Organization (WHO) as a global pandemic as of March turned the whole world order upside down. COVID-19, the most extensive epidemic ever experienced, has comprehensively changed the whole order that human beings are accustomed to and continues to change. Accordingly, the measures taken to prevent the spread of the epidemic have caused all service deliveries to be transferred to the digital environment at once. This unplanned excessive digitalization has caused major problems in all countries, regardless of the level of development.

The epidemic, which greatly disrupted the socio-economic life of the cities, forced the city administrations to update their service delivery methods and improve them effectively in a short time due to the restrictions in the scope of measures.

Due to COVID-19, the way of doing business has been transferred to the digital environment and internet speed has become of great importance. The epidemic, which changed working styles in many areas, also caused extensive transformations in urban services. Especially, the fact that employees work at home instead of going to workplaces causes relief in some problematic areas specific to the city (traffic, air pollution, etc.), and conducting work at home has increased the importance of the quality and speed of the internet network. With the decrease of social interaction in the daily flow of urban life, the knowledge economy has become the main element. In other words, the fact that the citizens do not create crowds in urban areas for situations such as working, meeting and traveling has enabled urban life to be digitalized through personal mobile devices (computer, tablet, mobile phone, etc.). This situation has increased the use of municipal websites and even national e-government applications in reaching

most of the city services. During the epidemic period, city administrations gained the ability to remotely inform and keep their citizens under control through digital service delivery. Issues such as the impact of COVID-19 on cities and urban service delivery and, in this context, the evaluation of the satisfaction levels of the citizens are the subject of many studies today and in the future, and it is thought that they will continue to be. It is thought that the ideas about how the global pandemic has changed urban life and the results can be evaluated more reliably in the coming years.

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CHAPTER IX

CBRN TERRORISM, PSYCHOSOCIAL EFFECTS AND INTERVENTION MODELS IN TERMS OF DISASTER MANAGEMENT

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1. Introduction

Terrorism is one of the social events that have not fallen off the agenda of the whole world in recent years and gained universal importance. The aim of terrorism is to eliminate the sense of trust in the society by creating an atmosphere of fear, anxiety and horror. In this way, an environment of political instability is attempted to be created. A definition of terrorism must first be made in order to understand the said aim of terrorism and to intervene. Terrorism is the systematic implementation of acts murder or extermination in order to intimidate individuals, groups, society or the government, so that a threat environment is created and the perpetrators can put pressure on to have their certain political demands met. However there is no commonly-held definition of terrorism. As a reason, terrorist activities are very diverse and there are different forms of terrorism in different geographies of the world (Schmid, 2004: 376).

Use of CBRN (chemical, biological, radiological and nuclear) agents to cause chaos and to exert damaging effects on a large scale is nothing but new

(Gençtürk, 2012:113). In the Archaic Age and Middle Ages, Mostly poisons and microorganisms were preferred for the said purpose, whereas in the 19th century, CBRN agents were started to be used in parallel with the innovations in the scientific world. CBRN agents are more lethal than conventional weapons, which is why they are popularly referred to as the “Weapons of Mass Destruction”. CBRN agents were used frequently especially in the First World War after which they spread rapidly and enabled terrorism to become a problem on a larger scale (Sezigen, 2009: 25; Sidell et al., 1997:117).

During the II. World War and its aftermath, production and use of weapons of mass destruction and CBRN agents have become even more widespread due to further advances in science and technology. Weapons of mass destruction, which were also used to shorten prolonged wars, are the most powerful elements of deterrence in today’s world. Therefore, in societies with a history of terrorism, the psychosocial effects of terrorism are manifested more severely and for prolonged periods. Terrorism also inflicts a very serious psychological stress effect mixed with a sense of panic (Kiremitçi, 2014: 2148).

However, early detection, security and protection measures taken against terrorism do not develop as rapidly as the terrorism, the forms it take and the ways it spread (Ekşi, 2016: 1490). Besides causing mass chaos, CBRN terrorism can also cause economic disruption and sway the governments towards increasing their defence expenditures (Lugar, 2005: 224).

In view of the foregoing, in this study, various aspects of CBRN terrorism, a human-induced disaster, are addressed, namely the forms it takes, the psychosocial effects it has on individuals, families and society, and the associated psychosocial intervention methods. It is aimed to detail both the preventive and corrective interventions, which can serve as crisis and trauma intervention, in the context of CBRN terrorism problem on the basis of the clinical model and the conservation of resources theory.

2. Cbrn Terrorism

Terrorist acts are perpetrated to achieve a political, religious or ideological goal through fear-mongering. These acts are abnormal acts of violence and atrocities deliberately committed or threatened to be committed by subnational groups with the aim of directly influencing the policy-making processes of governments. Accordingly, use of chemical, biological, radiological and nuclear agents by

terrorist groups to carry out such acts of violence and brutality resulting in mass deaths is called CBRN terrorism. CBRN and terrorism are increasingly used together, as the negative effects associated with both concepts become more prominent at both national and global levels (Enders and Sandler, 2002: 160). CBRN terrorism, which has become a new branch of terrorism studies, can be examined under four sub-headings, which are;

Chemical Agents

Substances that have high toxicity potential, are resistant to external factors and economical to produce and which are used to capitalize on its physiological effects to kill, eliminate by inflicting severe injuries, render ineffective by disrupting functions, destroy plant and animal food sources, pollute food stocks, disrupt economically important targets, reduce the level of trust in the government by forcing military and civilian personnel to use protective equipment, and to cause chaos and panic, are called chemical agents (Sezigen and Karayilanoğlu, 2006: 387; Karayilanoğlu et al., 2003: 593).

Among the reasons why chemical agents are often preferred are that they can rapidly spread over large areas and that some of their effects depending on the type of chemical agent occur in the short term, whereas majority of their effects appear in the long term. For these reasons, chemical agents are frequently preferred in terrorist attacks (Sezigen and Karayilanoğlu, 2006: 387).

Some of the terrorism incidents that have taken place in the past and involved chemical agents are as follows;

- In 1917, the German Army used mustard gas against the allied forces, resulting in approximately 90.000 soldiers getting killed by chemical weapons attacks, and approximately 125.000 British soldiers suffering non-fatal injuries (Lugar, 2005: 224).
- In 1974, a Yugoslavian immigrant was caught while planning a terrorist attack involving approximately 20 kg of cyanide gas at an airport in the USA (Lugar, 2005: 224).
- Iraqi Army used chemical weapons for 8 years, that is the duration of the Iraq-Iran war that broke out in 1980 (Lugar, 2005: 224).
- Approximately 40 tons of methyl isocyanate was released into the atmosphere as a result of an accident happened in a factory in Bopal, India in 1984. Approximately 3.800 people, who were exposed to this fatal gas,

died, 2.720 people were permanently injured, and thousands of others were affected (Sezigen and Karayilanoğlu, 2006: 387).

- In 1988, the Iraqi Army carried out a chemical attack on the town of Halabja that resulted in the deaths of approximately 5.000 people (Sezigen and Karayilanoğlu, 2006: 387).
- In 1994, 8 people lost their lives and 280 people were injured in the attack carried out a terrorist attack in Japan with the use of sarin gas by a sect called “Aum Shinrikyo”, a.k.a “The Supreme Truth” (Sezigen and Karayilanoğlu, 2006: 387)..
- In 1995, the same sect carried out another terrorist attack using sarin gas on the city’s subway killing 12 people and injuring 5.500 people in Tokyo, Japan (Lugar, 2005: 224).
- The chemical attack carried out in Eastern Ghouta by the Syrian Army on August 21st, 2013, resulted in the death of 1.429 people, 426 of whom were children (T.C. İçişleri Bakanlığı Afet ve Acil Durum Yönetimi Başkanlığı (AFAD), 2021)
- Sukhoi aircrafts targeted the northern district of Han Sheikhun district in the southern countryside of Idlib in Syria on April 4th, 2017, with rockets that carry poisonous gas, resulting in the deaths of approximately 100 people and poisoning another 500 civilians, most of whom were children (AFAD, 2021).

Biological Agents

Microorganisms such as bacteria, viruses and their by-products, etc. that cause disease or death in humans, animals and plants are called biological agents. The outcome expected from the use of biological agents besides leading to death is also to reduce the opponent’s ability to fight or to hinder opponent’s ability to meet basic needs such as eating and drinking. In biological terror, agents used on humans aim to cause epidemic diseases (Yüksel and Erdem, 2016: 205). In short, biological warfare agents can be used for malicious purposes such as to spread fear in communities or individuals, create chaos and diseases, destroy the ability of governments to govern, inflict great economic damages or to reduce the population (Hüşan, 2010).

These agents, which are found spontaneously in nature, have some natural risks for human life. However, the possibility of occurrence of these risks

spontaneously is very low. Thus, these agents are used for biological terrorism only after their disease-causing, infectious properties and durability are increased with other biological substances. It is assumed that more than 180 biological agents can be tailored for use in biological terrorism (Lugar, 2005: 224).

Biological warfare agents are also used as a political tool in international politics and for show of force in the context of weapons of mass destruction, as is the case with other types of warfare agents. For this reason, scientific approaches and interpretations must be based on auditable, observable, evidence-based realistic grounds in order to prevent them from falling into the hands of such malicious people (Yenen and Doğanay, 2008: 100).

Some of the terrorism incidents that have taken place in the past and involved biological agents are as follows;

- In 1984, 751 people were affected from the terrorist attack involving the deliberate contamination of the foods of approximately 10 restaurants in the US with salmonella bacteria (Lugar, 2005: 224).
- In 1994, two people were caught while planning to carry out a terrorist attack in the US using the biological agent ricin (Christopher et al., 1997: 431).
- In 1995, it was discovered that the sect called “Aum Shinrikyo”, a.k.a “The Supreme Truth”, tried to develop biological weapons based on botulism toxin and ebola virus after their terrorist attacks involving sarin gas were exposed (Cenciarelli et al., 2013: 113).
- In 2001, anthrax virus was attempted to be spread through mail in the US, resulting in 19 people to become infected and 5 people to get killed. After the attacks, approximately 10.000 people under the risk of getting infected with the virus have been treated with antibiotics (Denoon, 2005).
- The claims that the Covid-19 (coronavirus disease 2019) pandemic, which resulted in the infection of 115 million and the death of 2.5 million people worldwide (data current as of 05.03.2021), is a biological agent, were yet to be refuted (World Healty Organization (WHO), 2021).

Radiological Agents

Radiation is defined as the energy packages of high speed particles and electromagnetic waves (Çimen et al., 2017: 2461). Accordingly, radiological terrorism aims the emission of radiation waves through detonation of the radioactive material integrated into conventional explosives. The spread of

the fires and radioactivity resulting from the explosion into the atmosphere creates a negative effect on human health and the environment. The greatest risk associated with radiation terror is the illegal use of high grade uranium or plutonium in terrorist attacks (Rosoff and Winterfeldt, 2007: 537).

Exposure to radiation may be directly, or indirectly through the inhalation of airborne radioactive materials, accumulation of these substances in the soil or on the surface, and contamination of skin and clothing. Exposure to high doses of direct radiation can cause cell death, impairment of organ functions and major burns, as well as death within a few hours as a result of one or more of these factors. In addition, radiation bombs cause radioactive gases to spread into the atmosphere, and the contamination of all living things through inhalation or food (Lugar, 2005: 224).

In cases when the actual exposure is not sufficient to inflict cell damage, radiation causes cell modification rather than cell death. The effects of low doses may emerge years later as a disease (Özcan and Topçuoğlu, 2008; 40).

Some of the terrorism incidents that have taken place in the past and involved radiological agents are as follows;

- In 1996, a bomb made of Cesium 37 and dynamite was placed in the Izmailovo park of Moscow in Russia and was reported to a local television channel at the last minute before it went off. Allegedly, the terrorist act was carried out to reveal Russia's security deficit and it was not aimed to explode the bomb (Lugar, 2005: 224).
- A container full of radioactive materials attached to a mine was found near a railway line in Grozny in Russia in 1998 (Ortatatlı, 2015: 45).

Nuclear Agents

Nuclear terrorist acts are carried out by terrorist groups either by directly obtaining nuclear weapons or by attacking a facility that has nuclear capacity (Ortatatlı, 2015: 45). In more than thirty countries around the world, there are approximately 450 nuclear reactors established for industrial purposes, more than 100 nuclear reactors established for scientific purposes, and more than 10.000 nuclear weapons of mass destruction. This nuclear inventory allows the terrorist organizations to expand their nuclear weapons activities (Demirci, 2012: 1311).

Terrorist groups acquire nuclear weapons generally via three different scenarios. The most challenging and dangerous one among these scenarios is materialized when a terrorist organization reaches the capacity to build nuclear weapons. The second scenario includes the theft and seizure of a nuclear weapon by a terrorist organization. The last scenario includes providing support to a terrorist organization by a country with nuclear weapon technology (Boaz, 1998).

Some of the terrorism incidents that have taken place in the past and involved nuclear agents are as follows;

- In 1973, 15 people organized an armed attack on the nuclear power reactor in Lima, Argentina, and were neutralized by the security teams (Lugar, 2005: 224).
- The emergency cooling system was sabotaged at the Pennsylvania Beaver Valley nuclear power plant in 1981 (Lugar, 2005: 224).
- In 1981, the emergency generators of the New York Nine Mile Point nuclear reactor were deliberately disabled (Lugar, 2005: 224).
- In 1982, the Superphenix reactor in Creys-Malville, France was attacked with 4 anti-tank rockets and the reactor was damaged (Lugar, 2005: 224).
- In 1982, the nuclear reactor, which was under construction in Cape Town, South Africa, was attacked with 4 bombs (Lugar, 2005: 224).
- In 1985, guerrillas infiltrated the control room of the Koeberg Reactor near Cape Town, South Africa, and the control panel was deliberately damaged (Lugar, 2005: 224).
- The fourth aircraft hijacked in the September 11th, 2001 attacks, with its passengers and crew, fell while 15 minutes away from the Three Mile Island nuclear power plant in Pennsylvania, and later it was stated that the target of the terrorists might have been the nuclear power plant (Lugar, 2005: 224).
- In 2005, it was stated that Chechen rebels attempted to hijack five planes in Russia and one of the targets was a nuclear power plant (Lugar, 2005: 224).
- Three suspected terrorists were caught in 2005 around the Lucas Heights nuclear research reactor near Sydney, Australia (Lugar, 2005: 224)..
- In 2011, near the Sellafield nuclear power plant in Cumbria, England, British Police detained five suspected terrorists under the anti-terrorism law (Demirci, 2012: 1311; Leventhal and Yohan, 2004: 187).

2. Cbrn Risk Management

Risk management is defined as the effort to describe and manage potential problems (Leventhal and Yohan, 2004: 187). Accordingly, CBRN risk management aims the elimination of the risks in respect of the use of chemical, biological, radiological and nuclear agents, elimination or minimization of possible losses and damages, and doing the plannings and taking measures to ensure that the potential targets can continue their activities smoothly (White, 2002: 310).

Effective risk management against CBRN attacks is very difficult. As a reason, CBRN agents are not only too accessible, but also used in many areas in our daily life, and in industry in particular. Thus, CBRN risk management by continuously carrying out the respective inspections and controls is very necessary in the industrialized countries, as well (Lugar, 2005: 224)..

The risk of CBRN terrorism is directly related to: the diversity of agents that can be used in terrorist attacks in countries and the control mechanisms related thereto; the blast range, impact area and lethality of agents that can be used in terrorist attacks; the existence of production and storage areas that can be targeted by terrorist attacks; the existence of terrorist organizations that can carry out such attacks; the extent of willingness of existing terrorist organizations to implement their strategies to lead to mass deaths; and last but not the least, the security gaps that the perpetrators can use to their advantage. Potential risks to CBRN terrorism are essentially assessed on the basis of these factors (Shea and Gottron, 2004).

Factors that increased the spread of CBRN terrorism in today's world are (Hanci, 2001: 331);

- Easier access to technical information,
- Difficulties in controlling and inspecting CBRN agents,
- Increased number of experts in the field of CBRN and the fact that it is easier for terrorist groups to find sympathizers or collaborators among these experts,
- Emergence of political instabilities in the countries that hold to CBRN agents in order to use them as warfare agents in case of war, which facilitates the capture of these agents by terrorist groups,
- Easier production and transportation of some of the CBRN agents,

- The financial capacities reached by some terrorist groups that allow them to buy CBRN agents rather than to capture, and
- The increase in the willingness of some terrorist groups to acquire weapons of mass destruction.

In strategies to be developed against CBRN attacks, stages of risk management, preparedness, response and improvement activities should all be taken into account as a whole. At the risk management stage, hazard and risk identification, risk prevention, screening and detection, risk mitigation and risk-bearing studies each have a special importance, given the difficulties in determination the agent initially used in CBRN attacks, the limited time for emergency intervention and protection, the possibility of use of different agents in combination, the duration of impact, and the need for special equipment for protection and intervention (Hanci, 2001: 331).

The threat area of terrorism is a very wide one which also includes civilians, and additionally the potential use of CBRN agents further complicates the management of the corresponding counter-terrorism activities using conventional security approaches. Security approaches must be compatible with civil defence methods. Consultation and communication with stakeholders and the community is essential to support a well-functioning risk management process (Kadioğlu, 2008: 30).

The decisions and actions taken should be effectively consulted with internal and external stakeholders, and the relevant plans and processes should be continuously improved pursuant thereto. Community support and participation is an essential component of the risk management process aimed at CBRN agents. Ensuring consultation and the involvement of citizens in the process will also assist in developing proactive management and bridging the gaps between the risk perceptions of different stakeholders. Risk communication helps managing the panic and speculation in the post-attack society. Risk communication practices are also important in terms of anticipating and effectively responding to the public concerns and expectations thereof (Kadioğlu, 2008: 30).

Challenges in screening and detection of constantly evolving CBRN agents and increases in the number and types of areas targeted with these CBRN agents render risk management related to CBRN agents difficult. Hence, risks associated with CBRN agents can only be managed through an accurate and ideal risk management mechanism. The basic approach in risk assessment is

to ensure a process management involving continuous improvement. A solid infrastructure should be established for success and this infrastructure should be continuously improved in line with the scientific and technological developments (Vicar, 2011: 21). The main purpose of using CBRN agents in terrorist activities is generally to inflict mass killings. Yet sometimes, rather than inflicting mass casualties, the main strategy of CBRN attacks can be to shake confidence in public authorities, increase defence expenditures of governments, and create fear and anxiety in society (Thornton, 2012: 8).

Preparedness against CBRN attacks can act as an instrument of deterrence in the context of CBRN risk management. In terms of deterrence, enhancing the defensive ability is just as important as enhancing the offensive power. Making the relevant preparations, detection and prevention methods, technologies developed and used, training and military drills known publicly, that is, show of force, by the states that are threatened by terrorist groups, may act as a deterrence for terrorist organizations, reduces the psychosocial impact of CBRN attacks on society, strengthens the bond of trust between the community and public authority, and contributes to the post-attack crisis management (Sungtaek, 2020: 41).

3. Psychosocial Effects of Cbrn Terrorism

Society is formed based on the bond between thousands or millions of individuals, most of whom will never cross paths in real life, with an intense sense of belonging based on common ethnic, religious, national or ideological backgrounds (Guidottia and Trifirò, 2015). They aim to live in a specific social group and acquire a social identity so that groups of people living in the society have a positive sense of self and feel safe. A common sense of security is created by enabling groups of people to decide between the “dangerous” and the “safe” with the psychological and physical boundaries created to protect themselves and feel safe (Tajfel, 1982: 11).

Human beings live within a specific social group to feel safe and adopt a social identity to have a positive sense of self. A common understanding of security is created based on the meanings attributed to “dangerous” and the “safe”, which are defined according to the psychological and physical boundaries that the societies create to protect themselves and feel safe (Tajfel, 1982: 11). Terrorist organizations attempt to erode this common understanding of security by inflicting destructive effects on the concept of society (Özcan, 2013: 79). The main purposes of terrorist organizations with different ideologies are to shake

the trust of the people in the administration and to create an environment of chaos, by creating distrust in the society (Coaffee, 2006: 390).

CBRN terrorism, is a new branch of terrorism used as a means of political actions and propaganda, in that it includes planned and organized violence, has a certain preparation stage, is carried out using conventional weapons deliberately targeting innocent civilians (Demirkent, 1980: 15; Smith, 2008: 59).

Violence is not an end but a “means” for CBRN terrorism, that enables the perpetrators to achieve their goals. Similarly, victims of terrorist activities who were targeted, and were killed or injured as a result, or subjected to violence are also perceived as a “means” by the terrorists, which they can use to force their “enemies” to accept their ideology. Terrorist groups create a circle of vulnerability by sowing seeds of fear in the victims of terrorism, their relatives, those who are not likely to be targeted by terrorism, and the common cultural society (Bandura, 1990: 163; Kılıçoğlu and Demiray, 2004).

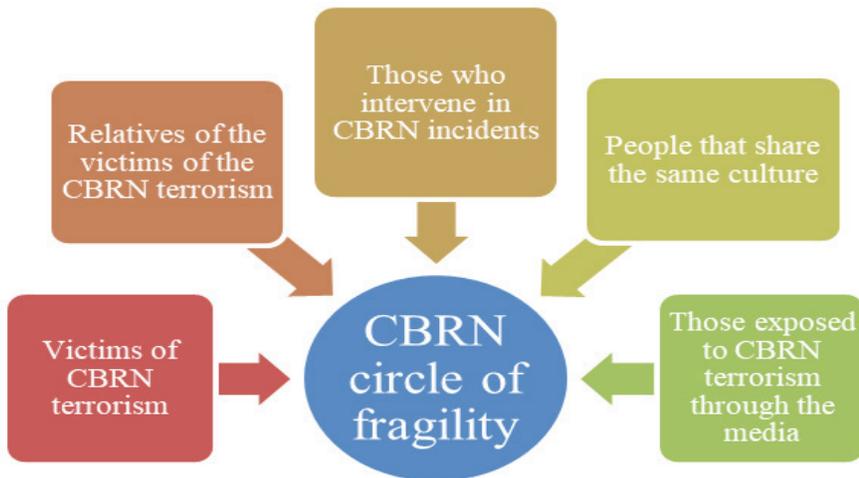


Figure 1. *Elements of the Circle of Vulnerability Created by CBRN Terrorism*

Psychosocial support in the context of CBRN terrorism includes preventing the psychological incompatibilities that may arise after the CBRN incidents, re-establishing and developing the relationships among the family and the society, ensuring that the victims become aware of their own capacities and strengths in the process of going back to their ‘normal’ lives, increasing their ability to cope, improve and recover, and supporting the auxiliary staff Garip and Oğur, 2019: 85). The main purpose of providing psychosocial support after

the CBRN incidents is to eliminate the chaos and uncertainty caused by the terrorist attacks experienced by the victims in the circle of vulnerability and to implement posttraumatic psychosocial intervention. In addition to providing psychosocial support, all security vulnerabilities must also be addressed in order to enable the affected people to rebuild their lives at a level comparable to what they had in the past, if not better (Dyess, 1998: 112).

The intensity of the psychosocial effects of CBRN terrorism on individuals may increase or decrease from person to person, based on factors such as the age and gender of the affected individual, his/her previous experiences with CBRN terrorist attacks, and the fact that whether the individual lives in a geography where these attacks are frequently experienced. The reactions of those exposed to CBRN terrorism directly by experiencing CBRN incident in person are usually manifested trauma, whereas the reactions of those exposed to CBRN terrorism indirectly as the CBRN incident is reflected on the media or via the perceptions of the community about the CBRN incident are usually manifested as a lack of interest or empathy/sympathy, and in some cases, also as trauma usually depending on whether or not there is a cultural bond with the victims of the CBRN incident. It is only after understanding the psychosocial effects of CBRN terror on humans that the relevant stages of intervention can be planned (Quarantelli, 1985).

3.1. Psychosocial Effects of Direct Exposure to Terrorist Incidents

The psychosocial impacts of CBRN terrorism on the individuals vary according to whether the individual in question experienced the CBRN incident in person or whether he/she witnessed to it. Direct exposure to CBRN incidents has highly traumatic and lasting effects on individuals (Tuncay and Akçay, 2018: 330). The most traumatic CBRN incidents include deaths that occur suddenly and unexpectedly. A death that occurs due to an illness, old age or even a war, though still tragic, is an expected situation, whereas a death that occur as a result of an accident, disaster, etc. appalls the families, friends and colleagues of the deceased, since it occurs unexpectedly. Additionally, a death that occur as a result of an unexpected incident usually entails a process that includes the search for the missing bodies of the individuals, if not yet found, who are presumed to be dead, the identification of the deceased by their relatives, and burials. This process alone may lead to a series of emotions ranging from fear and anxiety to loss, sadness and mourning, all of which may be a part of the traumatic experience (Bragin, 2011: 381).

In situations that include confronting the terrorists, many sources of stress such as fear of death, uncertainties, detentions, brutality and violence emerge (Holloway and Fullerton, 1994). Additionally, victims that survived these situations are known to have developed temporary solutions to their situations led to their survival such as carrying out counterattacks against the perpetrator or fleeing, or direct coping methods such as sit up and take notice (Quarantelli, 1985).

3.2. Psychosocial Effects of Exposure to Terrorist Incidents through Media

Today, the power of the media has taken precedence over the intrinsic cultures and beliefs of the societies. In parallel, along with the latest scientific and technological tools, media enables terrorist organizations to sustain their effects not only in the areas targeted, but also in the whole world. It is the media itself, the importance of which is increasing day by day, that sets and organizes the agenda and provides solutions to problems (Korkmaz, 1999). There were incidents in the recent past through which the terrorist groups, using this power of the media, sowed seeds of violence and fear in the societies, and imposed themselves on people in this way (Cho and Han, 2004: 311). Terrorist groups use the power of the media, namely the classical tools of mass communication and the internet for different purposes such as to create resources and to expose their messages to third parties. In this way, terror is experienced not only by the victims and their families but also by third parties (Rogers, 1999). It is evident that terrorism cannot spread without the media (Waters, J2002: 59), which is the major reason underlying its success in achieving its ideological goals and why CBRN terrorism is considered as a phenomenon of the modern era (Kart, 2001: 80).

Terrorist organizations promote themselves, spread their ideology and make propaganda using formats such as images, sounds and expressions, which are rendered possible by the technical capacity of the media. The time that the media organs devote to terrorist incidents affects the audience psychologically and creates fear and tension among people. In this way, millions of people who watch terrorist incidents live are, in a sense, forced to put themselves in the shoes of the victims and feel the horrors they suffered (Lomasky, 1991: 95).

In the event that a terrorist organization achieves to manifest themselves strong and invincible and succeeds in making the people to buy this perception, the legitimacy of the state becomes questionable and concurrently the public may put pressure on the government to negotiate with the terrorist organization. As a consequence, terrorist organization would reach its goal by creating the

impression that “there is no other choice but to reach an agreement” and forcing political powers to fulfill their demands (Devran, 2015: 87).

It was demonstrated that a significant part of the society experiences trauma in relation to the terrorist incidents indirectly, especially through exposure over the media channels, even though the incident occurs far from them. Accordingly, media unwittingly helps terrorist groups achieve their goals by increasing the number of victims manifold (Milgram, 1986: 29). Particularly after the bombing of World Trade Center in 1993 and the bomb attack in Oklahoma City in 1995, many studies have been carried out to investigate whether news of terrorism causes Post Traumatic Stress Disorder (PTSD) and depression symptoms in third persons (Ofman et al., 1995:313; Pfefferbaum et al., 2006: 220). It was determined that the visual representation of the incidents causes the viewer to disregard the actual distance between him/her and the people who actually experienced the incident, and to develop a certain attitude and emotion as if he/she experiences the event, as well (Schleifer, 2006: 10).

4. Psychosocial Intervention Models Aimed at Coping With the Adverse Effects of Cbrn Terrorism

CBRN terrorism, one of the most traumatic events that a person would ever encounter throughout his/her entire life, causes intense stress and behavioral changes on individuals as a result of the physical, mental and social damages thereof (Karancı, 2001: 291; Masten and Narayan, 2012: 230; Nandi et al., 2005: 305). In other words, CBRN terrorism threatens the society both directly and indirectly by turning each member of the society into potential victims and creates a traumatic society as a result. It is very difficult to determine the type of the CBRN agents used in a CBRN terrorist activity and takes a long time to do so. The right response to a CBRN attack cannot be developed unless the exact cause is understood, and in which case, there is a chance that the size of the attack changes rapidly and gets worse. Moreover, those who survive the created chaos are victimized as much as the real victims, the pre-victims who lost their lives from the attack, as they face intense vulnerability, fear, disability, and death in the aftermath of the attack. In the face of these events, the psychological structure of the society is negatively affected resulting in a differentiation in individuals' perceptions about the world, human nature, death and about themselves (Zeidner, 2006: 301; Hamaoka et al., 2004: 534).

Furthermore, loss of senses of trust and security induced by the CBRN terrorism in individuals predisposes them to develop mistrust towards almost anyone, also including the mental health professionals. Individuals' reactions to CBRN terrorism in its aftermath vary from person to person, depending on the type of incident, its impact, individuals' proximity to the event, and whether or not the individuals suffered any losses as a result of the incident (Waters, 2002:61).

Physical Reactions	Mental Reactions	Emotional Reactions	Behavioral Reactions
Increased arousal, Anxiety, Muscle tension Nausea, Fast Pulse, Dizziness Lack of energy Fatigue, Gnashing of teeth	Changes in thoughts about other people Increased awareness, Decreased awareness, Dissociation, Difficulty in focusing Reduced attention, Memory problems Difficulty in making decisions, Diving into deep thoughts	Changes in thoughts about self, Change in thoughts about the world, Fear, loss of sense of security, Sadness, grief, depression, Feelings of guilt Anger, restlessness, Apathy, Loss of interest, desire, Inability to enjoy, Loss of trust, Decreased self-esteem, Feeling of helplessness, Emotional distancing from others, Intense and excessive affect, Chronic sense of emptiness, Blunted affect	Social withdrawal, Quick arousal, Avoidance of situations and places, Aggression, Changes in eating habits, Weight loss or gain, Restlessness, Increase or decrease in sexual activity, Self-harm, Learned helplessness, Addictive behaviors

Figure 2. *Psychological Symptoms Manifested After Incidents of CBRN Terrorism (Zeidner, 2006: 301; Hamaoka et al., 2004: 534).*

All efforts aimed at restoring the functionality of individuals, groups, families and society affected by CBRN terrorism, which has such negative effects on people, are aimed at accelerating the transition to normal life through effective psychosocial interventions (Bragin, 2011: 381; Landau, 1997: 512).

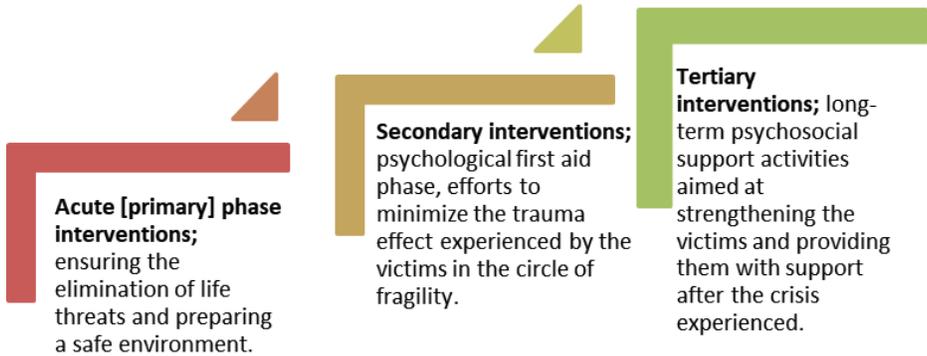


Figure 3. Purpose map of the psychosocial interventions held after the CBRN terrorism incidents.

Understanding and mitigating the traumatic effects of CBRN terrorism requires crisis intervention at the societal level (Aktaş, 2003: 39). The crisis intervention model that is to be implemented in the said context should be based on a family-oriented approach, clinical model and conservation of resources theory in order to effectively address the psychosocial intervention steps.

First, the psychosocial activities based on family-oriented approach involves family functions, roles in the family, relations with relatives, family supports, and self-care mechanisms. The aim of the psychosocial activities based on family-oriented approach is to bring family members together and set the ground for the members of the family so that they can identify the problems they have in common, list and prioritize these problems, and cooperate in order to solve them (Griffith et al., 2005: 551).

Psychosocial activities based on family-oriented approach aims to achieve the following goals in respect of the individuals (Griffith et al., 2005: 551):

1. To address the mental symptoms and functional disorders in the individual in the sphere of relationships in an attempt to reduce these symptoms and disorders;
2. To analyze and resolve the conflicts that the individual has with the wider family and society through family and marital conflicts;
3. To mobilize the family's intrinsic power to determine the grievances within the family and to deal with these problems utilizing the relevant resources;
4. To facilitate the perception and satisfaction of the emotional needs of family members;

5. To develop problem-solving and communication skills of members and the family in the face of challenging life events and medical and mental illnesses;
6. To enhance the autonomy and communication skills of each member of the family;
7. To increase reconciliation on gender and intergenerational role distribution; and
8. To facilitate and revitalize the family's integration with the social environment.

Family and community structures and cultures should be taken into consideration in family-oriented interventions held after traumas. In traditional societies such as Turkey, social identities are often integrated with family life. In such societies, social support and communication within the family play a vital role in eliminating the psychological and material damage caused by terrorism. Additionally, the family-oriented approach provides an advantage in reaching large masses in adverse situations such as the insufficiency of the number of psychological health experts and financial resources in a chaotic environment as in the case of the aftermath of a terrorist attack. In family-oriented approach, families, together with experts, assist in reaching and supporting the victims who need support. In this way, more victims are reached, and individual and social recovery are achieved faster (Griffith et al., 2005: 551).

Secondly, the psychosocial activities based on the clinical model emphasize that individuals with a history of psychopathology, post-traumatic stress disorder, depression, anxiety disorder and "substance abuse" have not sufficiently developed skills and emotional levels needed to cope with CBRN terrorist attacks. Accordingly, it is asserted that these individuals are more vulnerable to new traumas (Meyer, 1991: 6). The person exposed to CBRN terror must first accept the incident. He/she should then confront the trauma and overcome its short and long term effects. Figley, who has defined the healing process as the process of transformation from a victim in an irregular and compressed psychological state to an organized individual who can stand on his/her feet, indicated that the length of this healing process is determined by the intensity of the violence exposed, the importance of individual's losses for him/her, and the personal characteristics of the individual (Figley, 1985).

Thirdly, conservation of resources theory argues that individuals strive to obtain, protect and increase the resources they value. According to this theory, individuals can achieve their goal of leading a successful life, as they improve their personal characteristics such as self-esteem and social characteristics such as seniority, and then preserve these characteristics (Yürür, 2011).

Environmental conditions often threaten or reduce these resources. In accelerating the transition of the individual back to normal life, first of all, physical and mental state of the person, his/her family and close acquaintances, the individual's status, position, economic status, his/her significant other, his/her basic beliefs and self-esteem are to be taken into account depending on the relationship between the threatening CBRN attacks and the individual's existing resources (Yürür, 2011).

The effects of a CBRN attack that is experienced or witnessed by an individual are manifested in 3 consecutive phases:

First phase involves experiencing a shock that varies according to variables such as the magnitude and impact of the CBRN terrorist incident, the severity of the reactions, the proximity of the person to the place of incident, the duration of exposure to the incident. These reactions range from immature human emotions to overwhelming complex emotions, numbness, anger, pain, anxiety and fear, constantly re-experiencing the incident in memory, to dreams and repetitive flashbacks, over-arousal and severe anger and nervous breakdowns (Jordan, 2005: 345).

Secondly, in the denial phase, most individuals surprisingly revert back to their behavior before the terrorist incident fast. However, this does not mean that the individual in question is not physically and psychologically affected by the terrorist incident. Individuals try to suppress their memory in order to eliminate the emotions of fear, despair and the terror they experience (Jordan, 2005: 345).

Thirdly, in the integration phase, the individuals re-evaluate the meaning of life on a personal basis. Awareness of the loss of family and/or relationships increases in the order of their importance as perceived by the individual. Individuals reconstruct their old thought and belief systems or try to develop new ones, and adjust their perceptions of the world, human nature, spirituality and of themselves, and then re-adapt. Psychological interventions due to traumas experienced after wars, massacres and organized acts of political violence should be community-based (Guidottia and Trifirò, 2015).

The success of all these interventions held within the scope of the aforementioned phases depends on the genetic characteristics, personal characteristics and weaknesses of the individuals and the experiences they lived in the past, as they may further aggravate the symptoms they manifest as a result of the CBRN terrorist attacks that they experience during and after the crisis. The CBRN terrorist attacks may induce post-traumatic stress disorder (PTSD), acute stress disorder (ASD) in individuals, and studies are being conducted in order to develop treatments for these disorders (Meyer, 1991: 6; Brewin, 2020: 752).

Conclusion

The impact and prevalence of the terrorist incidents, which have had a great impact on people's lives in recent history, are rapidly increasing, as the terrorists use tools of mass communication and technological developments to their advantage. These developments have brought the CBRN terror to the fore as a new dimension of terror. Among the major purposes of CBRN attacks are show of force, to present a threat, and to undermine people's trust in the administration. The frequency of CBRN terrorist attacks has increased due to reasons such as easier access to technical information, difficulties in controlling and inspecting CBRN agents, emergence of political instabilities in the countries that hold to CBRN agents, and increased mobility of CBRN agents worldwide.

The targets of CBRN terrorism are often areas with high public presence. CBRN terrorism affects individuals physiologically, psychologically and socially by changing their perception of personal security, their life styles, future expectations and choices.

The aim of the attacks carried out by the CBRN terrorist organizations motivated by their ideologies is not just to kill or injure people. The attacks are also directed against any third parties, that is the whole of the vulnerability circle, that the terrorist groups try to reach. Generally speaking, the widespread media coverage of CBRN terrorism both in Turkey and in the world sow the seeds of fear and chaos in people.

Many studies reported an increase in the probability of experiencing trauma in people who experience CBRN terrorist incidents in proportion to their degree of cultural affiliation and physical proximity to the incident. In other words, CBRN terrorism directly and indirectly threatens individuals' physical integrity

and psychological conditions, values, thoughts, attitudes, the control they have of their lives and their presumptions, turning them into potential victims. It is obvious that the biggest goal of CBRN terrorism is to create a traumatic society.

Only a very few studies have been conducted on the effects of the CBRN terror on people and society in Turkey, which is a subject that is in fact of great relevance taking into consideration Turkey's past and current situation. Consequently, no intervention model could be developed which can be used for people affected by CBRN terrorism, as the effects of CBRN terror were not fully investigated.

The fear mongering effects of CBRN terrorism have led terrorist organizations to primarily use CBRN agents in achieving their goals. This made the fight against CBRN terrorism more complex and expensive for the countries. Risk management, cooperation with local, national and international stakeholders and communication with the society are all extremely important in the fight against CBRN terrorism. The fight against CBRN terrorism should be carried out based on proactive management of all local and national service groups, being fully aware of roles and responsibilities in accordance with the segregation of duties set forth in the context of the fight against CBRN terrorism, and meetings held at regular intervals. Training of the public should be taken into consideration during the preparatory works along with the training of the response teams. Sharing the preparatory works with the public can be used as a deterrent in risk management, and may reduce the psychosocial effects of attacks on society.

As can be seen from all these data, provision of psychosocial support after CBRN terrorist incidents is important in respect of the stabilization of the society. The CBRN terrorism experienced in the society directly or indirectly (through the media) causes concern for the future in individuals. Psychosocial support can intervene in such anxieties experienced by the individuals and assist in the rebuilding of the society.

Psychological interventions should be community-based, and should thus be provided using the family-oriented approach, in addition to the clinical model and conservation of resources theory. In traditional societies, as in Turkey, social identities are determined in accordance with family life. Family solidarity and support communication have a vital role in overcoming the trauma caused by CBRN terrorist incidents and provide an advantage in reaching large masses, especially in countries with limited psychological healthcare professionals and

limited financial resources. In addition, with the clinical model, it is possible to determine the individual differences of individuals who are victims of CBRN terrorism and to individualize the psychological intervention to be provided, depending on the extent of the individual's victimization, the way the individual has experienced the event, the losses the individual had suffered, and individual's state of health.

Psychosocial interventions that are to be held against CBRN terrorism should be first started from vulnerable groups and then extended to all individuals that suffered from CBRN terrorism. Individuals that are to be provided psychosocial interventions should first be decontaminated and provided with health intervention. It should not be forgotten that all healthcare professionals, security forces, etc. who respond to CBRN terrorism and similar incidents, should be encouraged to participate in the psychological intervention activities in order to help the society to fully recover from the CBRN terrorist incidents.

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CHAPTER X

OMBUDSMAN IN TURKISH REPUBLIC: THE OMBUDSMAN INSTITUTION

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1. Introduction

The Ombudsman Institution is a control mechanism that started to be implemented in Sweden in the 18th century in order to resolve disputes between the King and the people. Following the changes and developments in the world order, the institution's application in other countries has developed rapidly. Especially after the Second World War, classical control mechanisms were insufficient in controlling the actions and operations of the administration. The traditional management approach was abandoned and individual oriented management approach has been adopted. With the goal to provide efficient services to citizens, the capacity to provide services has increased in the public administration mechanism. With the increase in services offered, new audit methods were needed to audit public administration independently of Parliament. The Ombudsman institution, which protects the citizen in the face of violation of rights or improper attitude of public personnel in the services offered by the public administration is a new audit mechanism. In addition to the legal audit conducted in the classical audit mechanism, both legal audit and on-site audit can be performed in the ombudsman system which is a new type of audit.

18. The Ombudsman institution, which emerged in Sweden in the century and began to be implemented in the countries of the world after the Second World War, is responsible for overseeing the administration in an impartial, independent

way. Citizens who believe that their rights and freedoms have been violated can access the Ombudsman institution without cost and easily. The decisions taken by the Ombudsman are advisory and not legally binding.

The Ombudsman Institution ensures that the violations of human rights and illegal works and transactions arising from the service provision of the administration are resolved in favour of the citizens. The creation of an ombudsman institution in Turkey in the modern sense was realized in the last quarter of the 20th century. Many studies have been carried out to establish the Ombudsman institution, which was established in 2012. In 1982, the proposed constitution included a proposal for the creation of an Ombudsman institution for the first time. However, the Legislature did not consider this proposal. Later, in 1991, the Public Administration Research Project (KAYA) report published by the Institute of Public Administration in Turkey and the Middle East, seventh, eighth, ninth and fifty fifth with five-year development plans. and fifty seventh. The government bill included recommendations for the establishment of the ombudsman system in Turkey. However, not every proposal has been accepted, and not every work has been legalized. In a referendum held on 12 September 2010, the constitutional amendment was adopted and the ombudsman system was adopted in the 74th article of the constitution. In its article, it is organized as an Ombudsman institution. On 29/06/2012, the Ombudsman institution was established in Turkey with the Law No. 6328 on the Ombudsman institution published in the Official Gazette No. 28338. The institution adopted by many countries is named according to the cultural, administrative and political structure of each country. In Sweden and other Scandinavian countries, where the institution emerged, the structure is called the Ombudsman, and in Turkey, it is called Public Auditor (Ombudsman).

In this study, the structural and functional aspects of the institution were mentioned after mentioning the political and management structure of the Republic of Turkey, the historical process of the ombudsman system, its characteristics and what led Ombudsman to be formed in Turkey. In line with the annual reports published by the Ombudsman Institution between 2013 and 2020, statistical data were examined and analysed.

2. Turkey Republic of Political and Administrative Structure

The government model that forms the basis of the political system of the Republic of Turkey has been identified as a parliamentary system according to the 1982

Constitution. As a result of the plebiscite held in April 16, 2017, changes were made to the Constitution and Turkey's new government system model was changed to the Presidential System of Government after the Presidential and Parliamentary General Elections held in June 2018. The Republic of Turkey is governed by the Presidential System of Government. Unitary state structure in Turkey having special properties based on the Presidential System of Government, legislative, executive and judicial powers are sharply separated (Turan, 2018: 48).

Turkey's legislative power belongs to Turkey Grand National Assembly on behalf of the Turkish nation, executive power belongs to the President and jurisdiction belongs to independent and impartial courts (T.C. Constitution of 1982, Art. 7-9).

Turkey's legislative power belongs to Turkey Grand National Assembly. The legislature consists of 600 deputies. The age to be elected as a deputy is determined as 18. Parliamentary General Elections and Presidential elections are held every 5 years on the same day. With the Presidential System of Government, "interpellation", which is one of the ways of obtaining information and control of the parliament, was removed and "question" was changed to "written question". Parliamentary inquiry, general debate parliamentary investigation and written questions, and the power to obtain information and supervision which are included in the Grand National Assembly of Turkey Bylaws are exercised by the legislature (Miş & Duran, 2017: 43).

With the Presidential Government System, the prime minister and the council of ministers were abolished and the executive power was given to the President, who was directly elected by popular vote. The President is elected for a five-year term of office. The power to act for the president belongs to the vice president appointed by the president (İzci & Yılmaz, 2019: 386). The president, who has the executive power, has the power to issue a regulation called the Presidential Decree (TC Constitution, 1982, Art. 104). With this authority, it is the directly effective authority in the functioning of the public administration. With the Presidential Decree, the establishment and abolition of ministries, their duties and powers, and the establishment of central and provincial organizations can be regulated. Presidential Organization; is regulated by Presidential Decree No. 1 About Presidential Organization (Decree No 1, 2018, 30474). With the relevant Decree, within the Presidency Organization; There are Presidential Office, Presidency of Administrative Affairs, Vice Presidents, Affiliated Institutions and

Organizations and 16 Ministries. The executive branch has been reorganized by creating offices including 9 Policy Board and Digital Transformation Office, Finance Office, Office of Human Resources and Investment Office the (Decree No. 1, 2018, 30474).

Policy Boards and Offices involved as new actors in the public policy-making process; They have preliminary research, preparation, proposal and policy development powers (Akman, 2019: 45-49). Policy Boards affiliated with the President are as follows;

- Science, Technology and Innovation Policies Board,
- Education and Training Policies Board,
- Economic Policy Board,
- Security and Foreign Policy Board,
- Legal Policies Board,
- Culture and Art Policies Board,
- Health and Food Policies Board,
- Social Policies Board,
- Local Government Policies Board

The Constitutional Court is the highest court of the judicial system in Turkey. Within the judicial organization, there are the Council of State, Court of Accounts, Court of Appeals and Courts of Disputes, which are high courts.

The Republic of Turkey, which was founded in 1923, based on “*Republican regime*”, based on unitary state structure, is governed by the Presidential System of Government, which is a form of government such as presidential or parliamentary systems of government,

3. Ombudsman Institution and Its Historical Development

With the development of democracy in the world, the area of responsibility of the administration is expanding and it is insufficient to find solutions to the requests and complaints of the citizens with classical control mechanisms. The Ombudsman is a public official who acts as a mediator for the settlement of disputes arising in the relations between the administration and individuals. The Ombudsman differs from other audit mechanisms in that it has an autonomous structure within the classical auditing practices, and is independent and impartial (Parlak & Doğan, 2016: 19-22).

Ombudsman began to be implemented in Sweden in the 18th century. King of Sweden, XII. Charles, defeated in the Battle of Poltava, which was a war between Sweden and Russia in 1709, and took refuge in the Ottoman Empire and resided in the Ottoman lands for five years (İba, 2006: 239). Living in the Ottoman Empire, XII. Charles had the opportunity to examine the Ottoman state structure closely and was influenced by institutions such as Shaykh al-Islam, Divan-ı Hümayun (Imperial Council), and Ahi Organization (Turkish-Islamic Guild) (Yüce & Beyce, 2013: 22). King of Sweden, XII. Charles, appointed a representative (Hogste Ombudsman) in 1713 in order to eliminate problems in his country such as administrative irregularities, corruption, nepotism and bribery. In 1809, the Ombudsman Institution became a constitutional institution with the Swedish Constitution (Fendoğlu, 2010: 5). The establishment of the ombudsman, which was established in 1713 and became an audit mechanism by taking its power from the Constitution in 1809, has survived until today without any major changes.

The Ombudsman Institution has spread in waves around the world after its successful implementation in Sweden. The ombudsman institution, by spreading to the Scandinavian countries first, was established in Finland in 1919, was established in Norway in 1952 and Denmark in 1954 (Pickl, 1986: 40). Its spread to Europe and America after the Second World War is called the second wave. The third wave of the Ombudsman Institution is its application in Latin America, South Africa and Eastern European countries in the 1980s and 1990s. The application of the Ombudsman institution in the states formed after the dissolution of the Soviet Union and in Russia is expressed as a wave of four (Mutta, 2005: 55; Fendoğlu, 2010: 5). The Ombudsman Institution, which is being implemented by many countries today, continues to spread rapidly by finding application areas at different levels due to the development of democracy and the increase in the value given to human rights.

Protecting the rights of citizens, being called the legal guardians, the ombudsman institution was established in 1992 as the European Ombudsman in the European Union, a supranational organization. The European Ombudsman, which was established to protect the interests of individuals in the European Union (EU) member states, has the same status as the European Court of Justice (Temizel, 1997: 36).

The Ombudsman Institution is named according to the political and administrative structure of each country and is authorized according to this

structure. The institution, which is called the Ombudsman in Sweden, it is called the Federal Defense Ombudsman in Germany, Rights' Defenders in France, High Administration Auditor in the Turkish Republic of Northern Cyprus, Public Auditor Institution in Turkey (Tortop, 1998: 3-4). It is seen that the ombudsman institution, which is applied in the world, has common features and qualities. The Ombudsman is an institution that carries out its activities independently of the administration, working with the aim of resolving disputes between the administration and the citizens. In general, the ombudsman, who is appointed by the legislature, works independently against other bodies and authorities. The ombudsman can be appointed by the legislature or by the executive branch. The Ombudsman oversees the public administration by acting itself and in line with the complaints of the citizens. The Ombudsman has the right to request all kinds of information and documents from relevant institutions and organizations in line with complaints. The Ombudsman makes suggestions and recommendations to the relevant institutions, organizations and managers in cases where violations and irregularities are detected by the administration as a result of its examinations. Although the decisions taken by the ombudsman do not have the feature of legal sanctions, they have the authority to reject complaints about matters that are not within their jurisdiction. The Ombudsman submits the results of its audits to the Parliament in annual reports and shares these reports with the public (Özden, 2010: 35-37).

One of the most distinctive features of the Ombudsman institution is that citizens can file complaints quickly and free of charge. Another common feature in countries that have an ombudsman institution in the world is that citizens must have exhausted domestic law remedies in order to file a complaint to the institution.

Hill (1974: 77) lists the common aspects of the Ombudsman Institution as follows:

- The Ombudsman has an independent and impartial status.
- Complainants should have easy access to the institution.
- The Ombudsman undertakes the protection of fundamental rights and freedoms.
- The Ombudsman plays a balancing role in administration-citizen relations.
- The results of the audit conducted by the Ombudsman are announced to the parties and the public.

4. Ombudsman in Turkey

After the 1980s, the states in the world, which gradually expanded and turned into a bureaucratic structure, abandoned the traditional management approach and switched to a citizen-oriented management approach. With the prominence of the protection and observance of human rights in the world, states have started to adopt the Ombudsman system, which resolves disputes between government and citizens and plays a balancing role in these relations.

The first studies in the creation of an Ombudsman institution in Turkey were proposed by Ankara University Law Faculty and Faculty of Political Sciences' lecturers with "Reasoned Constitutional Proposal" in 1982, the time of the preparation of the Constitutional. However, this proposal was rejected by the legislators of the period and the State Supervisory Board, a structure similar to the Ombudsman's Office, was established with the 1982 Constitution (Yüce, 2020: 114-116).

In Public Administration Research Project (KAYA) report, published by Turkey and the Middle East Public Administration Institute (TODAIE) in 1991, it has been proposed to make a legal arrangement that will enable the State Supervisory Board, established in 1982, to work as an ombudsman (TODAIE, 1991: 43).

The necessity of the Ombudsman Institution was included in the 7th Five-Year Development Plan covering the years 1996-2000 and the 8th Five-Year Development Plan covering the years 2001-2005 prepared by the State Planning Organization (DPT). According to the 7. Five Year Development Plan; *"In the face of the fact that the judiciary is bound by strict rules of operation and is time-consuming, in order to effectively and quickly resolve disputes encountered in management- citizen relations, management that oversees the non-judicial but an inspection system that is not dependent on the government, which emerged as a result of the need for and found in most of the European Union and its member states, the Public Auditory that deals with citizens' complaints (ombudsman) system will be established in Turkey"*. (DPT, 1996: 119; DPT, 2000: 193).

The first concrete step for the establishment of an Ombudsman institution in Turkey, was "Ombudsman Draft Law" that was prepared during the 57th Government on 14.09.2000. The prepared Ombudsman Draft Law was forwarded to Turkey Grand National Assembly (Parliament) but the draft was invalid. For the establishment of the institution, in 2004, with "Law No. 5227

on Basic Principles and Restructuring of Public Administration” Ombudsman institution in Turkey is proposed to set the level of local administrations. It was stated that the public inspector of local administrations would assist in resolving the disputes between the administrative units and the citizen in provinces. The law was sent back to the Parliament to be discussed again by the President of the time and could not be enacted (Şengül, 2007: 136; Yağmurlu, 2018: 180).

The Law on Ombudsman Institution No. 5521 was issued on 15.06.2006, but sent back to the Turkish Grand National Assembly to be reconsidered by the President of the time, and submitted to the Parliament as the Draft Law on the Ombudsman Institution No.5548, and the Draft has been enacted by the Assembly. The Law on the Ombudsman Institution No.5548 was published in the Official Gazette dated 13.10.2006 and numbered 26318 and entered into force. The Constitutional Court was applied for annulment of the Ombudsman Institution, which acquired a legal character for the first time, by the President of the time and 123 deputies, and the Court unanimously decided to annul the Law on the Ombudsman Institution (Fendoğlu, 2013: 25).

Following the annulment decision of the Constitutional Court, a referendum was held on September 12, 2010 in order to overcome this problem arising from the Constitution. With the referendum, the constitutional amendment package was accepted. Constitutional amendment package submitted to the public vote, and the title of the 74th article of the 1982 Constitution was changed as “The right to petition, obtain information and apply to the ombudsman” and the obstacle before the Ombudsman Institution was removed (Özdemir, 2015: 24).

Following the Constitutional amendment made in 2010, a new draft Law on Ombudsman Institution, which includes many provisions of Law No. 5548, was prepared and submitted to the Turkish Grand National Assembly on January 5, 2011. The draft law was discussed by the Turkish Grand National Assembly and was enacted as the “Ombudsman Institution Law” on 14.06.2012 and was published in the Official Gazette numbered 28338 on 29.06.2012 (Çeliksoy & Bayan, 2020: 99).

General Law No. 6328 of the Ombudsman Institution says that; “The Ombudsman system that emerged as a result of the need for an audit mechanism that audits management outside the judiciary, without being tied to the management The Ombudsman system in the European Union and in many states around the world must be established in Turkey with the aim of resolving the conflicts encountered in management-individual relations as soon

as possible.” The Institution justifies the need for an audit mechanism that can quickly and effectively resolve disputes that may arise between citizens and the administration, examine complaints and make suggestions, and alleviate the intensity of the administrative judiciary.

Ombudsman Institution is a member of international networks and organizations of International Ombudsman Institute (IOI), European Network of Ombudsman (ENO), European Ombudsman Institute (EOI), Mediterranean Ombudsman Association (AOM), Asian Ombudsman Association (AOA), Islamic Cooperation Organization Member Countries Ombudsman Association (OICOA), Western Balkans Regional Ombudsman Organisations Network and Balkan Region National Ombudsman Network (Şahin, 2020: 176).

4.1. Duties and Powers

In order to fulfil the duties, set out in the Ombudsman Institution Law, it is located in the centre of Ankara, with a corporate legal entity being connected to the Grand National Assembly of Turkey, it is a special budget institution. Institution is organized as the Chief Auditor and the General Secretariat. According to the statutory regulation, the Authority can open offices outside Ankara when it deems necessary in order to resolve complaint applications faster (Law No. 6328, Article 4).

According to Article 5 of Law No. 6328; *“Upon the complaint about the functioning of the administration, all kinds of actions and procedures, attitudes and behaviours of the administration; It is among the duties of the Institution to examine, investigate and make suggestions to the administration in terms of compliance with the law and fairness within the understanding of justice based on human rights.* However, the procedures regarding the exercise of the legislative power, the decisions regarding the exercise of the judicial power, the purely military activities of the Turkish Armed Forces have been excluded from the scope of the Authority.

The Ombudsman Institution has the authority to examine and investigate the issues that are not related to the investigation, prosecution and the decisions of the courts, except for the decisions regarding the exercise of judicial power (Şimşek, 2013: 7-14).

Excluding the Turkish Armed Forces from the control of the Ombudsman Institution is difficult to reconcile with the rule of law. In order for the Turkish Armed Forces to be subject to supervision by the Authority only on military

actions, transactions and behaviours, it is necessary to ensure that one of the auditors is authorized and specialized in military matters (Erhürman, 2000: 171).

The Ombudsman Institution consists of the Chief Auditor and the auditors. The director of the institution is the Chief Auditor. The chief auditor is authorized to appoint the general secretary and other personnel, and to appoint one of the auditors in the field of women's and children's rights by providing the division of labour among the auditors. Auditors are obliged to fulfil the duties assigned by the Chief Auditor in the performance of the duties specified in the Law (Article 7). The Auditors work individually in the subjects and areas they are assigned by the Chief Auditor in accordance with the 2nd paragraph of Article 8 of the Law and submit their suggestions to the Chief Auditor.

4.2. Selection and Status

Chief Ombudsman is selected by the two-thirds majority of the total number of members, provided by the Grand National Assembly of Turkey for a four-year term. If this majority cannot be achieved, the vote of two-thirds of the total number of members of the parliament is sought by going to the second round. If the majority cannot be achieved in the first two rounds, the candidate who gets the absolute majority of the total number of members will be elected by going to the third round. If the majority cannot be achieved in the third round, the fourth voting is held and the voting is held between the two candidates with the highest number of votes. The candidate with the most votes in this voting is deemed to have won the election. In the fourth round, the quorum must be met (Article 11).

Auditors of the Grand National Assembly of Turkey Petition Committee are elected by the Mixed Commission established by the Human Rights Investigation Commission members. Selection of the Auditors in the first three laps, with the choice of chief auditors are subject to the same conditions but in the third round wanted members attended the fourth round not achieved the absolute majority of the whole number, and the third ballot the most votes of any candidate, the number of candidates to be selected to go to the election with a candidate twice as much. In the fourth round, provided that the quorum is met, the candidate with the highest number of votes is elected as the auditor (Article 11).

The Lead Auditors and auditors, whose term of office of four years has expired, have been granted the right to be elected for one more term

(Article 14). Candidates must be over the age of 50 to become a Chief Auditor, and over 40 to become an auditor. Having graduated from faculties of law, political science, economics and administrative sciences, economics and business, preferably at least 10 years in public institutions, international organizations, non-governmental organizations or professional organizations of public institutions or private sector is required in order to be elected as chief auditor and auditor. In addition, at the time of application, there should be no political party membership and applicants should not be prohibited from public rights (Article 10). According to Article 12 of Law, no institution, organization, authority, body or person can give orders and instructions, make recommendations or suggestions or send circulars to the chief auditors and auditors while performing their duties. In addition, in accordance with the same article, it is obligatory to act in accordance with the principle of impartiality while the Chief Auditors and auditors fulfil their duties.

The duties of the chief auditors and auditors are terminated in the event of their resignation, termination of office and death, if it is later understood that they do not have the qualifications specified in the Law or if they lose these qualifications after being selected. The General Assembly decides to dismiss the Chief Auditor, and the Joint Committee to dismiss the Auditors (Article 15).

4.3. Working Procedure

Natural or legal persons can apply to the Ombudsman Institution. The language of the complaint petition must be Turkish. However, in accordance with Article 8 of the Regulation on Procedures and Principles Regarding the Implementation of the Law of the Ombudsman Institution, if the person making a complaint can express himself better in another language and this situation is deemed justified by the Authority, the petition can also be made in another language. In order to apply to the Authority, administrative application methods must be exhausted. Applications made without exhausting the administrative application remedies are sent to the relevant institution. It has been stated that the Authority cannot conduct an investigation in disputes that are being heard in or decided by judicial organs. The Institution may accept applications even if the administrative remedies are not exhausted, in cases where there is a possibility of damages that are difficult or impossible to compensate. Complaint application to the institution must be made

within six months from the date of notification of the reply to be given by the administration. If the administration does not respond to the said application within sixty days, individuals can apply to the institution within six months from the end of this period. Complaint applications can be made directly to the Authority without any charge. In addition, applications can be made through governorships in provinces such as, and district governorships in districts. Applications can also be made via electronic media and other communication tools (Article 17).

The institution requests information and documents regarding the subject to be examined. The requested information and documents must be sent to the Authority by the competent authority within thirty days at the latest. However, information and documents qualified as state secrets and trade secrets may not be given by the highest authority and the board of the authorized units by stating the reason. Documents that are state secrets and trade secrets can be examined on site by the chief auditor or the auditor he has appointed. The lead auditor or auditors may appoint experts on the subject of examination and investigation, and listen to witnesses and relevant persons (Articles 18-19).

The institution must finalize the research and examination within six months at the latest from the date of application, and report the results of the research and, if any, recommendations to the relevant institution and the applicant. If the relevant institution does not deem the solution proposed by the Ombudsman Institution feasible, it is obliged to notify the Institution its justification within thirty days (Article 20).

Ombudsman is obliged to prepare a report on its activities and recommendations at the end of each calendar year and the Grand National Assembly of Turkey petition with the Commission on Human Rights Investigation Commission is obliged to submit to the joint committee consisting of members. The Commission discusses this report within two months, excluding breaks and holidays, prepares a report with its own views, and sends it to the Presidency of the Turkish Grand National Assembly to be discussed in the General Assembly. Annual reports prepared by the Ombudsman Institution are published in the Official Gazette and shared with the public (Article 22). In addition to annual reports, special reports and semi-annual reports are available on the Institution's website. Sharing these reports with the public means creating public pressure on the administration.

4.4. Activities of The Ombudsman Institution

Established in 2012, the Ombudsman Institution made its first decision on June 19, 2013. From 2013 to 2020, a total of 170,744 complaint applications were received. If the complaints received by the Ombudsman Institution are subjected to a preliminary examination and do not meet the requirements in Article 17 of the Law, the Authority will issue a “Decision not to be examined”. Complaints passed through the preliminary examination phase can be considered invalid, and the decisions taken can be in the form of a consolidation decision, a separation decision, a decision to send, an amicable settlement decision, a decision not to make a decision, a rejection decision, partly a recommendation, partly a rejection decision, and a decision of recommendation. The decisions made by the institution are subject to legal evaluation in terms of compliance with the law and fairness, in an understanding of justice based on human rights, observing the principles of good management.

Natural or legal persons can submit their complaint applications to the Ombudsman’s Office by fax, mail, e-mail, e-application and by hand. In the complaint applications; economy, finance and tax issues, public personnel regime, justice, national defence and security issues, education and training, youth and sports, health, social services, violation of human rights, local administrations, movable-immovable property, transportation, media and communication, issues related to food, agriculture and animal husbandry, science, arts, culture and tourism, energy, population, citizenship, refugee and asylum-seeker rights are included.

Table 1. Ombudsman File Data by Years

Year	Number of Complaints Transferred From The Previous Year	Complaint Application Within The Year	Total Complaint Application	Resulting Complaint Application
2013	-	7.638	7.638	6.110
2014	1.528	5.639	7.167	6.348
2015	819	6.055	6.874	5.897
2016	977	5.519	6.496	4.819
2017	1.677	17.131	18.808	14.746
2018	4.062	17.585	21.647	17.615
2019	4.032	20.968	25.000	21.170
2020	3.830	90.209	94.039	91.100

Source: <http://www.ombudsman.gov.tr>

When the applications made to the institution by years and the resulting complaint applications are examined, in 2017 and subsequent years, awareness of the institution increased compared to 2013, 2014, 2015 and 2016 and an increase in the number of files accepted by the institution are observed. It is thought that the COVID-19 epidemic was effective in the increase of applications made in 2020 to the Ombudsman Institution, which was established to resolve disputes arising from administrative relations with citizens.

Regarding the 91.100 applications finalized by the Ombudsman Institution as of 31 December 2020; 9.51% of them were “Dismissal Decision”, 10.29% of them were “Cannot-be-examined Decision”, 2.01% of them were “Amicable Resolution”, 0.18% of them were “Application Invalid”, 0.32% of them were “Decision that there is no Room for a Decision”, 75.74% of them were “Recommendation Decision”, 1.05% of them were “Refusal Decision”, 0.78 % of them were “Partial Recommendation Partially Rejection Decision”.

Table2. Compliance Ratios with the Recommendations by Years

Year	2013	2014	2015	2016	2017	2018	2019	2020
Compliance Rate %	20	39	37	42	65	70	75	76,38

Source: Ombudsman 2020 Annual Report, 2021, p. 99.

In 2017, a Research, Follow-up and Evaluation Office was established in order to monitor whether the decisions made by the Ombudsman’s Office will be followed by the relevant administrations. In this direction, with regard to the 1.551 decisions made in the direction of recommendation in 2020; While 1,325 administrations answered whether they would comply with the decisions, 226 administrations did not give an answer yet, and 30 administrations were informed that the decision was in the evaluation phase. When the responses of 1.325 administrations are evaluated; While 1,012 administrations stated that they would comply with the decisions made, 313 administrations gave their reasons (Ombudsman, 2020 Annual Report, p.98).

While the compliance rates were 20% in 2013, 39% in 2014, 37% in 2015, and 42% in 2016; In 2017, it increased by 23 points to 65%, and in 2018 it reached 70% by increasing again. In 2019, it was 75% with an increase of 5 points. Looking at the year 2020, the rate of compliance with the decisions made by the institution was 76.38%.

According to Abdullah Yilmaz and Duru Şahyar Akdemir (2020); complaints made to the Ombudsman Institution between 2013 and 2020 resulted in a “dismissal and non-examination decisions” due to the failure to provide application terms at the preliminary review stage. For these reasons, the effectiveness of the institution is decreasing. In addition, it is insufficient for citizens to benefit from the institution. Since 2013, when the Ombudsman institution began its activities up to the year 2020, it was observed that the rate of compliance with the recommendations made by the institution with the mediation function increased. Proposals have been made to increase the effectiveness of the Ombudsman institution. These proposals are in the form of organizing educational activities in order to raise awareness of the right to search for legal remedies for citizens, and obtaining support from non-governmental organizations and the public.

According to Ismail Sevinç & Betül Akyıldız (2020); in line with the reports published between 2013 and 2019, it was determined that the public personnel regime accounted for the majority of the complaints made to the Ombudsman institution. In order to solve the problem, a mental change should be achieved in the personnel management regime, the number of specialized personnel should be increased, steps should be taken to transition to Human Resources Management, a balance between bureaucracy and politics should be ensured. The public personnel system must act according to the principle of merit. It has been determined that the Ombudsman Institution, a young institution in Turkey, is trusted because of the defence of the rights of public officials against the administrations they are dealing with, and its recognition increases with each passing year.

According to Elvettin Akman & Ahmet Özaslan (2017), the annual reports of the Ombudsman Institution covering the years 2013–2017 showed an increase in the number of applications intended for urban transformation over the years. In line with the increasing applications, a model proposal was made for the Urban Transformation Ombudsman associated with the Ombudsman institution in Turkey. It has been proposed to establish an Urban Transformation Ombudsman within the scope of Level 1’ 12 regions according to the classification of Statistical Regional Units of Turkey. The Urban Transformation Ombudsman is obliged to follow the technical and legal processes of land and property ownership by taking a conciliatory role. The establishment of the Urban Transformation Ombudsman is important in terms of eliminating the victimization and rights violations experienced in urban transformation.

According to Önder Kutlu, Erhan Örselli & Selçuk Kahraman (2018), it has been proposed to establish a local government ombudsman in Turkey in order to quickly resolve the complaints of the people in the local authorities, which are the closest unit to the citizen in the provision of services, and to strengthen the link between the citizen and the local institutions. By integrating human rights and freedom issues with the local government ombudsman at the local level, awareness of the search for rights will increase in Citizens, eliminating deficiencies and failures in the services offered by local administrations will contribute to the development of local democracy.

As a result of the evaluation of literature about Ombudsman Institution and in line with the annual reports; the Ombudsman Institution founded in 2012 which got into action in 2013 is increasing awareness and safety every year. Educational activities should be organized to create a culture of pursuing rights in citizens, with the support of non-governmental organizations and the media, an ombudsman institution that defends human rights and freedoms in the face of the administration, independently and impartially. It is also required for the creation of special purpose Ombudsman types associated with the Ombudsman institution.

5. Conclusion

States are in charge of ensuring justice and equity in line with the rule of law in the relations among individuals and between the administration and citizens, ensuring the fundamental rights and freedoms of individuals and supervising public administrations in order to improve the services provided by the administration. There are ways of auditing such as parliamentary oversight, administrative supervision, judicial review, public scrutiny and international supervision. However, these types of control are insufficient, improvements are not observed in the provision of the service performed by the administration, and bad management practices and behaviours are not prevented. In this context, there is a need for an alternative control mechanism that resolves the disputes without going to the judiciary focusing on human rights in the face of unfair actions and actions taken by the administration in addition to the classical control mechanisms.

The Ombudsman Institution, which was established in Sweden in 1809 with the aim of protecting the citizens directly against the unjust acts of the

administration, spread rapidly among the world states after the Second World War. Modelled on the institution of Ombudsman founded in Sweden in 1809, in Turkey, Ombudsman was created in 2012. The Ombudsman Institution takes action upon the complaint applications made to the institution in order to protect individuals against the unfair actions and procedures of the administration and the attitude of the personnel.

The Ombudsman Institution strives to contribute to the spread of the awareness of seeking rights for the development of human rights, and to the formation of transparent and accountable administrative institutions in line with the principles of good management, which is based on human rights and continues its activities by observing justice and fairness. Although the Ombudsman Institution is a young and dynamic institution, it organizes national and international symposiums and workshops in order to increase its recognition and closely examines the ombudsman systems of other countries. It is in close contact with the public in order to establish the awareness of citizens to seek their rights.

Considering the annual reports, the total number of complaints made to the institution from 2013 to 2020 was 170,744, while the number of complaint applications concluded was 167,805. In addition, the First Examination, Distribution and Information Bureau and the Research Follow-up and Evaluation Bureau were established in 2017 in order to increase the effectiveness of the institution. While the compliance rate by the relevant administrations to the decisions made by the institution in 2013 was 20%, in 2020 the compliance rate increased to 76.38%. The increase in compliance with the complaint applications and the recommendations made by the institution over the years shows that the awareness of the institution has increased.

In order for the Ombudsman Institution to control the administration effectively and efficiently, full autonomy should be provided. In addition, to increase the functionality of institutions, it should be supported by the Grand National Assembly of Turkey and Presidency. As in many countries implementing the Ombudsman system, the Ombudsman Institution should be given the authority to act *ex officio*. The Ombudsman Institution should be given the authority to directly access the information and documents requested from the public institutions. In order to apply for the institution to remedy the grievances of individuals in a shorter time, necessary arrangements should be made to bend the rule of exhaustion of the administrative application method

specified in the law. It is possible to say that the recognition of the institution increases in the same direction with its complaints. The number of personnel working in the institution should be increased in order to resolve the increasing complaints urgently.

The Ombudsman Institution, which is a classic type of ombudsman, needs to be established in other types and fields. With the establishment of special purpose ombudsman offices, the workload of the Ombudsman Institution and the resolution of the complaints by the institution without resorting to a legal remedy will reduce the burden of the judicial body.

The Ombudsman Institution, which protects the rights and freedoms of citizens against the administration, investigates and examines complaints, and makes recommendations to the relevant administration, will become more functional if the specified deficiencies are corrected.

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CHAPTER XI

THE APPLICABILITY OF THE LOCAL OMBUDSMAN IN TURKEY*

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1. Introduction

Those who have sovereign power have imposed duties and responsibilities on those governed throughout history. While the state, which is the only power that holds the monopoly of the legitimate use of violence, uses this power to protect the rights and interests of people, it can also be directly or indirectly responsible for human rights violations due to its wrong decisions. Especially today, the state, which was established as the protector of democracy and human rights, may become a threat to individual rights and freedoms unless the necessary measures are taken. It is necessary to prevent violations of rights in practice by controlling the state's power with various methods to avoid these negative situations.

One of the main characteristics of today's democratic societies is the protection of the fundamental rights and freedoms of citizens against public administrations. This relationship between the citizen and the state, which have a long history, is a valuable achievement for today's democratic societies and is the result of the fights for rights and freedom, restriction and control of power, and loyalty to the law and democracy.

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The idea that the negative behaviours of the people assigned by the citizens directly or indirectly to govern themselves and citizens' complaints and requests regarding them should be independently audited by other bodies to protect the gains mentioned above dates back to the past. Starting from the first times when freedoms were felt until today, when the existence of the state is felt intensely in every field, the protection of rights and freedoms has always occupied the minds of societies and continues to do so. As a result of this occupation, those who are managed tried to establish direct, flexible, fast, and cost-free institutions to control those who govern them.

Local governments, which are the administrative structures organized as the closest unit to the public, are historical institutions that date back centuries and whose importance is increasing day by day. Today, discussions such as globalization-localization, the locality in service, democracy, and participation impose more responsibility on local governments and cause an increase in their powers.

Ombudsperson control has started to be preferred at the local level to prevent violations of rights, to directly audit the local administrations, which are the closest administrative unit to the citizen, and to assure democratic participation in the face of this increasing authority and responsibility. Countries are establishing ombudsperson offices at the local level due to the increase of the workload of national ombudsperson institutions over time and the need for a resolution to the problems experienced in the supervision of local governments faster.

The ombudsman institution was established in Turkey under the name "Ombudsman Institution (Kamu Denetçiliği Kurumu)." This control mechanism, which functions differently in many countries in practice, has been put into practice in Turkey, as affiliated to the centre and covering the whole country, far from being local. The consequences of the implementation of the Ombudsman Institution -which constantly monitors the administration, protects the public against mismanagement and contributes to the improvement of the administration by eliminating the problems in the administration- to the local level in Turkey and whether such an application is applicable for Turkey are essential issues.

It is known that the national Ombudsman Institution in Turkey cannot respond to the complaints coming from the local governments due to the increased workload and that the complaints originating from local governments have a remarkable place among the complaints coming to the national ombudsperson.

For these reasons, the centrally organized institution falls short of understanding local needs and sensitivities. This study aims to analyse whether the local level ombudsperson can be implemented in Turkey, based on the ideas that there is no obstacle to implementing the local level ombudsperson practice in Turkey and that an institution that operates at the national level can be successfully implemented at the local level. In this regard, at first, the study examines the concept of ombudsperson and its definition and the historical process of the ombudsperson institution in Turkey. Then, it discusses the local government ombudsperson and the local ombudsperson practices in England, Canada, the Netherlands, and Italy. Finally, it explains the applicability of the local government ombudsperson in Turkey by examining both positive and negative aspects.

2. The Concept of Ombudsperson and Its Definition

Public administrations can be audited in various ways, including judicial, political, administrative, public, media, and international auditing. Apart from these control mechanisms, the ombudsperson institution, which is a modern auditing tool, is available in many countries today (Gökçe, 2012: 204). Ombudsperson institutions are effective public administration audit institutions (Doğan, 2014: 79). The origin of the word ombudsperson is based on the Swedish language since the first ombudsperson institution in the modern sense was established in Sweden. The word was formed by the combination of the words “ombud”, meaning “representative” or “officer” in the Swedish language, and “man”, meaning “man” or “person” (Kahraman, 2011: 361).

Since the ombudsperson institutions are organized according to the political, administrative, legal, and social conditions of each country, there is no generally recognized definition of the concept. The ombudsperson receives the complaints of the public, investigates them, and reports the results of the research to the complainants and the organizations under investigation. The ombudsperson is an essential institution for the public where justice is established, and the bureaucratic institutions ensure that they will be treated in a good, swift, and respectful manner (Pickl, 1986: 37).

The Ombudsman Institution has the authority to inspect the administration’s procedures, behaviours, and actions in terms of unlawfulness and non-compliance and to recommend the withdrawal or removal of transactions that it finds unlawful. It is an independent state institution that takes action before the

administration and is authorized to take non-binding decisions to compensate the damages arising from these transactions and actions and to correct unlawful behaviours against citizens (Erhürman, 1998: 89). In short, the ombudsperson institution, which is an institution authorized to examine and finalize the complaints of citizens against those who govern themselves, can be considered as a state institution that protects the individual from other institutions of the state (Odyakmaz, 2013: 4).

The purpose of the practice of the ombudsperson is to protect individual rights by ensuring better functioning of the administration, avoid actions that will disturb and distress the citizen, allow the citizens to control and ask for an account of the result of the tax they have given (Fendoğlu, 2010: 4).

The ombudsperson, which is an institution that protects the rights of individuals against the public administration, ensures strong communication between citizens and public institutions and organizations, effectively audits the administration with a new inspection mechanism, raises awareness of the public through events, such as seminars and meetings, and minimizes injustices or eliminating them. It can be stated that it is established for these purposes.

3. The History of The Ombudsman Institution in Turkey

The history of studies on ombudsperson in Turkey goes back to the 1960s and 1970s. In the Fourth Five-Year Development Plan (1979-1983), it was proposed to establish a “State Advocacy Institution” (Yağmurlu, 2009: 95). Although the first legal study on ombudsperson ship in Turkey came to the agenda during the preparations for the 1982 Constitution (Gökçe, 2012: 210), the proposal to establish an ombudsperson board was not accepted and was not included in the constitution (Yağmurlu, 2009: 95).

The Turkish Industry and Business Association (TUSIAD) mentioned an ombudsperson institution in the report “Public Bureaucracy” published in 1983, and they emphasized the need for such an institution in the country, affiliated to the parliament (Sağlam, 2012: 96). “Public Administration Research Project” (KAYA), by Public Administration Institute for Turkey and the Middle East (TODAIE), also emphasized the need for an ombudsperson institution in Turkey in 1991. The project report suggests that “*Legal arrangements should be made to*

ensure that the State Supervisory Board functions as an ombudsman” (Kılavuz, Yılmaz and İzci, 2003: 63).

An important step was taken in the Seventh Five-Year Development Plan by emphasizing the significance of implementing an ombudsperson system in Turkey and suggesting establishing such an institution (Kestane, 2006: 137). The “administrative ombudsperson” system was put into practice in the Ministry of Industry and Trade in 1998 as a result of these developments. Thus, a practice of ombudsperson was applied for the first time in a public institution in Turkey (Sezen, 2001: 84).

During the 55th government period, the Human Rights Coordination Supreme Council decided to regulate the ombudsperson institution. For this purpose, firstly, the regulations of various countries on ombudsperson institutions were examined, then ombudsmen of many countries were invited to Turkey, and finally, information about the functioning and general structure of the ombudsperson institutions was obtained (Kahraman, 2011: 367). Later, although there were legal attempts to establish the ombudsperson institution in 2004 and 2006, these attempts were unsuccessful.

It was decided to establish an ombudsperson institution in the Constitutional amendment made after the referendum held on 12 September 2010. The Draft Law on the Ombudsman Institution prepared by the Council of Ministers was accepted by the Constitutional Commission on 15.06.2012. Then, the Law on the Ombudsman Institution numbered 6328 was published in the Official Gazette on 29.06.2012 and entered into force with the President’s approval (Efe and Demirci, 2013: 51-59).

4. Local Government Ombudsperson and Country Cases

Local governments are the closest administrative units to the public. Concepts such as globalization-localization, decentralization, localization in service, democracy, and participation impose more responsibility on local governments and equip them with more authority (Karabulut and Bayrakçı, 2019: 84). Thus, the services offered by local governments diversify, and the number of services provided increases. In the face of increasing authority and responsibility, citizens are looking for new control mechanisms to use their rights and freedoms without any restriction (Bengli, 2013: 35).

The ombudsperson institution, which makes significant contributions to the rule of law, good governance, transparency, democracy, and human rights, has developed rapidly throughout the world due to its dynamic structure (Efe and Demirci, 2013: 53), and today, it is organized at the national, regional, or local level with different duties and functions.

The most important developments that necessitate the implementation of a local government ombudsperson institution are the increase in the workload of the parliamentary ombudsperson over time and the problems in auditing the local governments due to their excessive duties. In this direction, some countries have found it appropriate to form a local government ombudsperson to solve problems arising from local governments (Ünal, 2008: 131).

The local government ombudsperson is the ombudsperson who has all the characteristics of the national ombudsperson. It is established to protect the citizens' rights against local governments and make suggestions for better functioning of local governments in a region or city with defined borders. Their authority is limited in proportion to their areas of intervention (Ünal, 2014: 104-105). The local government ombudsperson, which undertakes the duty of protecting the rights of citizens against malpractice by dealing with local problems, has an essential role in guiding individuals who do not have sufficient knowledge and experience about their rights and duties towards local governments, do not know the ways to follow these rights, or do not have financial resources (Gökçe, 2013: 9).

The local government ombudsmen can be appointed -like the parliamentary ombudsmen- or elected by the parliament, although their duties and powers vary from country to country.

While the local government ombudsperson audits the institutions under his/her jurisdiction, he/she acts as an independent and impartial body, like a parliamentary ombudsperson, without taking orders or instructions from any authority or person. Besides, they are authorized to make all kinds of expenditures related to their duties from their allocated budgets, make payments to persons who help the institution during the investigation and share information/documents. Their approval is also obtained either directly or indirectly in the appointment of the personnel of the institution who assist them in fulfilling their duties (Ünal, 2008: 137-138).

The local government ombudsperson can be established at all state, district, city, or province levels. Some countries, such as the Netherlands,

have an ombudsperson institution at the parliamentary level while having an ombudsperson institution at the local level. Some countries, such as Canada, may prefer to practice only local-level ombudsperson without a national-level ombudsperson. In this context, The UK, which has a unitary state structure and has both a national ombudsperson and a nationally administered local government ombudsperson; Canada, which has a federative state structure and has an ombudsperson practice at the local level without having a national level ombudsperson; The Netherlands, which has ombudsperson applications at the local level despite having an ombudsperson institution at national level; and Italy, which has a unitary state structure and an ombudsperson practice at the regional level, are examined in this part of the study as the prominent examples.

4.1. The United Kingdom

The local government ombudsperson was established in 1974 in the United Kingdom (UK). Initially, three local government ombudsmen were established in England and one in Wales. One year later, a local government ombudsperson was also established in Scotland by the law enacted one year later. (Akinci, 1999: 343).

The duties of the local ombudsperson institution are regulated in parallel with the duties of the parliamentary ombudsperson. It examines the claims of “mismanagement” and complaints concerning local governments. The ombudsperson appointed by the Queen with the recommendation of the Minister of Local Government can remain in office until the age of 65, the retirement age. In extraordinary situations such as his/her own will, inadequacy, or mismanagement, he/she is dismissed by the Queen (Arap, 2015: 69).

The reference of a city councillor was required to complain to the local ombudsperson until 1988, and this requirement was abolished in that year. In 1989, complaints about housing issues were taken under the authority of the institution, and some improvements were made in its parliamentary commission and budget. In 2007, they were enabled to conduct joint research on health issues together with the Parliamentary Ombudsman and the Health Ombudsman. Again in 2007, with the Local Government and Public Involvement in Health Law, the local ombudsperson gained the authorities to examine the municipalities in terms of their service defects, to investigate the events that reveal mismanagement of the local governments without complaints, to examine complaints received about the procurement of goods and services, and to receive verbal complaints

in addition to written complaints. In 2011, their authority to receive complaints regarding public schools was revoked. Later, they started to receive online applications in 2012 (Zengin, 2017: 45-46). Finally, with the amendment made in 2017, its name was changed as the Local Government and Social Care Ombudsman (<https://www.lgo.org.uk/>).

4.2. Canada

In Canada, where the Ombudsman Institution was established at the local level, there is no national-level ombudsperson authority. There are six institutions organized at the federal level specialized on specific issues (Bengli, 2013: 49). The autonomy of federated units allows them to determine the duties and jurisdictions of local ombudsperson institutions freely. For this reason, local governments are usually outside the jurisdiction of provincial-level institutions. Therefore, the local ombudsperson established by law and operating at the local level becomes responsible for local government units (Ünal, 2008: 191).

4.3. The Netherlands

The Netherlands is a very diverse country in terms of the ombudsperson. A National Ombudsman operates at the national level, a Children's Ombudsman works in the field of children's rights, and a European Union Ombudsman examines complaints about institutions engaged in international work. At the same time, 275 of the 421 municipalities in the country have local ombudsperson institutions. The National Ombudsman Institution, which has been in operation since 1982 and gained legal status in 1999, deals with complaints at the national level as well as local complaints from places where there is no local ombudsperson institution. In addition, since 2006, the problems that the local ombudsperson cannot solve have been included in the scope of the national ombudsperson (Özgüzel, 2016: 60-63).

The presence of an ombudsperson in most of the municipalities in the country and the direct authorization of the national ombudsperson in places where there is no ombudsperson institution at the local level can be considered as a reflection of the reconciliation culture existing in the Netherlands. Ombudsperson institutions operate in harmony with each other. Where the local ombudsperson is located, the national ombudsperson seeks permission from local bodies to intervene rather than directly intervene. This situation prevents a possible conflict and determines the boundaries of ombudsperson offices.

4.4. Italy

The Ombudsman institution was established in Italy in the mid-1970s. The first ombudsperson institution at the local level in Italy was established in Tuscany Region with a law dated 1974 (<http://www.consiglio.regione.lazio.it/>).

In Italy, which still does not have a national ombudsperson organization today, there is no ombudsperson institution in every region. Also, at the national level, there is a National Conference of Regions and Autonomous Provinces Ombudsman Coordination (Coordinamento Nazionale dei Difensori Civici Delle Regioni e delle Province Autonome) (<https://www.ombudsman.europa.eu/>) to expand and increase the institutional role of the ombudsperson and to develop relations with the European Ombudsman. The purpose of the organization, which was established as an association in 1994 (<https://www.difesacivicaitalia.it/chisiamo/>), is to ensure the establishment of an ombudsperson institution at the national level, as well as in regions where there is no ombudsperson institution (<https://www.difesacivicaitalia.it/attivita-del-coordinamento/>).

“Difensore Civico”, which is formed by the combination of the words “Difensore” and “Civico”, is used in all Italy with this name, corresponding to the ombudsperson institution. In the country where there is no national ombudsperson, there are 14 regions, Abruzzo, Aosta Valley, Basilicata, Campania, Emilia-Romagna, Lazio, Liguria, Lombardy, Marche, Molise, Piedmont, Sardinia, Tuscany, and Veneto, and two autonomous provinces in the Trentino-Alto Adige region. There are autonomous provincial ombudsperson offices at the local level in the provinces of Bolzano and Trento. In addition to the Trentino-Alto Adige region, there is no regional ombudsperson in the Friuli Venezia Giulia, Umbria, Puglia, Calabria and Sicily regions (<https://www.difesacivicaitalia.it/il-difensore-civico-della-tua-regione/>).

The legal regulations of the regions form the ombudsperson offices. In this regard, their roles can differ from region to region. In some regions, they have an auxiliary role for the excellent functioning of the administration, while in some regions, the role of protecting the rights of the citizen comes to the fore. In this context, the ombudsperson’s duties may be expanded or restricted due to cultural, political, economic, and geographical reasons. However, the ombudsperson offices, whose independence is guaranteed by the regional councils in all regions, are accepted as reliable, fair, and impartial mediators in solving problems (Kutlu, Örselli and Kahraman, 2018: 24-25).

5. The Applicability of The Local Ombudsperson in Turkey

The first development regarding the establishment of the local ombudsperson institution in Turkey was the proposal of the Provincial Ombudsman of the Bayburt Governorship in 1996 (Ünal, 2014: 126). Another development is Law No. 5227 on the Basic Principles and Restructuring of Public Administration, adopted in 2004 during the 59th Government period. According to Article 42 of the law that stipulates the establishment of an ombudsperson institution at the local level, a local public inspector will be elected by the provincial council in each province. The public inspector will assist in resolving the complaints of people whose interests are violated by the actions and transactions of local governments and their affiliated organizations. It was stated in the law that the decisions of the public inspectors would not be binding, and in case the local administrations did not comply with the decisions, they were asked to report this with justification (Şengül, 2007: 136). However, the mentioned law did not come into effect.

The Ombudsman Institution, which was established in 2012, started to receive complaints on 29.03.2013. The institution must prepare a report about its activities every year and submit it to the General Assembly of the Turkish Grand National Assembly. It prepared its first annual report at the end of 2013 and announced it to the public. The reports prepared by the institution are shared with the public on their official website.

In this part of the study, eight reports published between 2013 and 2020 are evaluated in the context of local governments. This assessment is considered to give an insight into the applicability of the local government ombudsperson in Turkey.

Table 1. Applications in the Field of Local Governments by Years

Year	Total Applications (Complaints)	Distribution of Applications by Subject of Complaints (Local Governments)*		Distribution of Applications by the Complained Institution (Local Governments)**	
		F	%	F	%
2013	7.638	455	6	350	4,6
2014	5.639	343	6,08	511	9,06
2015	6.055	329	5,43	506	8,36
2016	5.519	368	6,67	558	10,11
2017	17.131	927	5,41	1.424	8,31
2018	17.585	1122	6,38	1.851	10,53
2019	20.968	1971	9,40	2.278	10,86
2020	90.209	1418	1,57	2.013	2,23
Total	170.744	6.933	-	9.491	-

Source: (<http://www.ombudsman.gov.tr>)

As of the end of 2020, 6,933 of the 170,744 complaints were about the services carried out by the local administrations. Thus, the services carried out by the local administrations were one of the five most complained issues, with an approximate share of 4.06% in the total complaints. When evaluated based on the complained institutions, 9,491 applications are related to local administrations, and it has a place of 5.55% in the total applications.

When the complaints against local administrations are examined, it is seen that the most complained issues are infrastructure, development and public works procedures and practices, licensing procedures, and public transportation services. In contrast, the least complained issues are about funeral and burial operations and marriage services.

Legal regulations that cause human life changes have been the subject of positive and negative criticism in every period. The Ombudsman Institution, which can be considered as an essential reform for the Turkish public administration, has faced both positive and negative criticisms in the literature during the period it has gone through in Turkey. These discussions

*It shows the number of applications addressing local governments in the distribution of total applications every year.

** It shows the applications related to local governments in the distribution of the total applications by the complained administration/institution every year.

are not new in Turkey. It is seen that the common denominator of the criticisms about the applicability of the local government ombudsperson in Turkey lies in the criticisms of the general ombudsperson practice. Although the general ombudsperson practice was implemented in Turkey, these criticisms continue. The applicability of the local government ombudsperson, already applied in many countries of the world, in Turkey can be examined in terms of its positive and negative aspects.

The positive aspects of the local ombudsperson, if it is implemented, in Turkey can be summarized as follows:

For democracy to be fully embraced, established, and strengthened in local governments, it is necessary to ensure the democratic participation of the people in the administration and control local governments effectively. This control should be realistic and under the conditions of time rather than the control mechanisms that have lost their function or are not fully functioning (Gökçe, 2013: 10). In this context, implementing an ombudsperson institution is a requirement in local governments.

The importance of local governments is increasing, and they are getting more potent due to the globalization movements experienced today. The increase in their authority makes their auditing even more essential. The duties and powers of local governments in Turkey have also been increasing daily in parallel throughout the world. New control mechanisms should be adopted to eliminate the problems experienced in the supervision of local governments, and concrete steps should be taken. It will be beneficial to implement the local government ombudsperson, which is appreciated for its successful practices in the world as a new step in Turkey, to solve the problems.

To seek solutions to complaints and demands arising from local governments far from the geographical area where the problem arises brings critical problems, especially the bureaucracy. Introducing a central control mechanism as a solution to the problems encountered in the provision of many services offered by local governments such as urban transportation, electricity, water, road, housing, and cleaning, which are closely related to the daily life of citizens, causes significant problems in applications in these areas. An institution organized in the centre keeps away from the applications made in these areas and has difficulties finding solutions (Gökçe, 2013: 2-8).

If such an institution is established in Turkey, it is estimated that new communication channels will be provided in local governments and citizen

relations, and most importantly, the quality of the services provided by local governments will increase.

Since the Ombudsman Institution is an inexpensive and easily accessible mechanism (Kahraman, 2011: 369), it is thought that the citizens in Turkey will adopt this easily accessible and inexpensive structure, and the workload of the judiciary will be reduced.

Authority and task centralization, which creates the existing concentration in the centre in Turkey, and the management mechanism that is carried out behind closed doors and does not allow participation (Kılavuz, Yılmaz and İzci, 2003: 61), which ordinary citizens have difficulty in understanding, are almost chronic problems. If the ombudsperson control is implemented at the local level, these problems can be overcome, and citizens can be directly involved in the administration.

It is thought that it positively affects local governments since the ombudsperson institution performs the conformity check and does not seek any formal application requirement. However, the judicial review does not include the conformity check (Efe and Demirci, 2013: 66).

Another issue is that with the establishment of the local government ombudsperson, Turkey will come one step closer to the principle of locality outlined in the Maastricht criteria. It will have positive reflections on the EU accession process.

After summarizing the positive aspects of the establishment of the local government ombudsperson in Turkey, the negative aspects can be expressed as follows:

It is a controversial issue to what extent the existing control mechanisms in Turkey objectively and adequately function. Therefore, while these discussions continue, implementing a new control mechanism will only raise the existing discussions (Kahraman, 2011: 369).

It is difficult to say that the administration in Turkey has habits of correcting unjust and illegal actions and transactions without complaints and taking the complaints of the citizens into account (Demir, 2014: 5). Therefore, it can be not very sensible to establish a new institution as long as this administration structure continues.

There is a powerful administrative judiciary regime in Turkey. The administration is already supervised through the Council of State, Administrative and Tax Courts, Regional Administrative Courts, and partially the Courts of

Justice. In addition to all these, administrative units have their internal inspection and disciplinary boards, and there is a solid administrative control mechanism in the country (Odyakmaz, 2013: 8). Therefore, there is no need for a new control mechanism such as the local ombudsperson.

It is seen that the Ombudsman Institution in Turkey is not capable of solving the problems on its own but is a guiding institution in a sense for the citizens who complain about the administration before the judicial process (Sayan, 2014: 341). The most critical factor in this issue is that the ombudsperson institution does not have the authority to examine *ex officio* and on-site. Also, it is not clear to what extent the administrations will comply with the advisory decisions taken by the institution and what kind of sanctions will be applied to the administrations that do not comply. Therefore, it will be early to implement the local ombudsperson practice without observing the success of the general ombudsperson practice in Turkey.

The real purpose of trying to implement the local ombudsperson is not clear. Is it about solving the problems of Turkey in terms of local governments and enabling citizens to participate in the administration by strengthening local control? Or is it about creating an impression that the auditing system and localization are strengthened in Turkey's public administration system, just because it exists in developed countries and international organizations recommend it?

The increasing strength and responsibilities of metropolitan municipalities necessitate better supervision for local governments. However, suppose the local government ombudsperson is not established in line with the needs of the country and not implemented successfully. In that case, the negative outputs from the institution may be more than its returns. In this case, an institution that will potentially contribute to the legitimacy and image of the state by improving public services will have the opposite effect (Arap, 2015: 76).

6. Result and Evaluation

Ombudsperson, a relatively new type of supervision with its application in modern democracies, has become a necessary method for democratic societies due to its positive contributions in practice. Ombudsperson institutions were usually organized in a centralized structure when it was first implemented. However, it has been preferred in other fields due to its successful results and

started to be implemented at private, regional, local, international, and even supranational levels. The local government ombudsperson, which undertakes the duty of protecting the rights and interests of citizens against mismanagement by dealing with local problems arising from local governments, plays a vital role in defending citizens' rights who do not know their rights and duties or do not have financial means. The fact that the local government ombudsperson is preferred and embraced by the citizens for being inexpensive and being accessible as it does not have formal requirements for making complaints.

It can be seen from the countries where the local ombudsperson is implemented that it is not related to the country's administrative regime. The existence of a unitary or federal system does not constitute an obstacle to implementing the local ombudsperson. In Canada, which has a federal structure, while there is no primary level ombudsperson institution, there are ombudsperson offices at the provincial level. Also, there are separate ombudsperson offices in the Netherlands and the UK, which have a unitary structure at both national and local levels. These ombudsperson offices work in harmony with each other.

One of the most outstanding examples to show that the local ombudsperson practices are shaped according to the countries' political, administrative, cultural, and social structure in Italy. It is seen that the practices existing in the country, which has regional units within a unitary structure, often have the same characteristics. However, there are some differences in the application process. The municipal ombudsperson offices in regions act in cooperation with the regional ombudsperson offices. Also, regional ombudsperson offices continue to work within their legal boundaries, without conflict with the central administration, in solving the problems of the citizens living in the region.

It is visible that local administrations have a remarkable place among the issues examined by the Ombudsman Institution. So much so that, in the distribution of complaints based on subjects, local governments took their place among the top five issues that received the most complaints every year. They also take first place in the distribution of complaints based on institutions.

Local governments have a long history in Turkey, but the problems and responsibilities are increasing day by day in Turkey as in the whole world. There is no obstacle for Turkey to implement a local level ombudsperson practice as at the national level. In this period, when local democracies are gaining importance, a local ombudsperson, which is successfully implemented worldwide, should also be implemented in Turkey for local governments to function more

transparently, accountably, and fairly. In this context, it is thought that it will be beneficial to put the institutions into practice in 30 metropolitan cities in Turkey. Thus, about 80% of Turkey's population will have ombudsperson institutions at the local level. It will be observed what kind of consequences the practice will have for Turkey in metropolitan cities, whose service fields were expanded with the latest regulation. Unlike the national ombudsperson, the local government ombudsperson institution, which will be formed with a separate legal entity, should not deal with the complaints made to ombudsperson offices in metropolitan cities. They should be organized in a way that they can conduct a second examination if the metropolitan ombudsperson offices give permission.

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CHAPTER XII

AN EVALUATION ON CRIME AND CRIME THEORIES

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1. Introduction

From eating raw leaves to feeding on hamburgers, from cooking their food by lighting a fire to using microwave ovens, from using animal skins as clothes to wearing embroidered fur coats, from sheltering in caves to living in luxury residences, from hunting using arrows to hunting with a rifle, from guarding houses with wire fences to using more sophisticated security systems in order to secure houses and huge shopping centers have made human life easier and more comfortable, as well as brought many negative effects with it. With the increase in the human population along with the social, economic and environmental factors experienced during and after this process of change and transformation, some people have difficulty in reaching their basic needs such as food, drink and shelter, while others have continued to live in luxury, pleasure and abundance. Especially in ancient times, some people who could not meet their basic needs in order to continue their lives committed crimes in order to meet these needs. In today's world, some people commit crimes for reasons other than meeting their basic needs (Thotakura, 2011: 196). To put it more briefly, human beings have committed different crimes for different reasons since their first existence and continue to do so. Social life without crime is nothing more than a dream.

The Oxford English Dictionary defines “crime” simply as: ‘An action or omission which constitutes an offence and is punishable by law’. In the Dictionary of the Turkish Language Association, the name of the crime; acts contrary to customs, moral rules, in terms of name and law; illegal behavior is defined as an offense. Dönmezer (1984: 57) underlines that an act must be sanctioned by a law in order to be considered a crime. Durkheim states that crime is inevitable and is seen in all societies (Lunden, 1958: 5).

There are many theories on revealing the reasons for the crime phenomenon and preventing possible crimes. These theories generally deal with the concept of crime in the context of social, biological, economic and environmental factors. The common purpose of all these theories is to understand the phenomenon of crime (Özaşçılar, 2016: 17). Each theory has a unique point of view. Each point of view has some shortcomings in itself. For this reason, each theory is criticized by another theorist and these criticisms help to form new theories (Güllü, 2014: 104).

Before the modern period, there was no systematic legal order in which criminal acts were written. Persons thought to have committed crimes were punished by harming their bodily integrity or by torture. With the onset of the modern era, the facts of crime and punishment have undergone radical changes (Güven, 2018: 176). With the transition from the traditional period to the modern period, after the technological, cultural and political developments, the types of crime have also changed. It is not possible to understand cyber crimes that threaten social life in today’s world with early criminal theories, terrorist organizations such as “fethullahist terrorist organization- parallel state structuring” (FETÖ / PDY) and “ad-Dawlah al-Islamiyah fil-‘Iraq wa ash-Sham” (DAESH) who deceive with Allah and transcend the borders of the country, and white-collar criminals who obtain financial benefits by using inconceivable methods. Crime phenomenon; It is a complex and dynamic phenomenon that concerns multiple and multidimensional disciplines that change according to time, place, society and the policies of states and take new forms according to new situations. For all these reasons, it is very difficult for a theory to explain the crime in all its aspects and to reveal the reasons for the crime.

There are many early and modern criminal theories that try to explain the crime phenomenon in biological, social, economic, cultural and environmental terms. In this study, the prominent crime theories are discussed under two headings as traditional and modern crime theories.

2. Traditional Criminal Theories

The science of criminology, which tries to understand the crime phenomenon in all its aspects, deals with the crime and criminal behavior in three separate stages as pre-crime, during the crime and after the crime, at the same time, it examines the issue of prevention of crime and rehabilitation of the resulting crime within the framework of scientific techniques and research methods (Malkoç, 2014: 2-3). One of the leading scientists of criminology science is Cesare Lombroso (1835-1907) (Ferracuti, 1996: 130). Traditional (classical) crime theories are the first theories put forward to explain the crime phenomenon. Since these theories are the first theories to understand crime, they are far from looking at the crime phenomenon in a holistic way (Kızmaz, 2005: 150). However, these theories; They are very valuable in that they are the first, consider the crime with scientific methods, and try to understand the crime separately from the church.

In the 18th century, the French Revolution, the increase in the population in the cities with industrialization, the emergence of the modern state, the spread of the Renaissance movement that started in Italy to the whole of Europe, and the rapid developments and changes in human rights and freedoms caused the decrease of the effectiveness of the church on the society. After all these developments, the roles of states have been questioned again. Now, states are no longer seen as the holy representatives of God on earth, but rather as organizations created to protect the property, life and rights of the people, in a more succinct way, to serve the people. With this understanding, an incredible development and change has been experienced in social and scientific sciences. Early crime theories about the crime phenomenon are also a product of this understanding.

2.1. *Classical School Crime Theory*

Cesare Beccaria (1738-1794) and Jeremy Bentham (1748-1832), one of the important scientists of the 18th century, pioneered this theory. Classical school theory; There can be no crime and punishment unlawful, everyone is equal before the law, punishment should be regulated in a manner that can deter crime, the individual can only be held responsible for the crime he / she committed (principle of the personality of the crimes), the state cannot perform arbitrary practices, and defends the basic principles of the law that constitute the basic principles of today's modern criminal law. Although classical school theory

contains many thoughts on the phenomenon of crime, it mainly speaks of basic principles such as social benefit and absolute justice (Schofield, 2019: 65-68; Caro, 2013: 150). “*The thought that dominated the criminal law in 19th century Continental Europe was the causal connection centered classical crime theory*” (Özgenç, 2011: 135). Classical crime theory fed by “*Enlightenment Thought*”; It is based on the idea that the individual has a free will and that the individual himself can make the decision to commit a crime and therefore each individual should be held responsible for their criminal acts.

2.2. Biological Crime Theory

Human anthropology is a science that deals with the physiological characteristics of human beings and investigates the development of human from existence to present. As a physician, Gall tried to understand the good behaviors of some of them and the bad behaviors of others by looking at the different features of the skulls of the people around him and their appearance. The biological explanation of the crime phenomenon begins with the acceptance of biology as a science. The most well-known scientist in the field of crime anthropology is Cesare Lombroso. He conducted long-lasting research on prisoners in Lombroso prisons. He observed the prisoners in prisons and examined their movements, their past lives, their education, and their relationships with their friends. After all these studies, it was concluded that crime is an organism problem. According to Lombroso, just as some animals are born predators and wild, some people are born criminals. These people have some physiological characteristics that distinguish them from other normal people. Their gaze is harsh, has an arrogant smile, is short, has a narrow forehead, a small skull, and a large chin and cheek bones. Again, these people have long arms, usually with plenty of hair and a little beard. According to Lombroso, different physical characteristics point to the commitment of different crimes. The physiological characteristics and gaze of killers and thieves are different. These people have painful tattoos on different parts of their legs and arms and they do not feel pain during this intervention. In his recent works, Lombroso moved away from these rigid thoughts. In the last years of his life, Lombroso moved away from the idea that people were congenital and expressed the opinion that besides the physiological characteristics, the appropriate social environment was also effective in people committing crime (Dönmezer, 1984: 114-117).

2.3. Structural-Functional Criminal Theories

The leading names of this theory are Emile Durkheim (1858-1917) and Robert K. Merton (1910-2003). Structural-functionalist theories, which are also named as Durkheim's social reductionism, Merton's social structure and anomy theory, connect individuals' criminal deviation behaviors to social causes (Merton, 1938: 672). Durkheim tries to explain, for social reasons, even an individual preference, such as an end to one's own life voluntarily. According to Durkheim, socialization steps and efforts such as living in society, social solidarity, working together for a purpose and division of labor will prevent individuals from committing crimes (Can, 2004: 96-97).

Durkheim used the concept of anomie for the first time (Irmak and Çam, 2014: 1298). According to Durkheim, anomie is a state of social disorder that occurs after rapid industrialization, abnormal division of labor, periodic degradation and crises (Willis, 2007: 110). In other words, anomie is the disruption of the social order for different reasons and the deterioration of the relationship between the individual and society and social rules. Undoubtedly, in a society where social order and income justice cannot be achieved, the individual will move away from social life. It is highly likely that individuals who stay away from social life will behave deviatingly.

2.4. Labeling Theory

Leading names in labeling theory are Erving Goffman and Howard Becker. This theory focuses on the behavior and reactions of the state and society to the person who committed the crime after any crime, rather than the criminal behavior and the crime phenomenon. Most of the theories about the crime focus on the cause of a crime and look for the cause of the crime more on the person who committed the crime. Labeling theory, on the other hand, deals with the negativities of society stigmatizing the person who committed a crime after a deviant behavior. It is seen that people who commit crimes and who are imprisoned, after serving their sentences and gaining their freedom, these people are excluded by the society by using expressions such as convicts, that they are labeled, and these people continue to commit crimes (Kaya and İnan, 2020: 45-51).

According to this theory, some people who are strong in economic, social and political terms in the society tend to ignore, exclude from the society

and marginalize those who show deviant behavior in order to maintain their dominant power. In other words, those who hold power ignore people who have the potential to pose a threat to their power in order not to lose power and not to disturb their comfort. Following this ignoring, exclusion, ghettoization and exclusion, individuals continue to be the perpetrators of different crimes.

2.5. Marxist Crime Theory

Marx divides societies into three classes as capitalists, workers and bourgeoisies, and according to Marx, these classes are always in conflict due to the problems in the sharing of capital and goods (Colvin and Pauly, 1983). According to Marx, this conflict mostly passes between capital owners and laborers. In other words, the reason for each conflict in society is related to how equitably the resources are used and shared by people. The noble segment that can access resources such as capital, goods and services, that is, those who hold power tend to crush and ignore the classes that cannot access these resources. According to Karl Marx, the cause of conflict and deviating behavior in society is capitalism. So the real reason for crime is capitalism.

Marxist theory argues that the emergence of the crime phenomenon is due to the inequality between those who have power and those who do not. This theory does not punish those in power who commit important crimes such as war crimes, crimes against the environment, and non-payment of taxes, whereas simple crimes committed by poor people are punished. Marxist thought sees crime-punishment policies as a product of the strong class in terms of class. According to the Marxist crime theory, crimes can only be prevented by the equal distribution of resources and the participation of all segments of the society in decision-making processes. (Güven, 2018: 187).

3. Modern Criminal Theories

The number of theories to understand and examine the crime phenomenon is quite high. Traditional crime theories have been subjected to many criticisms in their own time and today. These criticisms generally focused on the one-dimensional view of each of these theories on the crime phenomenon. Modern crime theories are critical of traditional crime theories and advocate the idea that crime can be prevented by governments with comprehensive and contemporary policies. In this part of the study, some of the modern crime theories that stand out in the literature, as in the traditional crime theories, are taken into consideration.

3.1. New Right Realism Approach

Before explaining the new right-wing theory of reality, it is necessary to briefly talk about “neo-liberalism”. Because this theory is a product of the neo-liberal currents that brought the end of the “welfare state” understanding in the early 1980s.

After the first quarter of the last century, states started to intervene more in the economy and the market after the economic crisis known as the “1929 Great Depression”. This new economy model, expressed as “Keynesian economy-Keynesian welfare”, has been applied in almost every country in the world until the end of the 1970s (Aktan, 1995: 12). The fact that the state has entered the market completely, taking an important and determining role in the market has brought some problems, especially financial. After some economic, social and political developments in the world since the early 1970s, the “Keynesian understanding of welfare state” has become questioned (İnanç and Demiray, 2004: 164).

As the new right based on the withdrawal of the state led by the United States and Britain from the market and social areas, the social state understanding has replaced by the social state understanding after important problems in the economy, social security, retirement and other areas of life (unemployment, oil crisis, high inflation). As a matter of fact, it is possible to read this change as a search for a starting point for capitalism, which has contracted and entered a crisis (Çolak, 2016: 352; Çımrın, 2009, 201). The new right-wing realism approach theory emerged at a time when states started to return to their main business by withdrawing from social life and the market, except for their basic functions such as justice, security and education. In this sense, it is possible to see the reflections of “the new right” movement in the governments of the countries in general and the view of the crime phenomenon in particular.

The states, which are the fervent practitioners of the neo-liberal currents, chose to abolish the economic and social aids of the Keynesian welfare state understanding, especially to the poor. The New Right Realism approach, which is mostly included in the work of James Wilson and Ernst van den Haag, completely opposes the idea that crime stems from sociological and social problems. This theory does not focus on the economic, social and cultural dimensions of the fight against crime. It defends the view that crimes can only be prevented by effective fight against criminals and by the state supervision

and punishment of those who commit crimes. According to the new right-wing reality theory, there is evil in the nature of human beings and the way to prevent the emergence of this evil is possible by applying the strict rules set by the state without compromise (Yüksel, Güllüpinar et al., 2019: 35).

3.2. New Left Realism Theory

The theory of new left realism feeds on Marxism as well as important gaps neglected by the new right realism theory. While this theory emphasizes the issues of struggle between classes and injustice in the sharing of capital, argued by Marxism, it defends the thesis that crime can be prevented by the abolition of capitalism, not by police measures. In contrast to the extreme statist and securityist approach of the New Right Realist theory, the New Left Realist approach advocates more humane, flexible, and regulations aimed at bringing criminals into society. According to this approach, the prevention of crime will only be possible by removing the economic, social and political problems that people face. This theory opposes current prison practices and methods, arguing that convicted people can become even more marginal by being kept behind closed doors, and argues that these people should be reintegrated into society. This theory defends the view that this marginalization can only be prevented by community service programs and properly planned rehabilitation techniques (Yüksel, Güllüpinar et al., 2019: 39).

3.3. Postmodernist Criminology Approach

“In addition to the social and political changes experienced in societies, postmodernism has also had important effects on philosophy, art, culture, literature, photography, architecture, cinema and theater. That is why it is obvious that postmodernism is in close relation with the areas mentioned above and represents a broad cultural movement that emerged after modernism” (Özseveç, 2017: 135). Some social scientists consider the time we are in as the postmodern period and argue that this period is different from the modern period in every sense. (Parviz and Akbar, 2016: 102). The concept of postmodernism, which is discussed in all areas of life, has found its place in the science of crime (criminology). In today’s world, some crimes and coup attempts are expressed with the use of the postmodern concept. The coup attempt carried out by the FETÖ / PDY on 17-25 December 2013 under the name of so-called corruption entered the literature as a *“postmodern coup attempt”* (İnankul, 2016: 59).

“The postmodernist approach developed a hybrid understanding of criminology by combining chaos theory of basic sciences, complexity theory and semiotic approaches of psychoanalysis”. According to postmodern crime scientists, it is meaningless to reveal the reasons for the crime. Because every thought and assumption that tries to understand the crime is not valid for the future. Again, the postmodern criminology approach asserts that those who constitute the crime are the power holders and the laws. This approach suggests that everything is related to something else and therefore it is impossible to understand the truth of a subject which causes the crime (Yüksel, Güllüpinar et al., 2019: 44).

3.4. Integrated Theories of Crime

In fact, these theories are the name of a new approach in crime science. The number of integrative crime theories that try to bring together different variables and different motivations of crime is quite high (Kızmaz, 2005: 352). In this study, the prominent theories of integrative crime are briefly discussed.

3.4.1. Elliott’s Integrated Criminal Theory

Elliott’s Integrated Criminal Theory consists of three variables that try to define the crime: tension, inadequate socialization and social disintegration. Tension is the prevention or failure of a person to reach a goal accepted by social life by acting in accordance with the rules of social order. Inadequate socialization is the individual’s inability to coincide with the society or stay away from the society after not obeying social rules. Social dissolution, which is the third variable of Elliott’s Integrated Criminal Theory, is the high probability of being pushed into crime after living in a socially and economically low environment. When these three factors are briefly included, it is possible to state that the integrated guilt theory puts forward the assumption that individuals will be more inclined to commit crimes after they stay away from society and social norms do not embrace everyone. Elliott particularly emphasizes the importance of family and school for individuals to participate in society (Kızmaz, 2005: 353).

3.4.2. Miethe and Meier’s Theory of Crime and Its Social Context

Miethe and Meier explained this theory in detail in their work named “crime and social context”. Miethe and Meier examined the crime phenomenon as victim,

criminal and the social context of the crime under three headings and a single theory. In this theory, the factors that mobilize the criminal are discussed as economic problems, ethnic conflicts, irregular migration and family structure. This theory developed by Miethe and Meier; While highlighting the offender, victim and context components, it suggests that the crime consists of two main decision stages. The first of these is the decision of the person to commit the crime and the other is the choice of source and target. People who have low self-esteem, move away from society, and experience economic and social problems are more prone to commit crimes. In order for people in such a situation to attempt to commit a crime, the target must be easy and accessible besides its attractiveness. It is possible to say that this crime theory is a more expanded reflection of the rational preferences crime theory (Kızmaz, 2005: 362-366).

4. Conclusion and a General Evaluation

Globalization and especially the rapid developments in information and transportation technologies have significantly changed people's lifestyles, shopping cultures, communication styles, and views on social relations. All these changes and developments have differentiated the way the criminal phenomenon is committed, its appearance, its causes and its transboundary global dimension.

Until the last quarter century, the reasons that led people to commit crimes have changed considerably in today's world. People who committed crimes yesterday to feed themselves or to meet their basic needs have become criminals today to buy better car or to enjoy a more luxurious lifestyle. People who attempted to rob banks yesterday using a firearm or a cutting tool left their place today to people who committed massive robberies from banks and financial institutions that they were physically absent from through information technologies. As a result of all these, traditional theories trying to explain the crime phenomenon are insufficient to explain the crimes committed after the incredible changes and transformations in today's world. As a matter of fact, traditional theories have tried to understand the concept of crime by being influenced by the social, economic and social structure of their period. In this sense, it is possible to state that each crime theory has its deficiencies and is not sufficient to explain the crime on its own.

As a matter of fact, Lombroso's biological crime theory explains the crime phenomenon through the biological, physical and genetic characteristics

of the person who committed the crime and almost declared some people as innate criminals and ignored the environmental, social and social reasons that caused the crime to occur. The classical crime theory, on the other hand, has neglected many variables that cause the occurrence of the crime phenomenon, by considering each issue related to crime only in the sense of legal regulation. Structural-functionalist crime theories deal with crime only in the context of social relations, labeling theory tries to understand the crime phenomenon in terms of the exclusion of the person who committed the crime unilaterally, and the Marxist theory sees the crime as a product of the capitalist system. As a result, it is possible to state that each crime theory looks at the crime phenomenon from its own perspective.

In today's world, modern crime theories are also insufficient to explain the crime. In a sense, this deficiency should be regarded as normal. Because the crime phenomenon has a complex structure that cannot be explained by a single theory. In this sense, it is possible to express the similar criticisms of traditional crime theories to one-sided and trying to explain the crime from their perspective in modern crime theories.

AS THE LAST WORD; The crime phenomenon is a complex concept with different dynamics. It is not possible to explain the crime phenomenon with a single theory. Each type of crime has different motivations. For example, the motivation of the crime of theft and the crime of killing or injuring a man with a knife are different. Likewise, the reasons for violence against women and the crimes of using or selling drugs are different. In this sense, in order to understand the crime phenomenon correctly, it is necessary to consider each of the different types of crime separately and to examine the social, economic, psychological, environmental, political and other causes that cause each type of crime to occur.

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CHAPTER XIII

A VERY REAL ENVIRONMENTAL PROBLEM: GLOBAL CLIMATE CHANGE

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1. Introduction

Environmental problems have become one of the topical problems of today's world due to the damages and the secondary events that occur in association with these problems. The meteorological disasters occurred in the last few years in connection with weather events indicate of the extent of deterioration in the existing meteorological structure and the studies conducted in the relevant fields, regardless of whether they were recently conducted or not, agree that the global climate change is to be blamed for the said deterioration. It is widely believed that the climate changes that occurred in ancient times occurred as a result of a natural process; whereas today, the weight of human-induced factors in the composition of the external factors effective on the climate changes versus the natural factors has substantially increased, resulting in accumulation of carbon dioxide gas in the atmosphere more than ever before. The increasing amounts of carbon dioxide and other greenhouse gases in the atmosphere cause

the earth's temperature to rise as they absorb both the incoming infrared radiation coming from the sun and the outgoing infrared radiation reflected by the earth's surface, contrary to the main components of the atmosphere, that are oxygen and nitrogen, which are transparent to the infrared radiation. This increase in the temperature affects the lives of all life forms on the earth (Capra, 1989; Kadioğlu, 2012).

In today's world, the gradually increasing effects of global climate change are felt by almost everyone. The results of the relevant studies corroborate these observations. In parallel, governments and political leaders have started to give more weight to the countermeasures to prevent the situation from getting worse ((European Environment Agency (EEA), 2018)). In view of the foregoing, it is aimed in this study to make a general assessment of the current situation in respect of the climate change by defining the basic concepts related to the climate change, identifying the underlying reasons of the climate change, reviewing the efforts exerted to prevent the climate change, and determining the effects of the climate change on today's world.

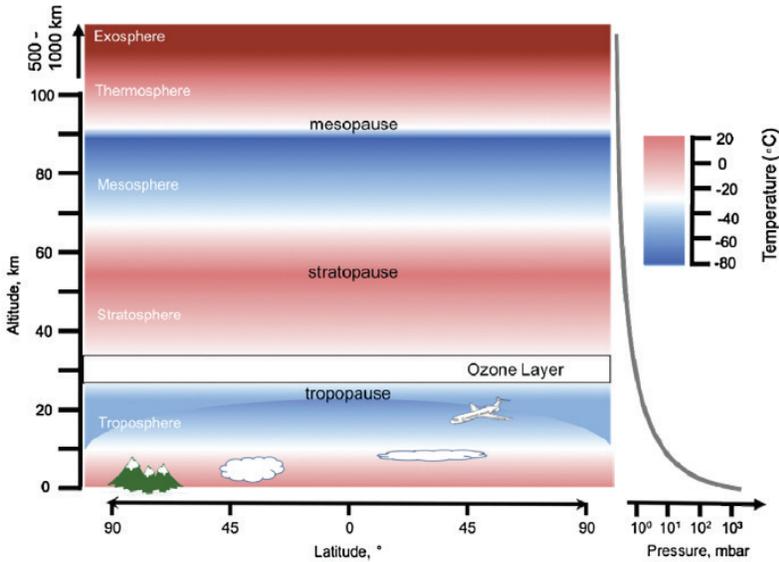
2. Basic Concepts

A better understanding of the concept of climate change and resulting global warming and certain weather events requires understanding the structure of the atmosphere at first (Kadioğlu, 2001: 17).

Atmosphere is a mixture consisting of gases that surrounds the earth. It has a thickness of more than 1000 km and its density decreases with increasing altitude. The word "atmosphere" is derived from Greek words of 'atmos', which means breath, and of 'sphere', which means sphere (Eken et al., 2018: 2).

The Structure of the Atmosphere

Atmosphere consists of 5 main layers, which are Troposphere, Stratosphere, Mesosphere, Thermosphere (or Ionosphere) and Exosphere. Additionally, there are 3 transitional layers, which are Tropopause, Stratopause and Mesopause, located in between these main layers ((Kadioğlu, 2001: 17; National Aeronautics and Space Administration (NASA), 2017)).

Figure 1. Layers of the Atmosphere

Source: Borduas and Donahue, 2018: 132.

Atmospheric Gases

Gases that exist in the atmosphere are essential to the life on earth. These gases primarily are oxygen and nitrogen, which make up 21% and 78% of the atmosphere, respectively; whereas the remaining 1% of the atmosphere is composed of gases such as carbon dioxide, neon, helium, krypton, xenon and hydrogen. Atmospheric gases are divided into three groups based on their availability in the atmosphere ((Ministry of National Education of Republic of Turkey (MEB) , 2012: 3)).

1. Gases that are always available in the atmosphere and the quantities of which do not change:
 - Nitrogen (N_2),
 - Oxygen (O_2),
 - Noble Gases ((Helium (He), Neon (Ne), Argon (Ar), Krypton (Kr), Xenon (Xe), Radon (Rn)) (MEB, 2012: 3-7).

2. Gases that are always available in the atmosphere and the quantities of which vary:
 - Carbondioxide (CO_2),

- Water vapor (H₂O),
 - Ozone (O₃) (MEB, 2012: 3-7).
3. Gases that are not always available in the atmosphere:
- Sulfur dioxide (SO₂),
 - Carbonmonoxide (CO),
 - Smog,
 - Nitrogen dioxide (NO₂) (MEB, 2012: 3-7).

Heat is the energy transferred from one substance to another or between regions of the same substance due to the temperature difference. In the event that two objects with different temperatures come into contact in an isolated environment, energy flows from the object with higher temperature to the object with lower temperature (Kara, 2013: 205).

Temperature is a measure of the average kinetic energy of the randomly moving molecules of matter. Hence, temperature itself is not a type of energy, rather it is a measure of heat, which is a type of energy (Kara, 2013:205).

Albedo is the fraction of the solar radiation that comes directly from the sun, reaches the surface of the earth, and is reflected back into space (Twomey, 1974:1251).

Energy, the source of life in the universe, is the work done using force. In this context, walking, feeding, heating the house or drying hair are all examples of energy use. It is possible to contribute to the family budget, the country's economy and the protection of nature by using energy efficiently while meeting the needs in daily life ((World Wide Fund for Nature (WWF), 2011:8)).

Energy efficiency is the reduction of the amount of energy consumed by improving the existing technologies or using new technologies, as per the general meaning of efficiency, that is the generation of the highest output with the least input without reducing the quality and quantity (WWF, 2011:9).

Renewable Energy is the type of energy obtained from environmentally friendly sources that has no risk of depletion, can be used continuously, and has the ability to renew itself (Şeker, 2016:810).

Radiative forcing, in short, is the difference between the solar radiation absorbed by the earth and radiated back to space. Under normal circumstances, there is a balance between short wavelength solar energy coming into the earth and its atmosphere and the re-emitted long wavelength radiation. Any factor that

affects this balance or the distribution of energy between the atmosphere, the land and the sea, may also affect the climate system. Such changes occurring in the energy balance of the earth and its atmosphere system are referred to as the radiative forcing (Türkeş, 2000:189-190).

El Niño, unlike La Niña that is characterized by unusually cold ocean surface temperatures in the tropical region of the East Pacific Ocean, is characterized by unusually warm ocean surface temperatures in the equatorial region of the East Pacific Ocean (Kayhan and Alan, 2014:7).

La Niña is characterized by unusually warm ocean surface temperatures in the Indonesian side of the equatorial region of the Pacific Ocean. From another perspective, it is characterized by unusually cold ocean water temperatures in the Central American side of the equatorial region of the Pacific Ocean as compared to El Niño (Kayhan and Alan, 2014: 4).

Air refers to all atmospheric events that occur anywhere on the earth and at any time, depending on the changeable processes in the atmosphere (Türkeş, 2000: 187).

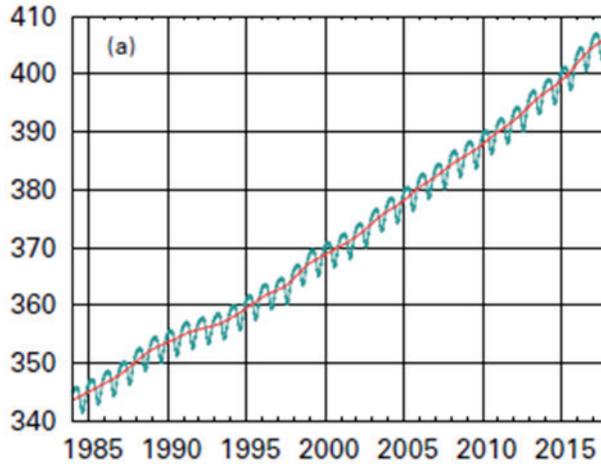
Greenhouse Effect refers to the excessive warming of the earth due to the increase in the ratio of greenhouse gases in the atmosphere, which are more permeable to the solar radiation with short wavelength but less permeable to the solar radiation with long wavelength reflected from the earth (Öztürk, 2002: 53).

Major Greenhouse Gases

Primary greenhouse gases are carbon dioxide (CO_2), carbon monoxide (CO), methane (CH_4), ozone (O_3), nitrous oxide (N_2O), water vapor (H_2O), halocarbons, perfluorocarbons, sulfur hexafluoride (SF_6), nitrogen oxides (NO_x), and non-methane volatile organic compounds (NMVOCs).

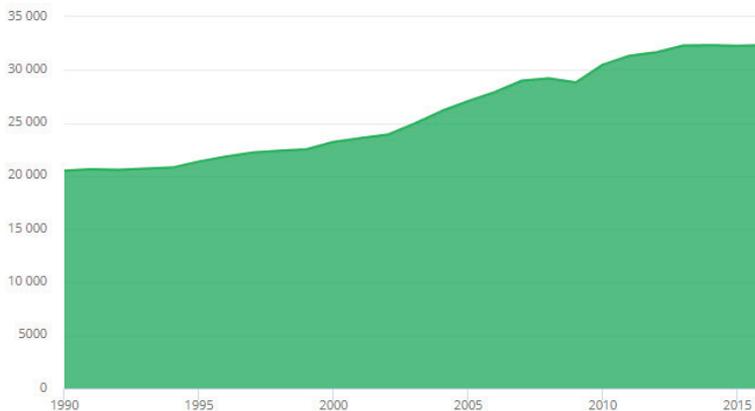
Carbon dioxide (CO_2)

Carbon exists in many natural cycles involving atmosphere, ocean, terrestrial and aquatic vegetation and mineral deposits. As a matter of fact, the first and foremost cycle that occurs between the atmosphere and the terrestrial and aquatic vegetation are carbon cycles. Carbon is generally present in the atmosphere in its oxidized form, and as carbon dioxide in particular. As part of the carbon cycle, carbon dioxide is a function of geochemical and biological processes (Gillenwater et al., 2002: 7).

Figure 2. The Increase in the Atmospheric Carbon Dioxide Ratio (1984-2017)

Source: World Meteorology Organization (WMO), 2018:6

The constantly increasing atmospheric carbon dioxide ratio accelerates the greenhouse effect. The Intergovernmental Panel on Climate Change (IPCC) reported that it is for certain that the increase observed in the atmospheric carbon dioxide ratio is caused by human-induced factors (IPCC, 2001a: 39).

Figure 3. The Increase in the Carbon Dioxide Emission Rate (1990-2016)

Source: International Energy Agency (IEA), 2018

Results of the studies conducted by two major organizations, that are World Meteorological Organization (WMO) and International Energy Agency

(IEA), demonstrated that the carbon dioxide emission rates have been steadily increasing.

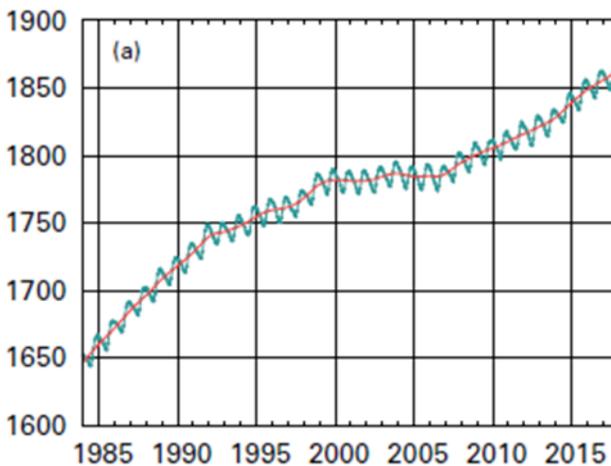
Carbon monoxide (CO)

Carbon monoxide facilitates methane and tropospheric ozone to react chemically with other elements available in the atmosphere. Thus, an increase in the concentration of atmospheric carbon monoxide indirectly affects the density of the tropospheric ozone. Carbon monoxide is formed as a result of incomplete combustion of carbon-containing fuels. Carbon monoxide is short-lived in the atmosphere and its ratio in the atmosphere varies according to the location. It is oxidized into carbon dioxide in the atmosphere via natural processes (Gillenwater et al., 2002: 7).

Methane (CH₄)

Methane is 20 times more effective than carbon dioxide in terms of greenhouse effect, yet it is fortunately less abundant in the atmosphere. Methane is a product of the anaerobic decomposition of organic substances. It reacts with hydroxyl radical ($\bullet\text{OH}$) available in the atmosphere forming carbon dioxide as a result. Density of methane in the atmosphere has increased by 150% following the industrial developments. Hence, it is the anthropogenic effects that is predominantly to be blamed for this increase (IPCC, 2001a: 41,42).

Figure 4. The Increase in the Atmospheric Methane Ratio(1984-2017)



Source: WMO, 2018: 6

Ozone (O₃)

Ozone is one of the major greenhouse gases found in the stratosphere and troposphere layers of the atmosphere (IPCC, 2001b:43).

Solar energy facilitates the reaction of volatile organic compounds found in the air with nitrogen oxides forming tropospheric ozone. The ratio of the tropospheric ozone, which is an effective greenhouse gas, has increased due to anthropogenic effects in general and the industrial revolution in specific.

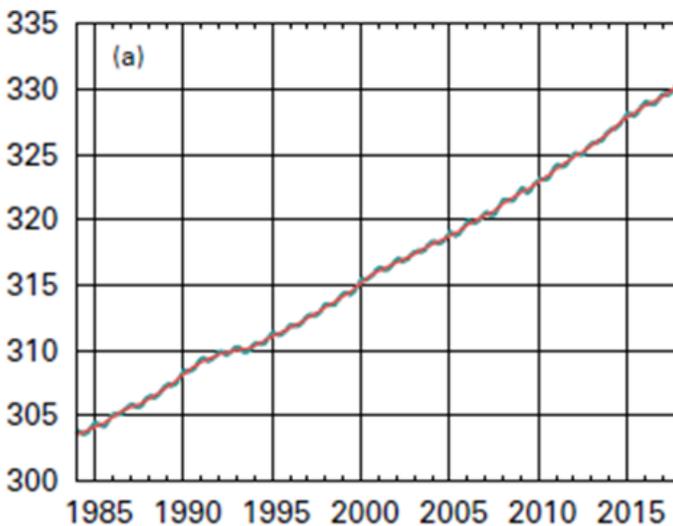
It ranks third among the atmospheric gases after CO₂ and CH₄ in terms of increase in density in atmosphere (Gillenwater et al., 2002: 6).

Nitrous oxide (N₂O)

Studies show that 15% of the greenhouse effect is caused by nitrous oxide. Human-induced effects such as use of synthetic and natural fertilizers in agriculture, use of fossil fuels, wastes, nitric acid production and combustion of biomass increase its release into the atmosphere (Gillenwater et al., 2002: 6).

The concentration of N₂O in the atmosphere has increased by more than 16% since 1750. At the same time, it is separated into its atoms in the stratosphere due to the photolytic effect of solar energy, which results in a decrease in its ratio in the overall atmosphere (Gillenwater et al., 2002: 6).

Figure 5. The Increase in the Atmospheric Nitrous Oxide Ratio (1984-2017)



Source: WMO, 2018: 6.

Water Vapor (H₂O)

Water vapor is the most abundant greenhouse gas in the atmosphere. Its ratio in the atmosphere varies between 0% and 2% according to the location.

It is not a long-lived gas and does not mix well with the atmosphere (IPCC, 1996; as cited in Gillenwater et al., 2002:5).

Water vapor can be found in solid, liquid or gas form in the atmosphere. It is believed that anthropogenic effects do not have a direct effect on the density of the atmospheric water vapor; yet they do have an indirect effect as the radiative forcing that occurs with the increase in the concentration of greenhouse gases affects the hydrological cycle. As a result, the warming caused by the increases in the ratios of greenhouse gases in the atmosphere increases the retention rate of water, and the increase in the water vapor density affects the cloud formation. Clouds are important as they both absorb and reflect the rays reflected from the sun and the earth's surface (Gillenwater et al., 2002: 5).

Halocarbons, Perfluorocarbons and Sulfur Hexafluoride (SF₆)

Halocarbons are man-made chemicals that directly or indirectly affect the solar radiation. Halocarbons consist of a halogen, such as chlorine or bromine, as the 'halo' prefix indicates, and carbon. Well-known halocarbons that contain chlorine include chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), methyl chloroform, and carbon tetrachloride, whereas the well-known halocarbons that contain bromine include halons, methyl bromide, and hydrobromofluorocarbons (HBFC). Halocarbons destroy the beneficial ozone that is found in the structure of the stratosphere and which protects the world against the harmful ultraviolet rays coming from the sun, hence are included in the ozone layer depleting substances controlled by the Montreal Protocol (Gillenwater et al., 2002: 7).

Hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulfur hexafluoride (SF₆) are not included in the ozone layer depleting substances controlled by the Montreal Protocol as they do not have ozone-depleting effects. However they are effective greenhouse gases and contribute to substances with greenhouse gas properties, though they do not have much effect on radiation. Hydrofluorocarbons for instance thin out the ozone layer. PFC and SF₆ are produced as a result of industrial processes.

The radiative forcing effects of PFC and SF₆ gases are low, however they have a fast production rate and long atmospheric life. Their inherent capacity to

block infrared rays make them potential candidates that will affect the climate in the future (IPCC, 2001a: 42,43).

Nitrogen Oxides (NO_x)

Nitrogen oxides (NO and NO₂) indirectly affect the climate change due to their effects on the formation of the tropospheric ozone, which is a greenhouse gas. The NO_x emitted from airplanes and released into the atmosphere reduces methane. NO_x is mainly formed by lightning strikes, microbial activities in the soil, natural or human-induced combustion of biomass, burning of fuels and reduction of N₂O found in the stratosphere. NO_x is short-lived in the atmosphere and its density varies according to location (Gillenwater et al., 2002: 7).

Non-Methane Volatile Organic Compounds (NMVOCs)

NMVOC gases include ethane, propane, butane and the like. These compounds, along with NO_x, facilitate the formation of tropospheric ozone and some photochemical oxidizers. NMVOC emissions are mainly generated by the activities of transportation sector, combustion of biomass and non-industrial consumption of organic solvents. NMVOCs are short-lived in the atmosphere and their densities vary according to location (Gillenwater et al., 2002: 7).

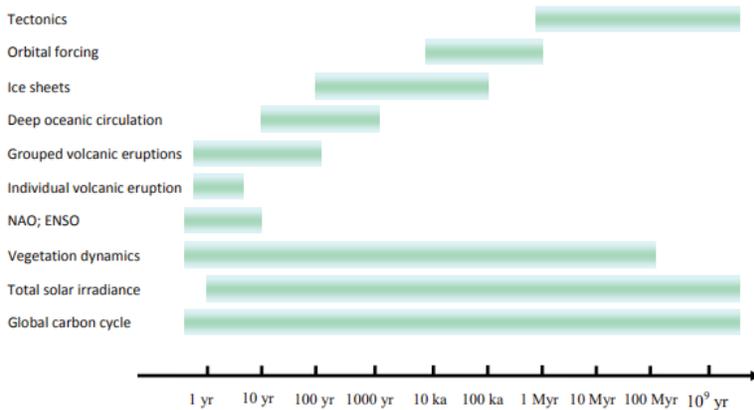
2. Causes of Climate Change

- The flattening of earth's orbit around the solar axis over a period of 95.000 years suggests that it is likely that ice ages were experienced in ancient ages.
- The results of the studies conducted on the axis of the earth suggest a shift in the axis over a period of 4000 years and a deviation from the axis over a period of 23.000 years (Milankovitch cycles).
- The changes induced by the continental drift in the directions of the wind systems on earth and of the current systems in the oceans cause climate change in the long term.
- The gases released into the atmosphere by volcano eruptions form a layer and block solar radiation causing a temperature drop. To give an example, the eruption of Pinatuba volcano caused an average of 1 °C drop in the earth's temperature.

- The glaciers in the Arctic and Antarctic continents have important effects on the earth's climate since they reflect the majority of incoming sunlight, play an important role in the formation of winds and have major effects on oceans.
- Sunspots affect the amount of energy reaching the earth.
- Furthermore, previously occurred climate cycles suggest a cooling trend in our age, yet we do not observe this trend, an observation which indicates that things likely had gone awry, as supported by the results of the relevant studies(Aksay et al., 2005: 30; Türkeş, 2007: 8; Kadioğlu, 2008: 28).

The causes mentioned above generally occurred during the course of the natural processes of the world and took thousands of years to have a concrete effect on the climate.

Figure 6. Internal Dynamics with an Effect on the Climate System in 1 Year (Y), 1 Million Years (My) and 1 Billion Years (109 Y)



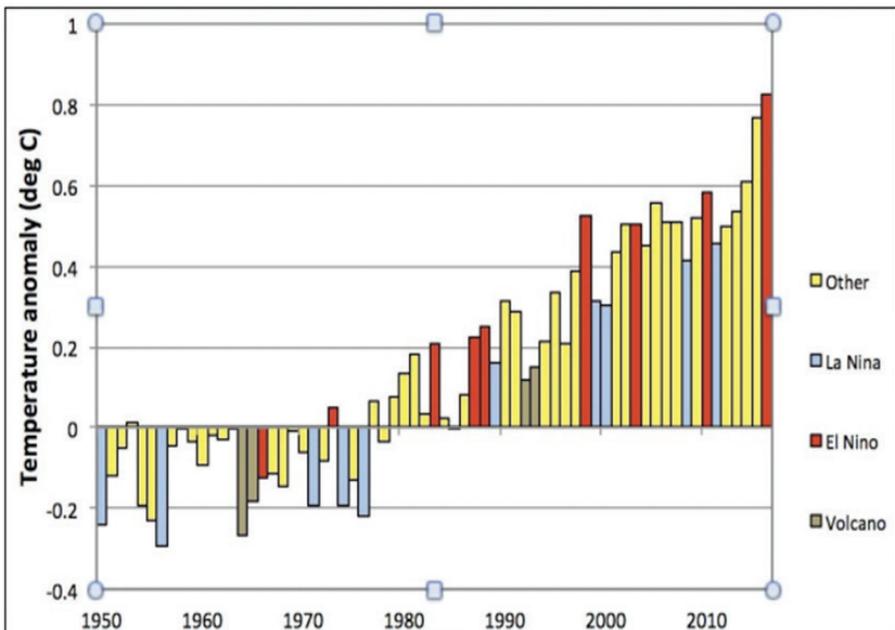
Source: Goosse vd., 2010: 110. *Abbreviations:* NAO (North Atlantic Oscillation), ENSO (El Niño-Southern Oscillation)

- El Niño and La Niña are effective on climate change, as well. La Niña occurs in the Pacific Ocean and has a great influence on climatic parameters, particularly in terms of temperature and precipitation, and first and foremost in nearby water masses and landmasses. To give an example, the seasonal temperatures observed in the southeastern United States are warmer than what would otherwise be expected, whereas the seasonal

temperatures observed in the northwestern United States are cooler than what would otherwise be expected.

El Niño and La Niña affect the climate at high latitudes and particularly in winter. Studies have shown that the temperatures observed in winter during the years of El Niño are warmer than what would otherwise be expected in the northern and central states of the US and cooler than what would otherwise be expected in the southeastern and southwestern states of the US, and that the temperatures observed in winter during the years of La Niña are warmer than what would otherwise be expected in the southeastern states of the US and cooler than what would otherwise be expected in the northwestern states of the US. In addition, it was reported in a study conducted at Florida State University that the temperature and precipitation anomalies observed in geographic areas affected by El Niño or La Niña during the years of El Niño or La Niña are different than the temperature and precipitation anomalies observed in the same areas in a normal year without El Niño or La Niña (Kayhan and Alan, 2014: 6-10).

**Figure 7. Global Temperature Anomalies (1950-2016);
16 of the 17 hottest years were recorded in the 2000s.**



Source: WMO, 2018.

Figure 7, which provides detailed information on temperature increase and about El Niño, La Niña and volcanic activities, indicates that El Niño, La Niña and volcanic activities have contributed to the climate change during the hottest years.

Climate change have been linked to numerous factors, yet experts agree that anthropogenic activities, along with the development of the industry in particular, disrupt the structure of the climate system and cause climate change (Legget, 2007: 19). To cite a few of these reasons:

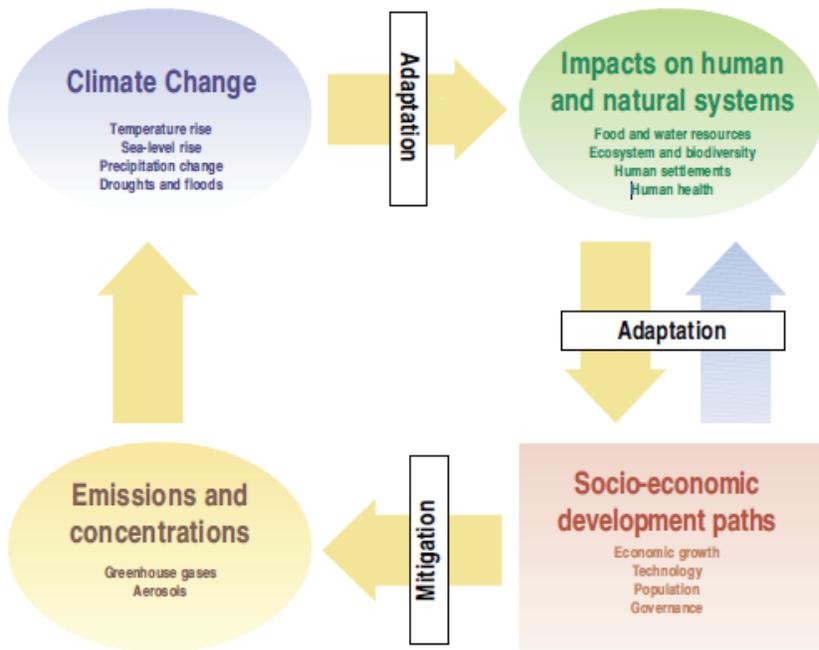
- The increase in the use of fossil fuels, the misuse of the land, and the onset of deforestation with the destruction of the trees, which are the lungs of the world, accelerated climate change (Justus and Fletcher, 2006: 2).
- The significant increase in greenhouse gas emissions from past to present is one of the most important reasons for the deterioration of the current climate structure (Justus and Fletcher, 2006: 2).
- Major changes in people's daily lives and working environments, rapid and unplanned urbanization, and certain agricultural activities contribute to the climate change (Bonan, 1999: 1305; Dolman and Verhagen, 2003:3).
- Not paying due attention to renewable energy sources in terms of sustainability and not reducing the use of fossil fuels inflict permanent damages upon climate and environment (Bradshaw, 2010: 276).
- The changes caused by natural or anthropogenic factors in the atmospheric structure and in other features of the earth are among the important causes of climate change (Aksay et al., 2005: 30; Türkeş, 2007: 8; Kadioğlu, 2008: 28).

2.1. Consequences of Climate Change

- Extreme weather events,
- Extreme temperatures
- Increase in tropical storms,
- Changes in precipitation patterns,
- Increase in moderate storms,
- Disruption of Atlantic thermohaline circulation,
- Decomposition of methane hydrate,
- Imbalanced energy demand,
- Increase in floods in coastal areas,

- The impact on human health,
- The impact on water resources,
- The impact on agriculture and increase in droughts
- The impact on ecosystem (McKibben and Wilcoxon, 2002: 113-114).
- Sea level rise and acidification of the oceans (Environment Agency Report, 2018: 5-11).
- Increase in climate-related migrations (Kniveton et al., 2008: 57).
- Increase in poverty (www.sputniknews.com, 2018).
- The impact on food ((Food and Agriculture Organization of the United Nations (FAO), 2018)).
- The impact on the economy (Başoğlu, 2014: 193).
- Melting glaciers
- Increase in the number and type of disasters
- Global warming leads up to climate change, and climate change gives rise to consequences that can potentially change the physical and human geography of the earth (Engin, 2010: 73).

Figure 8. The Formation and Effects of Climate Change



Source: IPCC, 2001b: 40.

2.2. Evidences of Climate Change

Most important indicators of the climate change have been the climate parameters, such as temperature, precipitation, humidity, sea level, etc. There are more evidences of climate change available today, particularly with the increase in anthropogenic activities (Kılıç, 2009: 23). To give a few examples;

- The average temperature of the world increased by 0.74 °C between 1906-2005 (Cromwell et al., 2007: 2),
- There are a lot less glaciers today, since numerous glaciers melted, as did most of the glaciers that existed on the tops of high mountains along with snow cover. Today, glaciers are predominantly available at the poles only.
- The natural habitat of tropical plants and fish that love hot weather and warm waters has extended towards the poles.
- Number of migrants migrated due to climate changes increased, as did the refugee problems related thereto.
- Bird species that are sensitive to airborne pollutants have become either extinct or one of the endangered species.
- Trees' annual rings have been growing faster.
- The hottest years of the last 1400 years have been recorded one after another during the 1990s (Kadioğlu, 2008: 30).
- Evaporation and precipitation rates have increased.
- Precipitations have been occurring mostly in the form of heavy rain.
- Many tundra regions have been displaced by steppes (North Pole Steppes).
- Coral reefs have been whitening (coral bleaching) due to warmer waters which subjected them to more stress and mortality (Özmen, 2009: 43),
- Records of tide rates and water level measurements indicate a 10-25 cm increase in the average global sea level since the 19th century (IPCC, 1996a: 5). This increase is related to the temperature increase being observed in today's world ((DPT (State Planning Organization of Turkey, 2000: 5)). The domino effect created by climate change is as clear as day. Increases in temperatures triggered melting of the arctic and antarctic glaciers, which in turn resulted in an increase in sea levels (Kılıç, 2009: 24).
- The precipitation regime has increased in the northern hemisphere during winter. On the other hand, a decrease was observed in the precipitation regime of subtropical and tropical zones since the end of the 1960s. This

change in precipitation regimes has affected the fresh water resources, agriculture and the society in general. For example, the drought occurred with the decrease of rainfall in the Sahel region of Africa has forced millions of people to migrate and caused the deaths of millions of animals. 1973, 1977, 1989 and 1990's have been the time periods with severe droughts on record. Furthermore, in regions with terrestrial climate, spring and summer seasons were prolonged (DPT, 2000: 5).

- Another important indicator has been the decrease observed in the temperature of stratosphere with the increased emissions of harmful chemicals particularly in recent years. The decrease in the stratospheric temperature causes an increase in air pollution as it causes a decrease in the air circulation inside the stratosphere layer, which is why the decrease in the average temperature of the stratosphere layer is another important indicator of climate change. As a matter of fact, there has been an increase in air pollution due to the increase of harmful substances in the air subsequent to the industrial revolution (Aksay et al., 2005: 29).

2.3. Climate Change From Past to Present

Studies that form the basis of climate change go back three centuries. In 1681, Edme Mariotte discovered that glass and certain permeable surfaces allow sunlight and heat to pass through. On the other hand, the first experiment about greenhouse effect was conducted by Horace Benedict de Saussure in 1760 using a heliothermometer (IPCC, 2007: 103).

In 1827, J. B. J. Fourier published the first study in which greenhouse gases role in the change of earth's temperature was mentioned. J. Tyndall was the first scientist to argue in 1863 that the earth's temperature will increase with an increase in atmospheric CO₂, the most important greenhouse gas.

The first scientist who introduced the phenomenon of climate change to the literature in 1896 was the Nobel Prize winner Svante A. Arrhenius. He stated in his study that even minor changes in the amount of atmospheric carbon dioxide will increase the temperatures and change the climates. In the later years, the importance of the changes in carbon dioxide amounts has become more apparent with the studies conducted using scientific method.

With the increase in industrialization and the emergence of fossil fuels, Svante A. Arrhenius contributed to the literature with another study in 1908. In this study, he argued that industrialization and increase in fossil fuel use will

affect climates. In 1938, G.S. Callendar collected temperature data from 200 weather stations and compared these data with the increase in the amount of atmospheric carbon dioxide. Consequentially, Callendar found a correlation between the increase in the amount of atmospheric carbon dioxide and the rise in temperatures.

However, both Arrhenius and Callendar, perceived the increasing temperature caused by the increase in the amount of atmospheric carbon dioxide as an insurance against the re-occurrence of ice ages, which are known to have occurred in the past. Additionally, they also speculated that the increase in temperature would increase agriculture and anthropogenic activities in cold regions (Engin, 2010: 74).

In 1957, the first permanent CO₂ observation station was established in Hawaii (Engin, 2010: 74). In the same year, R. Revelle and H. Suess reported that half of the carbon dioxide released into the atmosphere remains in the atmosphere and therefore the carbon dioxide concentration will increase by 20% to 40% in the later years.

In 1970, a workshop entitled “Study of Critical Environmental Problems – SCEP”, an important milestone in respect of climate change phenomenon, was held in Massachusetts. In the declaration published as a result of the conference, it was emphasized that the increased carbon dioxide levels will have important consequences in later periods. Additionally, in the final declaration of another important conference entitled “Study on Man’s Impact on Climate – SMIC” that took place in Wijk, Sweden, global warming and global cooling terminology were introduced to the literature and it was recommended to increase the studies on these two important phenomena (Cain, 1983; as cited in: Engin, 2010, 74).

The first global conference on the environment was the Stockholm Conference that was held in 1972 with the support of United Nations. The final declaration of the conference featured the slogan of “Only one Earth” and the understanding that everyone has equal rights and responsibilities in respect there of. “United Nations Environment Programme – UNEP” was established following the Stockholm Conference to carry out the activities of United Nations on environment (Engin, 2010, 74).

The First World Climate Conference was held in 1979 (IPCC, 2007: 105). In 1985, the Villach Conference organized by the “World Climate Program – WCP” has been the first conference that featured a scientific consensus on the

importance of global warming (Engin, 2010: 74). The final declaration of the conference featured the following text: “*Recent experiments have demonstrated that a double fold increase in the concentration of CO₂ or equivalent gases in the atmosphere will lead to an increase in the average temperature of the earth by 1.5 - 4.5 °C*” (WMO, 1986: 20).

The Vienna Convention signed in 1985 and the Montreal Protocol signed in 1987 were meetings held on the damage to the ozone layer. Hence, environmental problems have come to the fore by the middle of the 80’s. In this context, a report entitled “Our Common Future” was presented by “World Commission on Environment and Development” in 1987 (Engin, 2010, 75).

In 1988, the Intergovernmental Panel on Climate Change (IPCC), which is an important organization known for its reports on climate change, was established led by UNEP and WMO. Identification and assessment of anthropogenic climate change risks have been set forth as the objectives of IPCC. Furthermore, IPCC publishes special reports on the implementation of the “United Nations Framework Convention on Climate Change – UNFCCC” (Engin, 2010: 75).

2.3.1. Kyoto Protocol

The Kyoto Protocol, which entered into force in February 2005, includes 3 different mechanisms, known as the Kyoto Mechanisms or Flexibility Mechanisms, which are Emissions Trading, Clean Development Mechanism and Joint Implementation (Kyoto Protocol, 1998: 1-2).

The Kyoto Protocol aims to reduce the greenhouse gas emissions of countries on and after the 2000s. It imposes a legal obligation on countries to reduce the emission rates of the greenhouse gases specified in the protocol to at least 5% below the 1990 level between 2008 and 2012. Parties to the Protocol were imposed different obligations in terms of the emission rates to be reduced. In this context, an obligation to reduce emissions by 8% was imposed on EU and an obligation to reduce emissions by 7% was imposed on US. On the other hand, exemptions were granted to some countries. To give a few examples, Australia was granted the privilege to increase its emissions by 8% during the first period set forth in the Protocol, whereas Ukraine, Russia and New Zealand were granted the privilege not to change their emission rates compared to their emission rates in 1990 (Türkeş, 2006: 7).

The Bonn Agreement signed in 2001 determined the legal framework for the Kyoto Protocol, whereas the matters reconciled in the Bonn Agreement were legalized in 2001 via the Marrakech Accords (Türkeş, 2006: 8).

2.3.2. United Nations Framework Convention on Climate Change (UNFCCC)

UNFCCC was adopted in 1992 to respond to climate change globally and entered into force on March 21st, 1994. 194 countries in total have become a party to this Convention, thus it is also important in terms of universality. The primary objectives of UNFCCC are to prevent the anthropogenic impact on the climate system and to keep greenhouse gas emission rates below a certain level. UNFCCC is essentially a Convention that defines the general rules, obligations and principles in respect of its subject matter ((ÇSB (Ministry of Environment and Urbanization of Turkey), 2018)).

One of the important aspects of the Convention is that the climate system was defined therein as a common asset. In this context, the Convention draws attention to the greenhouse gas emissions caused by industry and other activities and which may harm the climate system. The aim of the Convention was established in its following provision of: “Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”. Furthermore, the principles of the Convention are set forth as the principle of equality, the principle of common but differentiated responsibilities, precautionary principle, and the principles of “common concern of humanity”, “free trade” and “cost efficiency” (ÇSB, 2018).

2.3.3. Copenhagen Accord

A number of conflicts emerged at the climate summit held in 2009 in Copenhagen, Denmark, with major ones being China’s objection to the international mechanism that oversees the activities affecting the climate change, the demands of developed and developing countries for fair treatment in terms of activities to be banned due to their effect on the climate change, and the social oppositions. Nevertheless, the “Copenhagen Accord”, which stipulated a ban on certain activities to ensure that the temperature increase does not exceed 2 degrees, and provision of financial aids to developing countries in order to ensure climate justice, was adopted (Satır and Reyhan, 2013: 964).

The Accord has two primary objectives. Its first objective is to ensure the reduction of carbon emissions by developed countries. Accordingly, developed countries are to declare their carbon emissions even though they do not have a legal obligation to do so. Its second objective is to ensure the provision of 100 billion dollars financial aid to the developing countries until 2020 so that they can adapt to the measures to be taken against the risks that prepare the ground for global warming, in terms of the adaptation of their industrial sectors in particular. (Satir and Reyhan, 2013: 964).

2.3.4. Paris Agreement

The Paris Agreement, which is an agreement of historic importance, was signed by 195 countries and adopted on December 12th, 2015, at the Paris Climate Summit held in France following two-week long negotiations. As an Agreement that has an important place today in terms of actions taken against climate change, it envisages fundamental changes in the societies, economies and environments at local, national and global levels for the sake of countering climate change (Karakaya 2015: 1-2).

The Agreement stipulates that all parties to the Agreement, the developed countries in particular, assume responsibility in reducing the greenhouse gas emissions. The Agreement envisages that the developed countries will take more measures to reduce greenhouse gas emissions than other countries and reach zero greenhouse gas emissions by 2050, whereas that the developing countries will reduce their greenhouse gas emissions in line with their capacities. This difference between the groups of countries was attributed to the principle of “common but differentiated responsibility” (Karakaya, 2015: 1-2).

Additionally, the Agreement has established that the average temperature of the world has already increased by 1 degree due to the industrial developments and the increase in anthropogenic activities. Accordingly, the Agreement also envisages to limit the increase in average temperature of the world by 1.5 degrees in order to keep it under 2 degrees in any case.

Moreover, the Agreement envisages that the developed countries will provide the necessary climate finance support, as well as the necessary technological support and any other type of support needed to develop the existing capacities in terms of the fulfillment of the climate change actions, to developing countries, so that they can realize the transformation to a “low-

carbon and climate resistant” economy, while sustaining their development process (Karakaya, 2015: 1-2).

In this context, the financial support that is to be provided by developed countries to the developing countries by 2020 has been determined as 100 billion dollars. Additionally, it has been envisaged that this amount has to further increase during the period after 2020. The Paris Agreement will be evaluated regularly every five years in a calculable way about how much progress the countries party to the Agreement have recorded in achieving their targeted amounts of greenhouse gas emission reduction and adopting the necessary policies (Karakaya, 2015: 1-2).

2.3.5. Milestones of the Climate Change Regime

Table 1. Milestones of the Climate Change Regime

Conference Title	Date	Host(s)& Sponsor(s)	Summary of Conference Final Declaration
Villach Conference	1985	WMO and UNEP	Climate change is highly likely. Governments should prepare themselves to sign a treaty on climate change.
Toronto Conference	1988	Canada	CO ₂ emissions should be reduced by 20% until 2005. Governments should develop a common framework to that respect.
UN General Assembly	1988	UN	Climate Change is everyone’s common problem.
Hague Summit	1989	The Netherlands	Governments must establish a new institutional authority to combat global warming.
Noordwijk Conference	1989	The Netherlands	Developed countries should reduce their greenhouse gas emissions in the shortest timepossible.
IPCC First Assessment Report	1990	WMO and UNEP	According to the “business-as-usual” scenario, the average globaltemperature will continue to increase by an average of 0.3 °C degrees every 10 years.

Conference Title	Date	Host(s)& Sponsor(s)	Summary of Conference Final Declaration
The Second World Climate Conference	1990	WMO and UNEP	Countries have to reduce their greenhouse gas emissions. Developed countries should set targets in terms of the amounts of greenhouse gas emissions to be reduced.
UN General Assembly	1990	UN	INC has been established.
The “Earth Summit” (UNCED)	1992	UNCED	UNFCCC has been submitted for signature.
First Conference of the Parties	1995	UNFCCC	The provisions of UNFCCC were brought up for discussion.
Second Conference of the Parties	1996	UNFCCC	Genoa Declaration
Third Conference of the Parties	1997	UNFCCC	Kyoto Protocol
Fourth Conference of the Parties	1998	UNFCCC	Buenos Aires Plan of Action
Fifteenth Conference of the Parties	2009	UNFCCC	Copenhagen Accord

Source: Bodansky, 2001: 25-26. *Abbreviations:* WMO: World Meteorological Organization, UNEP: United Nations Environment Programme, UN: United Nations, IPCC: Intergovernmental Panel on Climate Change, INC: The Intergovernmental Negotiating Committee, UNCED: The United Nations Conference on Environment and Development, UNFCCC: United Nations Framework Convention on Climate Change

Table1. Major Conferences on Climate Change Held since 1999

Conference Title	Date	Title	Date
Bonn Climate Change Conference	June 1999	Bonn Climate Change Conference	April 2010
Bonn Climate Change Conference	October 1999	Bonn Climate Change Conference	May 2010
Bonn Climate Change Conference	June 2000	Bonn Climate Change Conference	August 2010
Lyon Climate Change Conference	September 2000	Tianjin Climate Change Conference	October 2010
Lahey Climate Change Conference	November 2000	Cancun Climate Change Conference	November 2010

Conference Title	Date	Title	Date
Bonn Climate Change Conference	July 2001	Bangkok Climate Change Conference	April 2011
Marrakech Climate Change Conference	October 2001	Bonn Climate Change Conference	June 2011
Bonn Climate Change Conference	June 2002	Panama Climate Change Conference	October 2011
New Delhi Climate Change Conference	October 2002	Durban Climate Change Conference	November 2011
Bonn Climate Change Conference	June 2003	Bonn Climate Change Conference	May 2012
Milan Climate Change Conference	December 2003	Bangkok Climate Change Conference	August 2012
Bonn Climate Change Conference	June 2004	Doha Climate Change Conference	November 2012
Buenos Aires Climate Change Conference	December 2004	Bonn Climate Change Conference	April 2013
Bonn Climate Change Conference	May 2005	Bonn Climate Change Conference	June 2013
Montreal Climate Change Conference	December 2005	Warsaw Climate Change Conference	November 2013
Bonn Climate Change Conference	May 2006	Bonn Climate Change Conference	March 2014
Nairobi Climate Change Conference	November 2006	Bonn Climate Change Conference	June 2014
Bonn Climate Change Conference	May 2007	Bonn Climate Change Conference	October 2014
Vienna Climate Change Conference	August 2007	Lima Climate Change Conference	December 2014
Bali Climate Change Conference	December 2007	Geneva Climate Change Conference	February 2015
Bangkok Climate Change Conference	March 2008	Bonn Climate Change Conference	June 2015
Bonn Climate Change Conference	June 2008	Bonn Climate Change Conference	August 2015
Accra Climate Change Conference	August 2008	Bonn Climate Change Conference	October 2015
Poznan Climate Change Conference	December 2008	Bonn Climate Change Conference	May 2016

Conference Title	Date	Title	Date
Bonn Climate Change Conference	March2009	MarrakechClimate Change Conference	November2016
Bonn Climate Change Conference	June2009	Bonn Climate Change Conference	May 2017
Bonn Climate Change Conference	August2009	UNClimate Change Conference	November2017
Bangkok Climate Change Conference	September2009	Bonn Climate Change Conference	April2018
Barcelona Climate Change Conference	November2009	Bangkok Climate Change Conference	September2018
CopenhagenClimate Change Conference	December2009	Katowice Climate Change Conference	December2018

Source: Created by researcher UNSurvey, 2019, *Abbreviations:* UN: United Nations

In addition, IPCC has been actively involved in efforts to contain climate change by publishing a total of 40 reports in respect thereof since 1990.

3. Key Indicators of the Climate Change in the World

According to the latest climate evaluations made by WMO, the average temperature of the world has increased by 0.98 °C in 2018 compared to the average temperature of the world during the period of 1850 to 1900, and by 0.38 °C compared to the average temperature of the world during the period of 1981-2010, a period when global warming already became known and the industry had developed. Based on this information, 2018 was determined as the fourth hottest year in history, after 2015, 2016 and 2017 ((MGM (General Directorate of Meteorology of Turkey), 2019: 3)).

The results of a series of studies carried out by the National Oceanic and Atmospheric Administration (NOAA) of US revealed that the average temperatures of 2018 were in average 0.79 °C higher than the average temperatures of the period between 1901 and 2000. Additionally, the mean increase in average temperatures was determined as 1.12 °C in land areas, whereas 0.66 °C in the oceans. Furthermore, the mean increase in average temperatures was determined as 1.18 °C and higher in the Northern Hemisphere compared to 0.97 °C, the mean increase in average temperatures in the Southern Hemisphere (MGM, 2019: 3). The average sea level rise between the period of

January and July of 2018 was determined to be 2-3 mm higher than the average sea level rise in the same period of 2017 (WMO, 2019).

Atmospheric concentrations of carbon dioxide continued to increase in 2018. Atmospheric concentrations reflect the balance between the emissions originated from anthropogenic activities and the net uptake of the biosphere and oceans. Increasing levels of greenhouse gases in the atmosphere are key factors of climate change. Increasing greenhouse gas concentrations in the atmosphere due to anthropogenic effects result in further interaction of these gases with the biosphere and oceans. Accordingly, more than 90% of the energy trapped by greenhouse gases is absorbed by the oceans. Hence, the average intensity of the Ocean Heat Content (OHC), caused by the Carbon Dioxide releases and accumulated in the upper layers of the oceans, has increased once more in 2018 compared to OHCs of previous years. As a matter of fact, according to quarterly held assessments, temperature of oceans measured in 2018 has been either the highest or second highest temperature on record. On the other hand, the overall assessment of the last decade revealed that the twenty-five percent of human-induced carbon dioxide emissions were absorbed by the oceans (WMO, 2019).

Carbon dioxide reacts with seawater changing the pH value of seawater. Accordingly, pH value of the oceans has decreased in the last 30 years. This condition is also known as ocean acidification. Ocean acidification affects marine organisms, corals and mollusks (WMO, 2019). Concentration measurements of the greenhouse gases in 2017 revealed an increase in all greenhouse gases. In this context, concentrations of CO_2 , CH_4 and N_2O were found to have increased to 405.5 ppm (parts per million), 1859 ppb (parts per billion) and 329.9 ppb, respectively. The increase in the concentrations of greenhouse gases continued in 2018, as well (WMO, 2019).

Arctic sea ice likely reached its maximum extent for the year, at 14.78 million square kilometers (5.71 million square miles) on March 13th, 2019, according to scientists at the National Snow and Ice Data Center (NSIDC) at the University of Colorado Boulder. The said wintertime extent reached on March 13th, 2019 ties with 2007's, as the 7th smallest extent of winter sea ice on record in the 40-year satellite records, according to scientists at the NASA-supported NSIDC and NASA (National Aeronautics and Space Administration) (NSIDC, 2019). The winter's maximum extent (5.71 million square miles or 14.78 million square kilometers) reached on March 13th, 2019 is 332,000 square miles (860,000 square kilometers) less than the average winter's maximum

extent recorded between the years of 1981 and 2010 average maximum, an area equivalent to the area of ice larger than the state of Texas.

On the other hand, size of the Antarctic sea ice throughout 2018 was determined to be well below than its average size. For instance, in February 2018, Antarctic sea ice was determined as 2.28 million square kilometers, which was 33% below average and the 2nd lowest value among the NSDIC data, whereas the average for September was 17.82 million square kilometers, which was 4% below the average and the 5th lowest among the NSDIC data. These results were worse than the preliminary estimates made for 2017 and 2018 (NSIDC, 2019).

The Antarctic Ice Sheet is an important indicator of climate change and has a major impact on sea level rise. The Antarctic glacier lost 2.720 ± 1.390 billion tons of ice between 1992 and 2017, which corresponds to an average sea level rise of 7.6 ± 3.9 millimeters during the same period. During this period, ocean-induced melting caused ice loss rates in West Antarctica to increase from 53 ± 29 billion tons per year to 159 ± 26 billion tons per year. The collapse of the ice shelf increased the ice loss in the Antarctic Peninsula from 7 ± 13 billion to 33 ± 16 billion tons per year (Shepherd, 2018: 219).

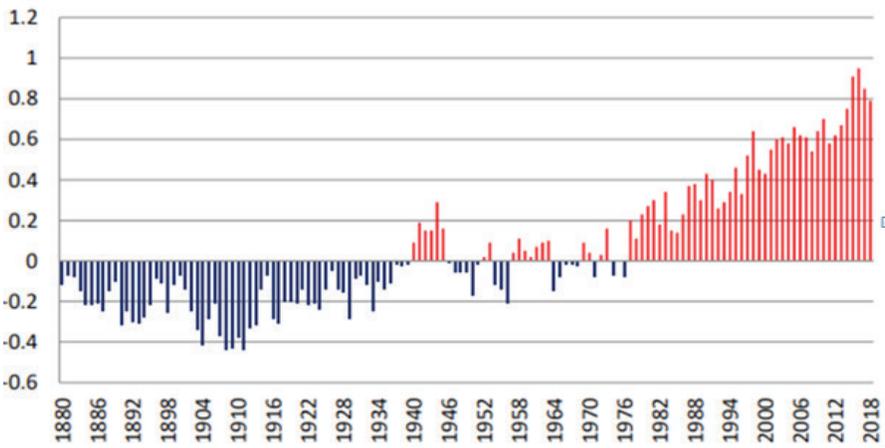
In addition, the study conducted by University of California, University of Utrecht and the NASA Jet Propulsion Laboratory revealed that the melting level in Antarctic glaciers increased by an average of 280 percent annually between the years of 2001 and 2017 (www.sputniknews.com, 2019). Another indicator of the danger posed by climate change is the decomposition of methane hydrate. The results of a series of studies carried out using special sensors in Greenland by the international research team formed by the University of Bristol, England, demonstrated that the ice sheet, melting heavily during the summer months in particular, releases a very high amount of methane gas, which was determined to have been initially trapped in ice masses and released by melting. The said research team, working on a total area of 600 square kilometers of the Greenland ice mass, found that the water coming out of the melting ice bed and flowing into the rivers caused a total of 6 tons of methane to mix into the seas. Methane is a very important greenhouse gas and has the potential to increase the greenhouse effect by 20 to 28 times compared to the carbon dioxide.

Researchers have warned that the greenhouse gases released by oxidation will also increase the temperature. In this context, recent work on the micro-organisms has shown that a large amount of methane gas is formed between the ice sheets in an oxygen-free environment, since the micro-organisms transform

organic material to methane. Yet, previously, it was thought that the release of methane in the polar regions has been occurring through melting of the ice sheets only, since melting of the ice sheets uncovers the frozen soils and causes the methane trapped within to be released (Andrews, 2019: 31-32; www.T24.com, 2018).

Sea level rise became inevitable, as can be deduced from the fact that the sea level already rose by 15 cm or 6 inches, during the 20th century due to the expansion of sea waters and the rapid melting of glaciers. This situation poses a threat to coastal communities and wildlife (www.windows2universe, 2018). During the last century, mountain glaciers have decreased in size and the amount of permafrost has increased in return. The increase in sea surface temperatures and warmer shallow oceans gave rise to the death of a quarter of the coral reefs that exist (www.windows2universe, 2018). On the other hand, increasing temperatures in large lakes have had dramatic results, such as increased blooming of algae setting the scene for invasive species. Water levels in lakes have fallen and stratification increased (www.windows2universe, 2018). Increasing temperatures and extreme drought have led to a decline in crop productivity around the world. Reduced crop yields refer to food shortages with many social implications (www.windows2universe, 2018). Ecosystem balance has been disrupted as well. The temperature rise has caused sensitive species to migrate to more suitable habitats or die (www.windows2universe, 2018). Changes have also occurred in the lengths of the seasons (www.windows2universe, 2018).

Figure9. Global Average Temperature Anomaly (1880-2018)



Source: www.ncdc.noaa.gov, 2019.

Studies have revealed that there have been substantial increases in the number of hurricanes that occurred in the Atlantic Ocean since the 1970s. In parallel, it is thought that the number of tropical cyclones that occurred in other parts of the world has increased as well. The deteriorating salinity in the Atlantic ocean was determined to cause the Gulf Stream hot water flow to slow down, and this is thought to be one of the reasons of the increase in the frequency and severity of the disasters (Parekh, 2018: 6,7). Scientists continue to investigate whether the climate is the cause or effect (www.windows2universe, 2018). Additionally, there has been an increase in number of deaths due to heat strokes. Number of disease-carrying animals such as mosquitoes also increased, as did the length of the pollen season (www.windows2universe, 2018). The world has warmed 1°C compared to the pre-industrial period and the resulting climate changes have serious consequences all over the world. In parallel, with each passing day, we are witnessing a higher number of climate-related events that can be classified as catastrophic events. For instance, in 2017, the summer season in the Northern Hemisphere has featured an extraordinarily hot heat wave, which almost scorched all Europe, resulting in fires to break out in countries such as Portugal and Italy, and was thus named as ‘Lucifer’ (Parekh, 2018: 5). In another example, more than 1200 people lost their lives during the same year as a result of the floods in South Asia. 40 million people were affected by these floods in Nepal, India and Bangladesh, whereas 11 million people were affected in China as 60 rivers were flooded resulting in many people to lose their lives and 18,000 houses to get destroyed. The drought that occurred in Cape Town in the same year devastated people and the government had to ration the water (Parekh, 2018: 5). The summer season in 2018 in the Northern Hemisphere was an unforgettable season as it has featured many heatwaves. For example, as a rare event, the coniferous forests in Sweden located within the Arctic circle caught fire after an unusually dry season. Severe forest fires broke out in Athens and California. Particularly the fire that broke out in California was so severe that it was said to have created its own climate system. On the other side of the Pacific Ocean, in Japan, more than 220 people lost their lives as a result of floods, and 2 million people had to leave their homes.

Subsequent to the floods, more than 80 people lost their lives in Japan as a result of the heatwave. The Japanese Government named all these events as natural disasters.

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CHAPTER XIV

RESTRUCTURING OF PUBLIC FINANCIAL MANAGEMENT IN TURKEY IN THE POST-1980 PERIOD

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1. Introduction

In the post-1980 period the concept of globalisation took hold of the whole world and caused crucial political, economic, social and cultural effects on various countries. In line with the conception of new public management brought about in this process, the public finance management has been restructured in Turkey. Fundamental changes regarding financial system were made by the Public Finance Management and Control Law no. 5018.

The aim of the Public Finance Management and Control Law no. 5018 that is started to be applied in the context of restructuring endeavours of public management in Turkey is to base the public spending process upon faster and more robust principles, to ensure discipline, accountability and transparency in the public finance management system, to ensure efficiency, productivity and economy in the use of public funding, to increase economic performance and to eliminate the mess of the system.

In the study new conception of government brought about by globalisation is analysed and the restructuring process of the public finance management in Turkey is assessed in the context of the regulations brought about by the Public Finance Management and Control Law no. 5018.

2. New Conception of Government Brought about by Globalisation

The globalisation phenomenon that reflects the fundamental characteristics of today's world expresses the quick integration and affinity process that has been experienced lately in the fields of economy, politics and social and cultural life (Köse: 2003:3; Tutar, 2000:18; Parlak, 2003:353). With globalisation, in addition to the reductions in transportation and communication costs, it is also aimed to remove the obstacles in front of the cross-border exchange of goods, services, capital and human/labour. In addition to existing institutions new institutions that would engage in cross-border activities have also been constructed through globalisation and international organisations have in turn driven globalisation (Stiglitz, 2002:31).

The social state or welfare state that became widespread in the 20th century started to be discussed after the economic crisis started in the 1970s (Bulut, 2003:180-181). As the resolution of the crisis has not been accomplished and as classical Keynesian policies applied against the crisis has been unsuccessful, liberal thought gained strength in the 1980s and started to be applied in economic and social policies (Sönmez, 1998:511). Downsizing the state, privatisation, deregulation and restructuring the capitalism in the context of these concepts have become a current issue in such an environment (Bulut, 2003:180-181).

The rise of the concept of globalisation coincides with the internationalisation process that gained pace through the implementation of the policies of overseas expansion till the 1980s, with the liberalisation of financial markets and capital movements across the world and with the expansion of neo-liberal program worldwide (Bulut, 2003:184-189). In the neo-liberal welfare model, it is aimed to ensure individual freedom by using free market system as a base for market-government relations, by downsizing the state, by reducing public expenditures and hence by eliminating social intervention (Sallan Gül, 2004:303).

The mechanism of economic globalisation has shaped with the globalisation of commerce, the increase in the pace of the mobility of capital and the decrease in the cost of information through technological innovations, and in the globalising world international mutual dependence has increased in terms of economy and other factors. On the other hand, free competition in the global scale has emancipated creative and entrepreneur human resources and accelerated technologic improvement. The basic elements of economic

globalisation are also important as they underpin the new economic order and the government conception in this new economic order (Ener and Demircan, 2006:205).

In line with this change, new functions and duties are imposed to the concept of state in today's world and primarily, the economic role of the state has been restructured. The relationship between state and economic life has started to feature the regulation and supervision functions of the state, Instead of intervention function (Ener and Demircan, 2006: 209; Ener and Demircan, 2008: 61). In this context, the new duty of the protectionist and regulatory state having duties such as national defence, poverty reduction and environmental protection, can be expressed as preventing market failures and unfairness in the market process and as building necessary legal infrastructure against the problems brought about by the globalisation (Dileyici, 2004:33).

Globalisation causes massive changes in the structural and functional appearances of the state (Heady, 1998; Caiden, 1994; Esman, 1991; Scholte, 1997). The first of these changes is that the decisions and managerial rules of supra-national governance organisations (IMF; WB, WTO etc.) have turned into sanctions that affect the management systems of nation states. Secondly, the level of mutual interdependence of modern states in terms of dealing with domestic and cross border issues and setting off on a quest of collaboration in terms of common interest such as global environment and environmental sustainability has increased. Thirdly, it has provided that states have developed the functions of governance and administration both at the domestic and international level by attaining the advantages of information age. Forth change is that with the power of globalisation, the role of government has changed direction for supplying suitable conditions for private enterprise. The function expected from the public administration is the formation and protection of legal and institutional basis for the operation of market economy (Farazmand, 1999:258-259). Together with the functions of supervision and regulation of the banking and financial sectors, the market regulation and competition support functions of the state have increased (DPT, 2000:5-6). Another alteration that globalisation has made in the characteristics of the modern state is the transformation of administrative state from welfare state to entrepreneur state (Eisinger, 1988; Farazmand, 1999:259).

Due to globalisation, states have tried to comply with differentiating conditions and new requirements. Some new concepts such as codetermination, democratic governance, localisation, governance, optimum service delivery and

performance management, and new management techniques mostly settled in the field of business management have been incorporated in the structural and functional processes of public administration (Parlak, 2003:347-348). Instead of traditional administrative mentality, flexible, decentralised, entrepreneur, open participation in the administration, market based new public administration mentality has been adopted. New public administration mentality that advocates those merits in the services of public administration such as efficiency, economy, productivity, customer orientation, responsibility, quality, performance, transparency, accountability (Bilgiç, 2003: 27,35), has brought the concept of human resources in place of personnel management (Ömürgönülşen, 2003:23).

3. Restructuring the Public Financial Management in Turkey: The Law No. 5018

The Public Finance Management and Control Law no. 5018 that was proposed for the adaptation of Turkey to the new economic order that has been brought about by the globalisation process was enacted in December 2003. Thus, General Accounting Law no. 1050 and dated 1927 that was being implemented was repealed.

Prior to the implementation of Public Finance Management and Control Law no. 5018 there were significant deficiencies of the financial system. The main deficiencies were: Tight junctions could not be constructed between development plans and budgets; some financial transactions were not included in the budgets, budgetary executions were restricted with the fiscal year, and there was no multi-annual budgeting. With the Public Finance Management and Control Law, it is aimed to alter the existing system and increase its efficiency, and to construct a public finance management and control system that complies with international standards and the EU norms. By broadening the scope of budget, it is predicted to use the power of purse in the best manner, to increase the efficiency of budget preparation and implementation, to ensure transparency in the financial management, to reconstruct the authority-responsibility balance in the expenditure process through a healthy accountability mechanism, to construct an efficient internal control system, and to form a new public finance management system that complies with contemporary developments (Saraç, 2005:124).

The Public Finance Management and Control Law no. 5018 has radically changed the financial system in Turkey. With the Law, budget unity has been

accomplished, besides fiscal transparency and accountability efficiency, economy and productivity in the use of public funding has become prominent, and public administrations have been given broad authorities in terms of decision making and implementation. In the use of public funding, the principles of fiscal transparency, the responsibility of accountability, performance-based budgeting and multi-annual budgeting were adopted (Falay, Şahin and Kesik, 2006:36; Ministry of Finance, 2004:350; Ergen, 2016:99-109).

3.1. The Regulations Brought about by Public Financial Management and Control Law and Their Assessment

3.1.1. Basic Regulations Regarding Public Finance

In the Law, the public financial management is defined as “*legal and administrative system and processes that would ensure the efficient, economic and productive use of public funding in compliance with the standards*” (Public Finance Management and Control Law no. 5018 (KMYKK), article 3/1). Here, the expressed concepts of efficiency, productivity and economy are the elements of performance management. Therefore, the fact that financial management would be based on performance was legally ensured.

In the Law it is expressed that “*the fundamental principles of public finance are implemented in a manner that it would ensure the accountability of public officials. Fiscal policy is formed and implemented in compliance with macroeconomics and social targets. Public finance management is performed in accordance with the power of purse of Grand National Assembly of Turkey. Public finance management ensures the fiscal discipline. Public finance management creates the necessary environment for the formation of public choice in a manner that ensures economic, fiscal and social efficiencies simultaneously. For the fulfilment of the goods and services production and necessities of public administrations, in accordance with economic or social productivity principles it is necessary to make cost-benefit or cost-efficiency analyses and other necessary economic and social analyses should be realised*” (KMYKK, article 5). Accordingly, in the Law, it is seen that importance is attached to the concepts of accountability, economic and social efficiency, compliance with productivity principles, cost-benefit or cost-efficiency analyses, power of purse and fiscal discipline. Besides, in addition to economic efficiency social efficiency is also emphasized. However, regarding social efficiency, it should be noted that state

should ensure social welfare not as a social state but instead as a regulatory state (Öz and Kaplan, 2005:246).

The issues of transparency and accountability are organised under two distinct captions by the Law. In the 7th article of Public Finance Management and Control Law the caption of Financial Transparency is ensured as “*In order to ensure supervision in the acquisition and utilization of all types of public resources, the public shall be informed timely*”. This provision is in line with the “right to demand information from public” that is tried to be actualised with the Right to Information Act no. 4982 entered in force in 2004.

In the 8th article of Public Finance Management and Control Law, accountability is ensured as “*Those who are assigned duties and vested with authorities for the acquisition and utilization of public resources of any kind are accountable vis-à-vis the authorized bodies and responsible for the effective, economic and efficient acquisition, utilization, accounting and reporting of the resources on the basis of law, as well as for taking necessary measures to prevent abuse of such resources*”.

Accordingly, those who are responsible for the acquisition and utilisation of any kind of resources must account to competent authorities. Thus, top executives¹ report their respective activities and release to the public. One copy of the report is sent to the Court of Accounts (Öz and Kaplan, 2005: 247). The Court of Accounts presents its opinions prepared by taking the government activity reports excluding local administration assessment reports, assessment and general activity reports of local administrations, the results of external audits into account to the Grand National Assembly of Turkey (Saraç, 2005: 140). In the context of these reports and assessments the Grand National Assembly of Turkey deliberates the administration and accountability responsibilities of public administrations about the acquisition and utilisation of public resources (KMYKK, article 41).

3.1.2 The Regulations Regarding the Performance-Based Management

Performance management is to take and implement required precautions for assessing and developing the performance of all employees, departments and processes in order to attain institutional success (Şentürk, 2005:28).

¹Top executives are the top administrators in the ministries and in other public administrations while it is the Governor for Provincial Special Administration and the Mayor for the municipalities. In the ministries the top executive is determined by the President (KMYKK, article 11).

With Public Finance Management and Control Law it is sentenced that in order to realise performance-based administration public administrations is to make strategic plans within the scope of “Participation Principle”. It is also mentioned that the budgets of public administrations should be prepared in compliance with the mission, vision, strategic aim and targets of the strategic plans and they should be based on the basis of performance (Erüz, 2005:67). The compliance of the budgets of public administrations with performance indicators and other aspects of performance-based budgeting is determined by the President. The performance indicators that is determined to be appropriate for the related public administration by the President take place in the budgets of these institutions. Performance audits are made in the context of these indicators (KMYKK, article 9).

Within the context of the understanding of performance-based administration it is required to compile budget related statistical data more neatly and in a manner that meets all kinds of necessities. About financial statistics, it is sentenced that public accounting system should be regulated in line with these criteria. The aim of the public accounting system is efficiency. It is based on international standards. Financial statistics are prepared in line with international standards and within the framework of the principles of integrity, reliability, usefulness, methodological validity and accessibility (KMYKK, article 52). Financial statistics are prepared by related institutions in line with the determined standards and sent to the Ministry of Treasury and Finance. The related statistics are compiled by the Ministry of Treasury and Finance. The statistics should be easily accessible. This, in turn, aims to realise financial transparency and accountability (Öz and Kaplan, 2005: 248). The statistics of a certain year is evaluated by the Court of Accounts and the evaluation report prepared for this purpose is submitted to the Grand National Assembly of Turkey and the Ministry of Treasury and Finance. This evaluation is made for accuracy, reliability and conformity to the predetermined standards (KMYKK, article 54).

3.1.3. The Regulations Regarding the Budget System

In the Law no. 1050, the types of budget were regulated as general budget, supplementary budget, special budget and affiliated to the budgets the circulating capital budget. With the regulations in the Law no. 5018, types of budget are regulated as Central government budget, budgets of social security institutions and budgets of local administrations.

Central government budget consists of the budgets of public administrations included in the charts I, II and III attached to this Law (KMYKK, article 12). Central government budget law is a law that presents the estimations of revenue and expenditure of public administrations within the scope of central administration permits and authorises the implementation and conduct of these estimations. In Chart I attached to the Law, general budget administrations; in Chart II special budget administrations; in Chart III regulatory and supervisory agencies are included (Arslan, 2004:3-4; Pehlivan, 2016:106-109; Tüğen, 2010; Öztürk, 2017:24; Mutluer, Öner and Kesik, 2005:188-189).

With the amendments in the Law no. 5018, supplementary budgets, funds and circulating capital budgets were abated. This abatement is an appropriate step for ensuring the integrity, transparency and productivity in terms of the utilization of public resources, for avoiding waste of resources and irregular processes (Arslan, 2004:5). With the identification of the budgets of social security institutions and the transfer of the budgets of regulatory and supervisory agencies into the scope of central government budgets, the scope of the budget has enlarged, and it has become more meaningful as it is. Both the enlargement of the scope of the budget and the re-regulation of administrations with supplementary budgets in a manner to be included under central government budget are appropriate changes in terms of financial discipline.

According to Law no. 5018 a performance-based budget system is developed. The basic feature of performance-based budgeting is that in addition to increasing the efficiency and productivity in the distribution of and utilization from resources, it aims to ensure financial discipline. Ensuring financial discipline necessitates medium- and long-term approach. In this respect, the most significant medium is the strategic plan (Yılmaz and Susam, 2005: 117-118). Therefore, according to Law no. 5018, budgets are to be prepared, implemented and controlled according to the performance measures in compliance with strategic plans. Besides, when preparing the budgets, next two years' forecasts should also be prepared. In this way, a transition process to a 3-year budgeting (multi-annual budgeting) is initiated (Kesik, 2005b: 52).

With an amendment in Law no. 5018 as of 2020 it is decided to actualise the “performance-based program budget” reform. The title of the 9th Article of the Law no. 5018 is altered to be “Strategic Planning and Performance Based Program Budget” (KMYKK, article 9). According to Law no. 5018 9th article, it is sentenced that “*public administrations prepare their budgets in compliance*

with development plan, Presidential programme, medium-term programme, medium-term financial plan, Presidential annual programme, strategic plans and the programme structure and based on performance.”

With the Law no. 5018 the budget code structure changed and a transition to analytical budget system was made. According to the 15th article of Law no. 5018 it is sentenced that *“The parts of the statement of expenditure of the central government budget law is prepared for each programme and based on the analytical budgeting classification”*.

Another important arrangement brought by the Law no. 5018 is a transition in budgets from cash basis accounting system to accruals accounting system (Erüz, 2005:70). In the 51st article of Public Finance Management and Control Law it is expressed that *“Public revenues and expenditures shall be indicated in the accounts of the fiscal year of their accrual. Budget revenues shall be booked in the year of collection and budget expenditures in the year of payment”*. Therefore, accruals accounting system is sentenced in the Law (Öz and Kaplan, 2005:248-249). The accounting executive is responsible for fulfilling these services and for keeping the accounts in due form, transparent and accessible. The accounting executives submit necessary information and reports to public administrations on a regular basis (Saraç, 2005:148).

An exemption to becoming law before entering the financial year is admitted with the Law no. 5018. Accordingly, *“In the event that the appropriations in the budgets of public administrations included in the central government turns to be insufficient, or in order to carry out unforeseen services, a supplementary budget can be prepared in a way to capture revenues to meet expenditures”* (KMYKK, article 19).

An arrangement is also made for covert appropriation in the Public Finance Management and Control Law. According to the Law, the amount of covert appropriations (the total of covert appropriations allocated in the relevant year) can not exceed five per thousand of the sums of the initial budget appropriations (KMYKK, article 24). The most important difference between the old regulation and the new regulation accepted with the Law no. 5018 is that there is now no limit to covert appropriations (Saraç, 2005:136).

Another important arrangement accepted with the Public Finance Management and Control Law is that *“no donation or grant may be collected by any real or legal person in return for or in relation to a public service or under similar denominations”*. Besides all kinds of donations and grants made

to public administrations are recorded as revenue (KMYKK, article 40). This arrangement aims at public associations and foundations. With this arrangement, government's efficiency of income appropriation has been increased (Öz and Kaplan, 2005: 253).

In Turkey there are two legal foundations of capital budget, namely the Constitution and the Public Finance Management and Control Law no. 5018. Following the elections held on June 24th, 2018 a transition from the parliamentary system to was experienced in Turkey and this, in turn, necessitated some crucial alterations both in the Constitution and the Law no. 5018. In this context, one of the fields to the re-arranged is the capital budget.

Together with the actual transition to Presidential Government System following the elections held on June 24th, 2018 the Council of Ministers and the Prime Ministry were abandoned and from that date on as an executive organ the Presidency has been responsible for the preparation of budget. While the executive organ had the authority to propose motion to the Grand National Assembly of Turkey under the name of "Draft Law" in the parliamentary system, in the Presidential Government System the authority to propose motion is given to the President under the context of "budget law proposal", the authority to propose bill of law except for budget law is given to the Grand National Assembly of Turkey. On that sense Presidential Government System presents a balanced control system between legislative and executive powers (Yeğen, 2020:156).

Another alteration is related to the authorised institutions for the preparation of capital budget. With the transition to Presidential Government System significant changes have been made in administrative organisation and the Directorate of Strategy and Budget that is affiliated to the Presidency was constructed. Again, the Undersecretariat of Treasury and Ministry of Finance were merged, and the organizational structure of the Ministry of Treasury and Finance and its duties were determined (The Presidency of the Republic of Turkey, Directorate of Strategy and Budget, 2020:6-7). In the parliamentary system, the Ministry of Finance and the Ministry of Development functioned as institutions that direct public administrations in terms of budget preparation and that ensure the initiation of the process. However, together with the transition to Presidential Government System, the duty of preparing budget belongs to the Ministry of Treasury and Finance and the Directorate of Strategy and Budget of the Presidency (Yeğen, 2020:158).

The legislative amendments about the preparation, submission and delegation of bill of budget law of central administration made together with the transition to Presidential Government System are as follows (The Presidency of the Republic of Turkey, Directorate of Strategy and Budget, 2020:7; Çalışkan, Kaya and Malak, 2020:730-731; Küçükaycan and Çelikay, 2019:341-345):

- In the context of the amendment in the Law no. 5018 the Presidency prepares central administration bill of budget law and for this purpose ensures the coordination among related public administrations. Besides, in accordance with Presidential decrees no. 1 and 13, it conducts the preparatory works of the bill of budget law of the Directorate of Strategy and Budget and the Ministry of Treasury and Finance in a coordinated manner.
- While Medium-Term Programme (OVP) and Medium-Term Financial Plan (OVMP) were prepared by the Ministry of Development the Ministry of Finance respectively, it is rearranged that it would be conjointly prepared by the Directorate of Strategy and Budget and the Ministry of Treasury and Finance.
- The authority of the admission of Medium-Term Programme (OVP) is given to the Presidency. In this context, it is ensured that the budgeting process would be initiated with the publication of the OVP approved by the President in the Official Gazette.
- With the arrangement it is decide that instead of High Planning Council Medium-Term Financial Plan (OVMP) would be approved by the President and would be published in the Official Gazette.
- It is ensured that the call for budget and its appendix, budget preparation guide, investment circular and its appendix, investment programme preparation guide would be prepared by the Presidency.
- It is ensured that the bill of revenue of government budget that is a part of central administration bill of budget law would be prepared by the Presidency. Accordingly, it would prepare the draft revenue budget proposal based on the estimation of revenue formed by the Directorate of Strategy and Budget and the Ministry of Treasury and Finance.
- The regulation that public administrations submit revenue and expenditure proposals to the Ministry of Finance and investment proposals to the Ministry of Development was changed and accordingly, the revenue and

expenditure proposals of the public administrations would be submitted to the Presidency.

- It is also ensured that central administration bill of budget law would be submitted to the Grand National Assembly of Turkey at least 75 days before the beginning of fiscal year by the Presidency, instead of by the Council of Ministers.

3.1.4. The Regulations Regarding the Financial Auditing

The Public Finance Management and Control Law no. 5018 broadens the scope of financial control and audit. The concepts of internal control and internal audit are accepted for public institutions with the Public Finance Management and Control Law no. 5018. In the Law, internal control is defined, the aim, structure-functioning, internal audit, the duties of internal auditor, the qualifications and assignment of internal auditor, Internal Audit Coordination Board and the duties of the board are arranged (Kaya, 2005:101).

Regarding auditing, a distinction should be made among “internal control”, “internal audit” and “external audit”. In the internal control, significance is given to pre-expenditure control process and the implementation of internal control is not an activity authentication but a compliance with laws authentication. On the other hand, internal audit is an activity authentication. Because internal auditors who are internal audit personal are responsible of evaluating the administration and control structures of public administrations based on objective risk analysis, analysing the efficient, economic and productive utilization of resources and making suggestions, making supervision of legal conformity in the post-expenditure process and performing other duties assigned with the Law (Öz and Kaplan, 2005:257).

Internal control is defined as “*Internal control encompasses financial controls and other controls comprising organizational, methodology, procedural and internal audit established by the administration in order to ensure that the activities are performed in an effective, economic and efficient way in accordance with the aims, defined policies of the administration and with legislation, the assets and resources are protected, the accounting records are held correctly and completely, the financial information and management information are produced in time and securely*” in the Public Finance Management and Control Law. The standards and procedures related to the financial management and internal control processes is defined by the Ministry of Treasury and Finance

and those related to the internal audit by the Internal Audit Coordination Board. Besides, these institutions ensure the coordination of the system and provide guidance to public administrations (KMYKK, article 55).

In the implementation period of the Law no. 1050, a centralised pre-expenditure financial control system was being applied by head of budget department and accountings affiliated to the Ministry of Finance. Together with the Law no. 5018 the pre-expenditure control duty is assigned to public administrations and turned to be an activity performed in the context of administrative responsibility. This duty would be fulfilled by financial services unit and the units of expenditure in the public administrations (such as general directorates) (Kesik, 2005a:109). The financial control authority would not work on behalf of the Court of Accounts or the Ministry of Finance, but instead work under the top executive and exercise the power on behalf of him.

Following the Law no. 5018, pre-expenditure visa and registration authorities of the Ministry of Finance and the Court of Accounts were entirely withdrawn. Besides, with the introduction of internal audit through the Law no. 5018 the supervisory boards have been repealed (Bayar, 2003:57-58). Hence, the authority regarding the utilization and auditing of public resources were transferred from political authorities to public top executives who are bureaucrats (Saraç, 2005:139).

Internal control and internal audit are different from each other, but they are closely related (Kaya, 2005:99).

Internal audit is defined as “*an activity of providing independent and objective assurance and consultancy, which is performed in order to improve and add value to the activities of the public administrations by evaluating whether the resources are managed in conformity with the principles of economy, effectiveness and efficiency, and by providing guidance*”. Internal audit is performed by internal auditors. Taking into account the structure and personnel number of public administrations, upon the positive opinion of the Internal Audit Coordination Board, internal audit units may be established, which are directly subject to the top managers (KMYKK, article 63). The financial management and control systems of public administrations consist of spending units, accounting and financial services, ex ante financial control and internal audit (KMYKK, article 57).

The purpose of internal audit is to remove the inconveniences in the implementation and to ensure better functioning of the process. External audit

is related to the accountability of the institutions and expresses post-expenditure auditing. External audit is the evaluation of the results of activities by an external institution. The external audit performed by the Court of Accounts is regulated with the Law no. 5018 and the Law on the Court of Accounts no. 6085. In the Law no. 5018 it is expressed that *“The purpose of the ex post external audit to be performed by the Court of Accounts is to audit the financial activities, decisions and transactions of management in terms of their compliance with the laws, institutional goals, objectives and plans, and to report their results to the Turkish Grand National Assembly within the framework of the accountability of public administrations within the scope of general government”* (KMYKK, article 68).

Among the purposes of the external audit performed by the Court of Accounts consolidation and dissemination of the responsibility of accountability are of importance. The Court of Accounts performs the function of external audit in two ways: regularity audit and performance audit (Selen and Taytak, 2017; Avcı, 2016:388; Özen, 2008:255). Regularity audits are carried out through; a) *determining whether revenues, expenditures and assets of public administrations and the accounts and transactions of these institutions are in compliance with laws and other legal arrangements; b) giving opinion on the reliability and accuracy of financial reports and statements of public administrations, by evaluating all kinds of supporting and necessary documents; c) assessing financial management and internal control systems* (Court of Accounts Law no. 6085, article 36).

Performance audits are carried out through measuring the activity results related to the objectives and indicators determined by administrations within the framework of accountability (Court of Accounts Law no. 6085, article 36). The main purpose of external audit is performance auditing (Öz and Kaplan, 2005:258).

When internal audit has the characteristic of advisory service, it may be claimed that the only control mechanism that the authorities who utilises public resources would encounter is the external audit performed by the Court of Accounts (Akbeý, 2005:183).

4. Conclusion

Based on the administrative mentality that globalisation, and knowledge-based society necessitate a requirement of alteration in the public financial management

systems in the world has emerged and the endeavours of re-structuring have gained pace lately.

With the requirement of change that initiated following the liberalisation in Turkish economy in the post-1980 period, the necessity of solving the problems experienced in public financial management system has come into prominence. In the context of re-structuring endeavours in public management, some fundamental changes were made in the financial structure. With the Public Finance Management and Control Law no. 5018, the financial management system has been re-structured in Turkey. The General Accounting Law no. 1050 was repealed, significant regulations have been made regarding public finance, budgeting, performance-based management and auditing.

The Law no. 5018 that has brought about some quite crucial developments to the public financial management system in Turkey in terms of the utilisation and auditing of public resources and that was prepared in accordance with the EU norms and international standards; brings significant changes in terms of ensuring budget unity, the proliferation of financial transparency and accountability, the efficient, economic and productive utilisation of public resources in accordance with strategic management understanding and the realisation of an efficient post-expenditure audit. Moreover, public financial management understanding formed with the new arrangements create a balance of authority and responsibility in the expenditure process, and express an understanding that adopts medium-term expenditure system, that is in compliance with multi-annual budgeting, that is based on accruals accounting, that grounds its activities on cost-benefit and efficiency analysis, that emplaced internal control system, and that realises performance audits in addition to regularity audits during internal and external audits.

Financial control provide assurance to the government, parliament, society and related parties about whether public resources are utilised efficiently, economically and productively, and in compliance with the determined aims and with the related legislation. The efficient implementation of the financial control system that is brought about by the Law no. 5018, would in effect increase the efficiency and success of the other decrees of the Law in the implementation phase.

In order the Law no. 5018 to be implemented in the best manner, it is crucial to develop the administrative capacity of public administrations. Besides, the regulations to give the expected results in terms of productivity and efficiency

in the public sector would depend on the elimination of the problems and the well-functioning of the system.

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CHAPTER XV

STRUGGLING WITH COVID-19 OUTBREAK IN THE FRAMEWORK OF GLOBAL PUBLIC GOODS

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1. Introduction

The potential global reach of infectious diseases is exemplified by the Black Plague, which caused serious social, economic and political consequences in Europe, taking nearly 200 million lives between 1347 and 1351. The Spanish flu, which emerged just over a century ago, killed around 50 million people. The world, which has witnessed many epidemics such as Asian Flu, SARS, HIV / AIDS, Ebola, and MERS, is facing the COVID-19 outbreak today.

As in past epidemics, the spread of COVID-19 has also been facilitated by international transport, leading to more than 120 million infections worldwide and over 2.5 million deaths from the first cluster of cases in Wuhan, China, from December 2019 to March 2021. Countries struggling with the COVID - 19 epidemic aimed to prevent the spread of the epidemic with practices such as “quarantine”, closure “and” social distance “, on the other hand, as economic activities almost came to a standstill they faced a great recession (Anderson et al., 2020).

Today, practices such as social distancing, effective quarantine practices, treatment regimens, vaccine development studies, anti-viral drug and herd immunity in the fight against COVID - 19 still maintain their importance and the resulting benefit is spreading to all humanity. On the other hand, in the effective

fight against COVID-19, there is no competition between individuals and no one can be excluded from the benefit obtained. This is why the fight against COVID - 19 is addressed in the context of global public goods.

In the study, first of all, the definition and classification of global public goods is given, and the concept of global public goods is dealt with theoretically. In the second part of the study, the COVID - 19 epidemic, which both caused deaths and negatively affected the welfare of billions of people and led to an unprecedented deep economic crisis, is addressed with macroeconomic indicators. The effects of these measures on the economy, as well as the medical and public health measures to be taken for the control of the epidemic, should be evaluated. The theoretical reasons why the COVID - 19 epidemic, which constitutes the main subject of the study, should be considered as a global public good is discussed and the study is concluded.

2. Global Public Goods: Conceptual Framework

For the first time, global public goods were systematically examined with the study conducted by the United Nations Development Program (UNDP) in 1999 and started to find more place in today's financial literature (Başaran, 2007: 91). In 2001, a report on the protection of global public goods was published by the World Bank, and in this report, global public goods; It is defined as a set of goods, resources, services and political systems with cross-border externalities that are necessary for development goals and poverty alleviation and are realized only by the joint action of developed and developing countries (Ferroni & Mody, 2002). In the study published by the European Union Commission in 2002, it was stated that the concept of global public goods is an important contribution to the common good, emphasizing the increasing importance of global public goods based on international performance in order to ensure sustainable development (European Commission, 2002: 1).

It is seen that the publicity and globality features of global public goods come to the fore in the definitions of global public goods (Başaran, 2007: 91). In the definitions that highlight the publicity feature; while the concepts of non-rivalrous in consumption of public goods and non-excludable from consumption of goods are emphasized, it is stated that the benefit of global public goods should include the whole world and even future generations in the definitions that emphasize the globality dimension (Kaul et al., 1999: 16).

Global public goods are also characterized as public goods, where there is non-rivalrous in consumption and non-excludable from the consumption of the goods. In this context, even if the number of users of the goods defined as public goods increases, the individual benefit remains the same, and the marginal cost of each individual utilizing the product in question remains as zero. On the other hand, the benefit provided by public goods spreads to the whole society and no one is excluded (Savaşan, 2016: 163).

In the definitions that emphasize the global nature of global public goods, it is stated that the access area of the benefit (loss) of public goods goes beyond local, national or regional borders. In this case, it can be said that the lack of competition and non-excludable in consumption, which are the basic characteristics of public goods, are far beyond the individual, nation, region and present generations (Feachem and Sachs, 2002: 6). In addition, as a result of globalization, the disappearance of the borders of the country and the widespread influence of national problems and the conflict or incompatibility of policies implemented by one country with other countries creates negative effects on the solution of the problems, but also makes the policies that countries implement alone ineffective (Akdemir and Şahin, 2006: 6). In this context, such as biosphere, biodiversity, environmental research, energy research, water resources, waste management, forestry policy, fisheries policy, environmental policy, peacebuilding, banking and financial services, technological research and development, free information flow, HIV / AIDS such as fight against diseases, control of infectious diseases, and health policy are included in the scope of global public goods (Mancarenhas and Sandler, 2005, p. 1114 - 1115).

3. Classification Of Global Public Goods

Global public goods are basically classified according to their characteristic structures, sectors and nature, and these criteria enable a better perception of the concept of global public goods.

The classification of the consumption of global public goods into two basic characteristics, which are expressed as non - excludable, is defined as the classification according to the degree of publicity. According to the degree of publicity, global public goods are summarized under three subtitles as “global pure public goods”, “global impure public goods”, “global club goods” (Cornes and Sandler, 1999: 9).

Table 1: Classification of Global Public Goods According to the Publicity Degree (Anand, 2002)

	Rivalrous	Non-rivalrous
Excludable	Private Goods	Global Club Goods (cross-border parks, satellite systems, waterways, international space station)
Non- Excludable	Global Impure Public Goods (reducing the impact of acid rain, ocean fishing, control of organized crime)	Pure Global Public Goods (limiting global warming, preventing the spread of infectious diseases, strengthening the ozone layer, scientific discoveries and knowledge)

Table 1 includes the classification of global public goods according to the degree of publicity. Goods and services such as the prevention of infectious diseases and scientific inventions with non-rivalrous consumption and non-excludable features, are included in the pure global public goods category. On the other hand, goods and services such as satellite systems, international space stations, where there is non-rivalrous in consumption but excludable is possible, are included in the category of global club goods. Reducing the effect of acid rain is classified as a global impure public good, where there is rivalrous in consumption but it is not possible to excludable it (Anand, 2002: 217).

Another classification of global public goods is the sectoral classification in which the benefits of global public goods to sectors are taken into account. Two different classifications that complement each other's deficiencies regarding sectoral classification are encountered. The first of these classifications is the classification made by Morrissey, Te Velde and Hewitt (2002) that examines global public goods under five main headings as environment, health, information, peace / security and governance. The combating infectious diseases are evaluated under the heading of health (Morrissey et al., 2002: 39). The authors also enriched the sectoral classification with the core and complementary global public goods approach used by the World Bank.¹

¹ According to the core activity-complementary activity distinction, direct activities towards the production of global public goods qualify as core activity. Complementary activities are defined as activities that make countries ready to consume global public goods created by core activities or contribute to the production of global public goods (contributing to core activities).

Table 2: Sectoral Classification of Global Public Goods (Morrisey et al., 2002: 17)

	Public Good	Core Activity	Complementary Activity	
			Production	Consumption
Environment	International	Reducing Emission	Research	
	National	Protection of Natural Resources	Supporting Agriculture	Poverty Alleviation
Health	International	Eradication of Communicable Diseases	Investigation of Diseases	Health Service
	National	Preventive Health Services	Health System	
Information	International	Research Centers	Internet Services	Global Networks
	National	Education Services	Universal Education	Schools
Peace/ Security	International	Prevention of Deadly Conflicts	Peacekeeping United Nations Security Council	
	National	Crime Reduction	Public order	Poverty Alleviation
Governance	International	Global Institutions	Investigations	Financial Stability
	National	Good Governance	Management Capacity	Equality

In the sectoral classification made by Gardiner and Le Goulven, global public goods are evaluated in four different groups according to their environmental, social, economic and institutional characteristics. In the classification in Table 3, taking into account the features of “excluded” and “non - rival being a competitor in consumption” in the benefits and costs of global public goods, the problems encountered in the provision of these goods and services and the global public damages that occur as a result are at the forefront.

Table 3: Sectoral Classification of Global Public Goods
(Gardiner and Le Goulven, from 2002 as cited by Dedebeek, 2015: 38)

Classification / Types of Global Public Goods		Benefits		Nature of supply problem	Corresponding global public bads	Costs	
		Non-excludable	Non-rival			Non-excludable	Non-rival
Environmental	Oceans	Yes	No	Excessive Use		Partly	Yes
	Atmosphere (climate)	Yes	No	Excessive Use	Global Warming Risk	Yes	Yes
	Biodiversity	Yes	Yes	Excessive Use	Ecosystem	Yes	Yes
Social	Human Rights	Partly	Yes	Insufficient Usage (Access Problem)	Abuse and Discrimination	Partly	Yes
	Struggle with poverty	No	No	Insufficient Supply	Crime, Corruption and Inequality		
	Health	Yes	Yes	Insufficient Supply	Infectious Diseases such as HIV, Malaria	Yes	Yes
	Peace	Yes	Yes	Insufficient Supply	War and Conflict	Partly	Yes
Economic	Efficient Trading	Partly	Yes	Insufficient Supply	Divided Markets	Yes	Yes
	Financial Stability	Partly	Yes	Insufficient Supply	Financial Crisis	Yes	Yes
institutional Infrastructure	Internet (physical and virtual infrastructure)	Partly	Yes	Insufficient Use	Internet Barriers	Partly	Yes
	Information	Partly	Yes	Insufficient Use	Information Barriers	Partly	Yes
	Good Governance (Rule of Law, Equality, Justice, Democracy)	Partly	Yes	Insufficient Supply	Corruption and Injustice	Partly	Yes

The main difference between the classification made by Morrissey et al. and the classification made by Gardiner and Le Goulven is which goods are accepted as basic global public goods or not. For example, while Gardiner and Le Goulven consider financial stability and poverty alleviation within the scope of basic global public goods and services; Morrissey, Te Velde and Hewitt consider financial stability and poverty alleviation as complementary activities in the production of global public goods. Moreover, Morrissey, Te Velde and Hewitt consider all goods that contribute to the production of these goods as global public goods, in addition to the basic services used in the production of global public goods (Dedebek, 2015: 37).

In the classification made according to the nature of publicity, global public goods are generally; They are classified into three categories: spontaneous existence, subsequent production, or goods that emerge with certain results (Kaul et al., 1999: 452). Natural global public goods are physically existing goods such as seas, oceans, water resources, and the ozone layer. Man-made global public goods can be exemplified as the Internet, information, universal principles and norms produced by people according to the conditions of the time and benefiting all people. In the category of global conditions in which health-related goods and services are included; global public goods, on the other hand, are intangible and beneficial to people in case order, stability and balance are preserved; otherwise, they are classified as damaging goods (Kanbur et al., 1999: 54). In the category of global conditions in which health-related goods and services are included; global public goods are abstract in nature and are beneficial to people in case order, stability and balance are maintained; otherwise, they are classified as damaging goods (Kanbur et al., 1999: 54).

Table 4: Classification of Global Public Goods by Nature (Kaul et al., 1999: 454 – 455)

Global concerns as global public goods: a selective typology						
Class and type of global good	Benefits		Nature of the supply or use problem	Corresponding global bad	Costs	
	Non-excludable	Non rival			Nonexcludable ^a	Nonrival ^b
1. Natural global commons Ozone layer	Yes	No	Overuse	Depletion and increased radiation	Yes	Yes
Atmosphere (climate)	Yes	No	Overuse	Risk of global warming	Yes	Yes
2. Human-made global commons						
Universal norms and principles (such as universal human rights)	Partly	Yes	Underuse (repression)	Human abuse and injustice	Partly	Yes
Knowledge	Partly	Yes	Underuse (lack of access)	Inequality	Partly	Yes
Internet (infrastructure)	Partly	Yes	Underuse (entry barriers)	Exclusion and disparities (between information rich and information poor)	Partly	Yes
3. Global conditions						
Peace	Yes	Yes	Undersupply	War and conflict	Partly	Yes
Health	Yes	Yes	Undersupply	Disease	Yes	Yes
Financial stability	Partly	Yes	Undersupply	Financial crisis	Yes	Yes
Free trade	Partly	Yes	Undersupply	Fragmented markets	Yes	Yes
Freedom from poverty ^c	No	No	Undersupply	Civil strife, crime and violence	Yes	Yes
Environmental sustainability ^c	Yes	Yes	Undersupply	Unbalanced ecosystems	Yes	Yes
Equity and justice ^c	Partly	Yes	Undersupply			

Note: This typology includes primarily issues that are the subject of the case studies in this volume. In addition, it refers only to final global public goods and bads, not to intermediate ones such as global regimes and institutions.

a. Here nonexcludable means that it is difficult for anyone to avoid bearing the costs of the bad.

b. Here nonrival means that one person's being affected by a bad—such as a disease—does not reduce the extent to which others are affected.

c. The demand for these goods emerges to the extent that the overuse of natural global commons or the underuse of human-made global commons assumes alarming proportions.

Another classification of global public goods is the classification of global public goods according to the presentation (supply) technique. The classification made according to the presentation (supply) technique has a structure that determines how the global public good will be produced. In this sense, according to the global public goods presentation (supply) technique; it is classified as summation, best shot technique, weakest link technique and the weighted sum technique (Sandler and Arce, 2002: 196). 196).

Summation: In collecting technologies, which constitute the most common type in the production of public goods, the total amount of public goods is equal to the sum of the contributions of all participants for the goods. Global public goods production function in collection technology is defined as;

$$Q = \sum_{i=1}^n q_i$$

In this place (Q) shows the total supply of global public good, and (q) shows the contribution of (i) country to the production of global public good. Limiting air pollution, establishing public health infrastructure, international parks and rainforest protection activities are presented by collecting technique (Anand, 2002: 219). In the fight against the COVID - 19 epidemic, it can be listed as stocking of goods / services protective equipment that can be offered with the weighted sum technique, testing the population, expanding the hospital treatment capacity (Sandler, 2020: 7).

Best shot technology: It is defined as the production technology that determines the total production amount of global public goods by the amount of contribution made by the country that contributes the most to this product. On the contrary the collecting method, the contribution made by one country does not replace the contribution made by others. The best hitting (strike) technique is expressed as;

$$Q = \max \{q^1, \dots, q^n\}$$

In this place, (Q) shows the total global production of public goods and (qn) (i) the contribution of the decision-making unit to the production of the good in question (Sandler, 1998: 13). Goods such as surveillance technologies, cessation of conflicts by mediators, crisis management team are defined as global public goods offered by this technique (Anand, 2002: 219). For example, the development of the COVID-19 vaccine, inventions to find new antiviral drugs, can be cited as examples for the best shot technique (Sandler, 2020: 7).

Weakest link technology: It reflects the situation where the total production amount of the global public good is equal to the production amount of the country that contributes the least to this production, and the country that contributes the least to production is defined as the weakest link. The Weakest Link Technique is defined by the equation as;

$$Q = \min \{q^1, \dots, q^n\}$$

(Q) shows the total global production of public goods and (qn), (i) the contribution of the decision-making unit to the production of the said good (Anand, 2002: 5). No matter how many measures all countries take in the fight against the

epidemic, which is considered within the scope of global public goods, if a country remains weak in taking measures, the measures taken by others are ineffective. In that case, development aid is directed towards the weakest link and effective quarantine practices are presented with this technique (Sandler, 2020: 7).

Weighted Sum Technique: In this production technique, the production amount of the global public good is equal to the sum of the weight ratios of each country's contribution. In this technique, the production function of the global public good is expressed as;

$$Q^i = \sum_{j=1}^n a_{ij} q^j (i = 1, \dots, n)$$

In this function, it is indicated that (Qi) shows (i) the amount of global public goods offered by the country, (qj), (j) the amount of global public goods produced by the country, (aij), (i) the share of the global public goods produced by the country (j) (Anand, 2002: 4). Interventions that prevent the spread of COVID - 19 and the decrease in the number of positive cases in countries / regions can also be evaluated within the scope of goods / services that can be offered with the weighted sum technique (Sandler, 2020: 7).

4. Covid- 19: Beyond The Epidemic

The new type of corona virus epidemic, which emerged in Wuhan in China and affected the whole world, created a rare and devastating effect on the world economy; Countries with the epidemic have taken measures to restrict mobility such as “quarantine” and “social distance” in order to minimize the devastating effects of COVID-19 on the health system. As countries struggling with the COVID-19 outbreak take strict measures to stop the spread of the virus, it is also seen that economic activities have come to a near halt (Anderson et al., 2020).

In the year 2020, when the epidemic started, it was seen that the GNP decreased by about 4%, but according to the 2020 Global Economic Prospects Report published by the World Bank, 7% of developed economies, 2.7% of South Asian economies, 2.8% of Sub-Saharan African economies, the Middle East and North Africa It is estimated that the economies of Europe and Central Asia will contract by 4.2%, the economies of Europe and Central Asia by 4.7% and the Latin America economy by 7.2%.

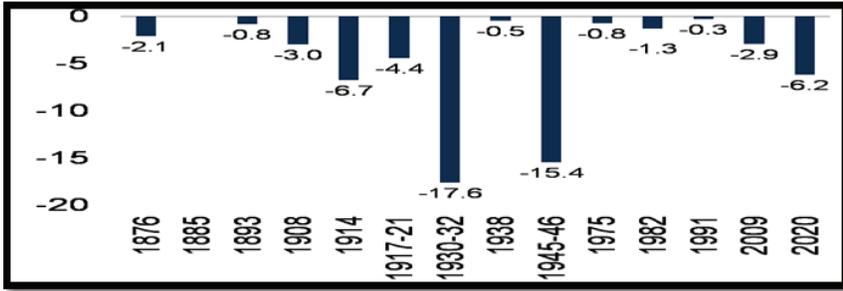


Figure 1: Global GDP Per Capita (%) (World Bank, 2020)

Figure 1 includes global GDP per capita. It is seen that the global economy has experienced 14 global recessions since 1870 and the deepest recession was between 1930 and 1932, when the effects of the World Economic Depression were reflected (World Bank, 2020). It is seen that there was the second deepest recession between 1945 and 1946 and it is known that this recession was caused by World War II. The third largest recession covering the last 75 years occurs in 2020 with the COVID - 19 outbreak. On the other hand, the International Monetary Fund (IMF) states that the COVID-19 outbreak has had more negative impacts than expected in the first half of 2020 and the recovery will be slower than previously predicted. As a matter of fact, by the IMF in 2021, growth in developed economies is 4.3%; 6.3% in developing economies; It is estimated to be 5.4% globally (IMF, 2021). 2021 GDP is 6.5 percentage points lower than predictions before COVID - 19 (IMF, 2020).

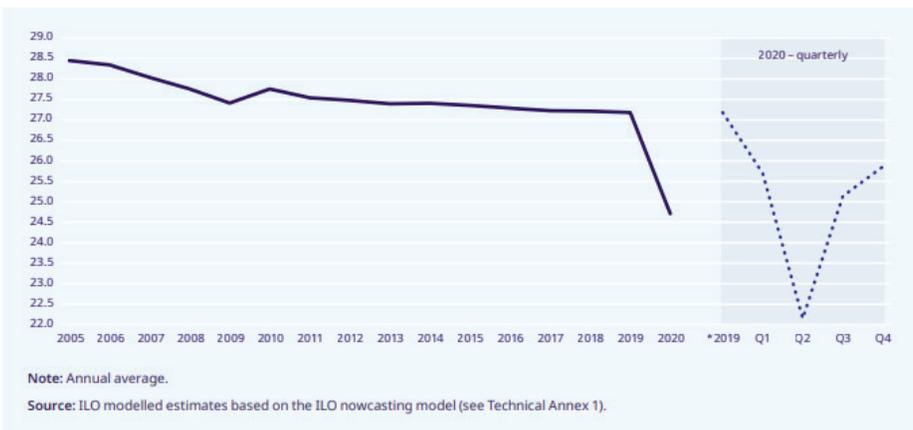


Figure 2: Hours Worked Per Person (Annual Average) in the Working-Age Population (Between 15 - 64 Years Old) in the World (ILO, 2021)

Figure 2 shows that in the 15 years before the COVID-19 outbreak started, the average working hours per person aged between 15 and 64 years fluctuated between 27 and 28 hours per week; It is seen that this rate decreased to 27.2 hours per week in 2019 and to 24.7 hours per week in 2020. Considering that the average working hours decreased by only 0.6 hours between 2008 and 2009 and 2.5 in 2020, it is seen that the impact of the COVID - 19 epidemic on the global working hours is approximately four times greater than the impact of the global financial crisis (ILO, 2021: 5.).

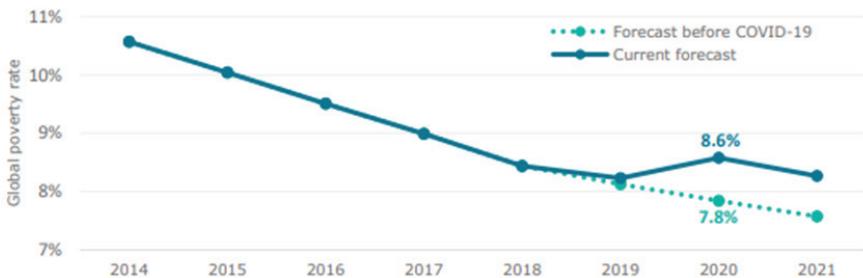


Figure 3: Global Poverty Rate (%) (Committee for the Coordination of Statistical Activities, 2020)

The COVID-19 outbreak first led to a decrease in economic activities, but also caused an increase in the number of people living on the poverty line. As a matter of fact, global poverty, which was 8.2% in 2019 (the share of the world population living on an income of \$ 1.90 per day or less), is projected to increase to 8.6% in 2020 or increase from 632 million people to 665 million people.



Figure 4: Distribution of Global Poverty Rates by Region after the COVID - 19 Outbreak (%) (Committee for the Coordination of Statistical Activities, 2020)

It is estimated that the increase in the rate of global poverty will be higher in low and middle income countries, especially in Sub-Saharan Africa and South Asia (Committee for the Coordination of Statistical Activities, 2020: 60).

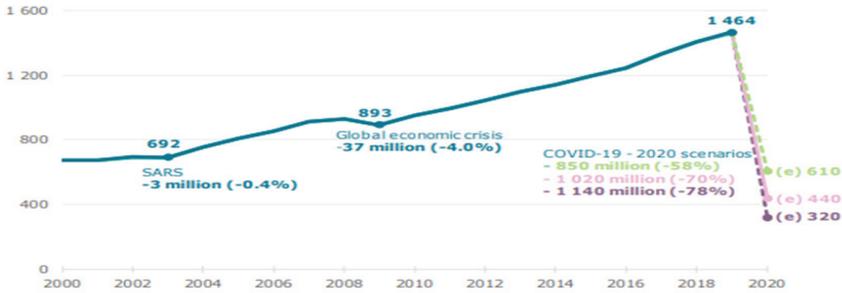


Figure 5: Estimated International Tourist Arrivals for 2020 (Millions)
(UNWTO World Tourism Barometer and Statistical Annex, 2020)

With the COVID - 19 pandemic, there is a 58% to 78% decrease in international tourist arrivals in 2020, depending on the speed of restriction in countries, the duration of travel restrictions and the reopening of national borders. These decreases are seen as 35% in Asia and Pacific regions, 19% in Europe, 15% in America, 12% in Africa and 11% in the Middle East respectively. It is estimated that the largest decline in the travel and tourism industry caused by the COVID-19 outbreak in history will result in a loss of \$ 860 billion to \$ 1.2 trillion in export revenues from tourism. In addition, with this decline in international travel and tourism, it is predicted that 100 to 120 million people working in these sectors are at risk (UNWTO World Tourism Barometer and Statistical Annex, 2020: 1).

In addition to the deep recession created by the epidemic in the economy, it is predicted that the epidemic will leave more permanent traces with the erosion in human capital due to the disruption of food security, lower investments, global trade and supply connections, and the disruptions in education (Gartner, 2012: 307).).

5. Struggle With Covid-19 In The Framework Of Global Public Goods

Although the concepts of public and private goods have been studied in earlier times, its foundations were laid in 1954 with Paul Samuelson's work "The Pure

Theory of Public Expenditure”. Samuelson attributes the evaluation of a good as a public or private good to the absence of “non - excluded” and “non - rival of the good. According to Samuelson, if there is non - excluded in consumption, a good is considered as a public good (Samuelson, 1954: 387). In the studies carried out by Samuelson and Musgrave in 1955, the concept of non-excluded in consumption was stated as a feature that should be for public goods. According to this; The non-excluded feature states that once a good is produced, nobody can be excluded from the consumption of that good and non – rival. As a result, the concept of public goods can be defined as goods in which there is non - excluded and non - rival (Musgrave, 1959: 9 - 11).

In order for the struggle with COVID-19 to be evaluated within the framework of public goods, public goods must have two basic characteristics. First, there is nobody excluded in the benefits to be gained in combating COVID - 19 (Sandler, 2020: 3). In this context, even if the number of beneficiaries of vaccines or treatments developed in the fight against COVID - 19 increases, the individual benefit remains the same, and the marginal cost of each individual benefiting is realized as zero (Savaşan, 2016: 163). Secondly, in the fight against COVID - 19, for example, if herd immunity is gained or effective treatment / drug is developed, other countries also benefit and no one can be excluded from the benefit (Smith, 2003: 475). As a matter of fact, the fight against epidemic diseases appears as a global public good that no country is excluded and every country will benefit from.

In addition to all these, the benefits and costs incurred in the fight against COVID-19 affect the whole world, so the fight against the disease in question has a global nature. As a matter of fact, according to the definition of Kaul et al. (1999), global public goods; It is defined as goods whose benefits cover more than one country group, affect several or preferably all humanity, and extend to both present and future generations, or at least meet the needs of present generations without forcing development options for future generations (Kaul et al., 1999: 9 - 12) . At the same time, the “free rider problem”, which is frequently encountered in public goods, also manifests itself in the fight against the epidemic that has the characteristics of global public goods. While those who do not participate in the costs benefit from the benefits that will arise with the end of the epidemic, they suffer if the problems related to the epidemic cannot be solved.

Some difficulties arise in relation to global public goods due to reasons such as lack of non - rival of global public goods, not possible to exclude, the global

nature of benefits and the problem of free rides. In this direction, developed countries / institutions that have reached the adequate infrastructure and have “the best shot” technique should finance the researches such as treatments and vaccines developed in the fight against COVID - 19, and contribute to the presentation (supply) of epidemics evaluated within the framework of global public goods (Morrisey et al., 2002: 22). As a matter of fact, studies on vaccination are observed in developed countries such as the United States, United Kingdom, France, Germany, Italy and China (Sandler, 2020: 5).

Countries struggling with epidemics, which are evaluated within the framework of global public goods, ignore the benefits provided for the world population while taking into account the marginal benefits that the struggle provides to their people. In this case, each country equates the marginal benefit it provides to its own people with the marginal cost incurred in the fight against COVID-19 and determines the production level. However, the total of the real marginal benefit to be obtained exceeds the marginal cost and as a result, the problem of insufficient presentation (supply) is encountered in the fight against COVID - 19 (Sandler, 2020: 5).

Considering the poor repercussions of the epidemic, access to technologies, management structures and effective treatment / vaccines to comply with a minimum standard of healthcare, provide effective treatment and vaccination, effectively and efficiently monitor and isolate those infected in the least developed countries which are the weakest link, is seen as an important stage in the struggle with COVID-19 (Hein, 2020: 26). However, it is estimated that developed countries, which contain only 14% of the world population, order 53% of COVID - 19 vaccines, and in nearly 70 underdeveloped countries, only one tenth of the population can be vaccinated (BBC News, 2020). In this direction, the lowest level of service delivery of the least developed countries, which are the weakest link in the fight against COVID - 19, determines the effectiveness of combating the epidemic. Nonetheless, it is known that least developed countries are insufficient to finance the costs they will bear to eliminate the epidemic in the fight against the global epidemic (Morrisey et al., 2002: 23). As a matter of fact, there is an enormous mismatch between the health financing needs of the least developed countries and the current health expenditures. While least developed countries account for 84 percent of the global population and 90 percent of the global disease burden, they account for only 12 percent of global health expenditures (Gottret and Schieber, 2006: 2).

However, if the minimum healthcare service standard will be reached in the fight against COVID-19, which is handled within the framework of global public goods, it should be provided not by the insufficient resources of least developed countries, by nations and supra-national actors at the global level. Actors should put the collective interests of world health before their private (national or organizational) interests (Hein, 2020: 24). It is necessary to discuss these collective interests in terms of public goods, to direct actors to undertake certain contributions necessary for the implementation of the common interest. In this regard, the World Health Organization, which has the capacity to create an interface between the health systems of different countries and the implementation of mass vaccination in the fight against the global epidemic, takes a leadership role in the control of infectious diseases, and leads the preparation of projects in line with the needs of the countries, undertakes the task of helping the relevant countries (Shakow, 2005: 36).

The World Health Organization, which is at the center of global health governance, needs long-term sustainable financing (Sridhar & Clinton, 2014). In this context, the World Health Organization will need to mobilize contributions from member states, multilateral organizations such as the World Bank, the European Investment Bank and voluntary organizations in order to take an active role in combating epidemics (Gartner, 2012: 312).

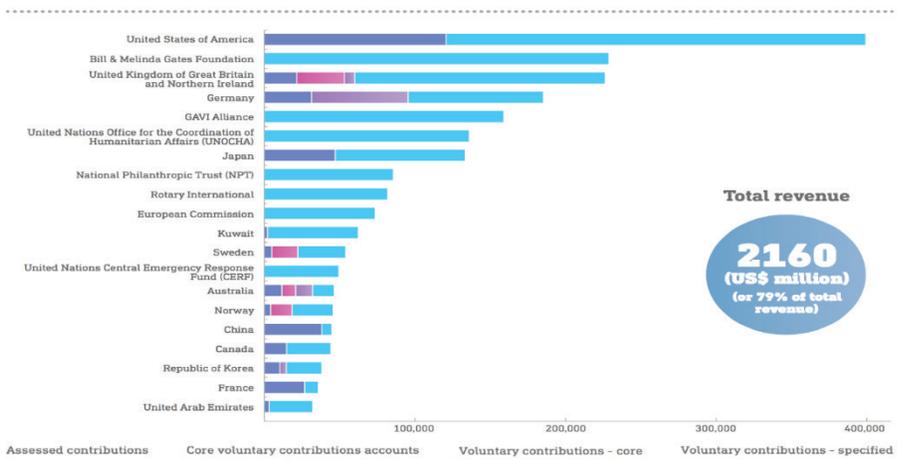


Figure 6: Contributors to the Budget of the World Health Organization (Million \$)
(WHO Results Report Program Budget 2018 – 2019)

In Figure 6, which includes the donors of the World Health Organization, the United States of America constitutes 15% of the WHO funds, thus it is the largest donor. The second largest funder is the Bill and Melinda Gates Foundation, which provides 9.8% of WHO funds. Other countries are also increasing their own financial support for the organization. For example, the UK has announced that it has provided 200 million pounds of new funding to control and combat the epidemic (World Economic Forum, 2020). Approximately 80% of the revenues of the World Health Organization is allocated by 20 countries or institutions. This situation is the main factor that facilitates technical independence and political neutrality, and increases the political vulnerability of the World Health Organization (Sridhar & Clinton, 2014). In addition, the weight of funds in the revenues of the World Health Organization creates an unstable financial situation and reduces the capacity to provide global public goods.

In addition to this, WHO is not the only global health institution in the fight against the COVID - 19 outbreak, and today GAVI; In partnership with UNICEF and WHO, plans to deliver 1.8 billion doses of vaccine to underdeveloped countries at no cost (Reuters, 2021). On the other hand, the Bill & Melinda Gates Foundation, the largest private foundation in global health, supports the development of diagnosis, treatment and vaccines for COVID-19. It also pledged \$ 150 million in financing to countries in Africa and South Asia to scale up COVID-19 detection, treatment and isolation efforts (Bill & Melinda Gates Foundation, 2020).

In the fight against COVID-19, the global supply and financing is realized not only by states but also with the participation of international organizations, companies and non-governmental organizations, and the problem of insufficient supply and financing, which is one of the main problems of global public goods, is minimized in this way.

6. Conclusion

Changes and transformations experienced after globalization have had their effects in the field of finance as well as in many other fields, and various concepts have taken their place in fiscal theory. In this sense, one of the most important effects of globalization in the finance literature is the emergence of the concept of global public goods. Global public good refers to goods that the positive or negative externality resulting from the production or consumption of a good has

effects extending to future generations as well as more than one country / region, and it is non – rival.

With the increasing mobility in international transportation with the effect of globalization, COVID -19, which was first seen in Wuhan, China in December 2019, spread rapidly around the world and caused thousands of deaths and millions of people to be infected. The countries struggling with the COVID - 19 outbreak aimed to prevent the spread of the epidemic with practices such as “quarantine”, closure “and” social distance “. On the other hand, disruptions were observed in agriculture, production, trade and supply chain, and the economy was dragged into a major recession. The worldwide COVID-19 outbreak has left the world’s poorest and most malnourished populations even worse in the context of scarce public resources, poor public health systems, and inadequate social protection. The inadequacy of these countries in effective healthcare services, test kits and vaccination in the fight against COVID - 19 is obvious.

If the fight against COVID-19 is handled within the framework of global public goods, the features of non - excluded and non - rival in consumption come to the fore. Firstly; in the fight against COVID-19, for example, other countries benefit from the benefits that arise in case of gaining herd immunity or developing effective treatment / medicine, and no one can be excluded from the benefit; even if the number of beneficiaries of vaccines or treatments developed to combat COVID-19 increases, the individual benefit remains the same, so there is no competition in consumption. In this context, the fight against the global outbreak emerged as a global public good that no country is excluded and every country will benefit from. Therefore, every stage in the fight against COVID-19 needs to be global, based on the principles of equal and universal access to treatments and vaccines. Developed countries / institutions that have achieved an adequate level of vaccine studies and can make the “best shot” should not seek profit. Rather, it should aim at achieving the widest possible health benefit. On the other hand, the least developed countries, which are in the position of the “weakest link”, need significant additional resources to control the epidemic. While the ongoing epidemic in least developed countries holds to be globally bad (poor) for the whole world, the negative externality dimension of the problem of the epidemic will continue to be reflected as a social cost to the whole world. For this reason, states, non-state actors and international organizations should take an active role in combating the global epidemic and provide minimum health conditions for the whole world.

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CHAPTER XVI

THE ANALYSIS OF RELATIONSHIP BETWEEN THE QUALITY OF PUBLIC ADMINISTRATION AND ECONOMIC GROWTH: A RESEARCH ON THE LOW INCOME COUNTRIES

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1. Introduction

The concept of the quality of public administration started to become important with the acceleration of the flows of globalization and the change of economic power balances in the world in the 1990s. In this context, the concept of governance quality was first used in the report titled “Sub-Saharan Africa: From Crisis to Sustainable Growth” prepared by the World Bank (1989) and the effects of the governance on economic performance was mentioned in this report. In addition to this study, Shah & Huther (1998) were developed an index named the governance quality index for 80 countries and these countries were divided into three groups in terms of governance quality.

The Governance Quality Index consists of the following sub-dimensions.

1. Freedom for speech and accountability,
2. Political stability and nonviolence
3. The efficiency of the government
4. The quality of regulatory
5. Rule of law

6. Prevention of corruption

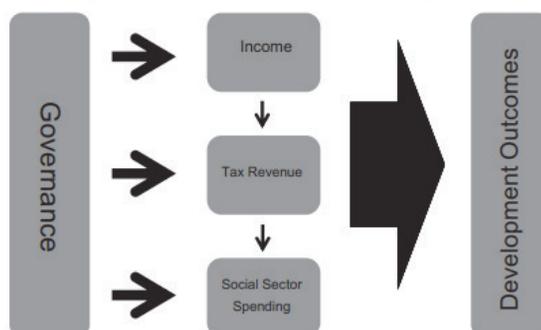
The Governance Quality Index scores of the countries range from 0 (lowest) to 100 (highest). The scores between 0 and 40 represent bad governance, the scores between 40 and 80 represent medium governance, and the scores between 80 and 100 represent good governance.

In this study, The Quality of Public Administration Index developed by the World Bank and calculated since 2005 is used. The quality of public administration is calculated by using 16 indicators consisting such as economic management; (ii) structural policies; (iii) policies for social inclusion and equity; and (iv) public sector management and institutions.

The scores of The Quality of Public Administration range from 1 to 6. 1 and 2 scores represent low quality while 3 and 4 scores represent mean quality. In addition, 5 and 6 scores represent bad quality. The Index predicts that the public organizations are reorganized within the frame of economic rationalization, efficiency and productivity. According to The World Bank (1991), governance is an authority to direct the economic and social resources of a country for this country's economic development. In this context, the government has a decisive importance on economic development and it is expected that increases in the quality of public administration also rises economic performance.

The relationships between quality of public administration and economic development realize via government incomes, tax incomes and social expenditures channels. Furthermore, these channels also relates to each other. As income increases, tax revenues rise. These increases in the tax incomes also encourage economic development by rising social opportunities of the government (Sen, 2014:3).

Figure 1. Governance and Development



Source: Sen, 2014: 3.

Bad governance has caused failed international development policies by impeding suitable and efficient use of the resources in the countries where has important resources. The failure of the economic development policies in the Africa and Middle East countries resulted from bad governance.

Collier (2007) stated that the economic development policies implemented by 76 percent of countries that have the lowest economic growth rates and the highest poverty rates failed due to bad governance and weak economic policies.

Sen (1999) indicated that increases in the democratization trends have encouraged economic development process by emphasizing the political freedoms have an essential importance for economic development.

Davis et al. (2012) emphasized that the institutions have a decisive impact on the relationship between bad governance and economic development. The development levels of the economies that have efficient and democratic institutions are higher than the economies that have inefficient and nondemocratic institutions. In this context, good governance affects economic development positively by increasing institutional quality and by decreasing corruption.

2. Literature Review

The studies examining the relationship between governance quality and economic development increased in the late 1990s. Rivera-Batiz (2002) analyzed the relationship among the governance, democratization, corruption and economic development. The good governance boosted economic growth especially through democratization.

Kaufmann & Kraay (2002) analyzed whether there is a reciprocal relationship between governance quality and economic growth. According to the results of the study, there is a strong and positive relationship between governance quality and economic development. However, the high- income level does not guarantee higher governance standard.

Chauvet & Collier (2004) emphasized that there is a positive relationship between good governance and the economic development. According to the results of the study, bad governance decreases economic growth capacity by 2.3 percent compared to other countries.

Sachs et al (2004) analyzed the impact of the bad governance on the economic development in the African countries. The governance reforms are important to determine the relationship between the governance and economic growth.

Cooray (2009) analyzed the relationship among public expenditure, governance and economic growth by using cross-sectional analysis in 71 countries. The results of the study show that public size and government quality affect economic growth. Increases in the governance capacity affect the economic performance of the countries positively.

Fayissa & Nsiah (2010) examined the relationship between governance and economic development in the Africa. The results obtained from the study showed that the relationship between governance and economic development depends on the type of the economic growth and the economic growth level.

Baland et al. (2010) emphasized that governance is essential for economic growth, but; internal changes in governance should also be analyzed. The internal dynamics impeding or promoting good governance should be analyzed in a country.

Karim et al. (2013) investigated the effect of governance and poverty on economic growth in eight developing countries during the period 2000-2009 by using a dynamic and static panel data model and a simultaneous equations model. Governance affects poverty negatively while political instability and corruption affect poverty positively.

Emara & Jhonsa (2014) analyzed whether there is a statistically significant relationship between the governance quality and economic development. The results indicated that there is a statistically significant relationship between the governance quality and economic development.

Abounoori & Mahbobian (2015) investigated the relationship between good governance and economic growth. According to the results of the study, good governance affects positively by improving institutionalization.

Ahmad (2016) analyzed the effect of the good governance of natural resources on economic growth. The study emphasized that governance principles to be implemented and approached by the authorities in power in any country especially the countries that are poor in good governance of their natural resources,

Mohammadi et al. (2017) investigated the effect of good governance on investment, national income and employment in selected MENA countries. According to the results of the study, good governance has positive impact on the investment, employment and economic growth.

Mira & Hammadache (2017) analyzed whether there is a statistically significant relationship between governance and economic growth. There is a positive relationship between good governance and economic growth.

Sharma (2018) indicated that good governance boosted economic development and welfare in addition to the protection of human rights and civil liberties.

Tharanga (2018) examined the relationship between governance and economic growth by using 145 countries datasets for the period of 2002- 2014 of period. The results showed that corruption has a negative impact on the economic growth. In this study, emphasized political stability must be provided and violence/terrorism indicators and corruption must be controlled in order to ensure success in economic development policies.

Ramadhan (2019) analyzed the impact of good governance and institutions on the economic growth in Indonesia. This study concluded that government performance and institutional quality have a role in driving economic growth.

AlAdlani (2019) analyzed the relationship between governance and economic growth in the Arab countries by using panel data. The results of the study suggest that there is no significant relationship between governance and economic growth in Arab countries.

Vinayagathan & Ramesh (2019) examined the impact of governance indicators on economic growth in Sri Lanka for the period of 1996-2016. There is a significant and positive relationship between government effectiveness and GDP per capita in the long run.

Fawaz et al. (2021) investigated the impact of governance on economic growth in developing countries. According to the results obtained, rule of law and control of corruption have a positive impact on developing countries' GDP per capita income while voice and accountability has a small negative effect on the developing countries' GDP per capita income.

3. Methodology and Data Set

In this study, the relationship between the quality of public administration and economic growth analyzed via cross-sectional regression analysis in the 30 low income countries for 2019. The study is based on Solow (1956) model. The quality of public administration is included to Solow growth model. In this context, the dependent variable of the model is economic growth rate. The independent variables are the quality of public administration, the capital stock and the labor stock growth rates.

Table 1. Data Set

Variables	The Quality of The Variables	Notation	Data Base	Frequency
Economic growth rate	Dependent Variable	y	The World Bank	2019
The quality of public administration	Independent Variable	ef	The World Bank	2019
Capital stock growth rate	Independent Variable	k	The World Bank	2019
Labor stock growth rate	Independent Variable	l	The World Bank	2019

The index value does not vary greatly from year to year. Therefore, the study covers 30 low income countries accessing their datasets for 2019. The cross sectional regression analysis is used in the study due to the data set is restricted. The countries included in the analysis have generally low and medium quality index scores.

Model based on Solow growth model. In the model the quality of public administration is used in addition to the capital and labor stock growth rates. In this context, The model is described as shown in Equation 1.

$$y = \beta_0 + \beta_1 k + \beta_2 l + \beta_3 ef + \varepsilon_t \quad (1)$$

β_1 and β_2 are the output elasticities of capital and labor, respectively. β_3 is the output elasticity of the quality of public administration. The coefficients of the model can be formulated as shown in Equation 2, Equation 3 and Equation 4.

$$\beta_1 = \frac{\frac{\Delta Y}{Y_1}}{\frac{\Delta K}{K_1}} \quad (2)$$

$$\beta_2 = \frac{\frac{\Delta Y}{Y_1}}{\frac{\Delta L}{L_1}} \quad (3)$$

$$\beta_3 = \frac{\frac{\Delta Y}{Y_1}}{\Delta EF} \quad (4)$$

β_1 represents, the effect of increase in the capital stock growth rate 1 percent on the economic growth while β_2 the effect of increase in the labor stock growth rate 1 percent on the economic growth. β_3 indicates the effect of increase in the quality of public administration one unit on the economic growth.

4. Results

Firstly, the descriptive statistics are examined. Descriptive Statistics are given in Table 2. The average economic growth rate is 4.47 percent in the countries including the analysis while the average capital stock growth rate and average labor stock growth rate are 3.45 percent and 0.09 percent, respectively. The variable that has the highest volatility is the capital stock growth rate while the variable that has the lowest volatility is the quality of public administration index.

Table 2. Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Max	Min
y	30	4.47	2.93	8.7	-2.5
k	30	3.45	11.09	25.29	-16.76
l	30	0.09	0.66	8.7	-2.5
ef	30	2.98	0.50	4	2

The countries that have the lowest and the highest scores are given in Table 3. According to Table 3, the country that has the highest economic growth, capital stock and labor stock growth rates is Etiyopia. Bhutan is country that has the lowest capital stock growth rate while Sudan is countries the lowest labor stock growth rate. Etiyopia has the highest quality of public administration index and Guinea and Sudan have the lowest quality of public administration index.

Table 3. Descriptive Statistics by Countries

Variables	Max		Min	
	Value	Countries	Value	Countries
y	8.7	Etiyopia	-2.5	Sudan
k	25.29	Etiyopia	-16.76	Bhutan
l	8.7	Etiyopia	-2.5	Sudan
ef	4	Etiyopia and Bhutan	2	Guinea and Sudan

Heteroscedasticity problem is often encountered in the cross sectional regression analyzes. Heteroscedasticity problem causes that The OLS estimators and regression predictions based on them remains unbiased and consistent, The OLS estimators are no longer the BLUE because they are no longer efficient, so the regression predictions will be inefficient too and Because of the inconsistency of the covariance matrix of the estimated regression coefficients, the tests of hypotheses, (t-test, F-test) are no longer valid. Therefore, the availability of the heteroscedasticity problem in the the cross sectional regression analysis must be absolutely tested. Two different model is estimated due to availability of heteroscedasticity problem in the study. There is heteroscedasticity problem in the first model. Table 3 gives the results of the regression analysis performed without considering the cross section problem. As seen in table 3, the coefficients are not is not statistically significant except the quality of public administration.

Table 4. Cross-Sectional Regression Analysis (No Robust)

Dependent Variable: y				
Variable	coefficient	Std. Error	t	prob
k	0.065	0.045	1.44	0.164
l	-0.875	0.757	-1.16	0.259
ef	2.784	0.975	2.86	0.009*
c	-3.965	2.954	-1.34	0.193

R-Square 0.54

F Stat 4.02 Prob (0.0195)

Breusch Pagan test is used to test the reliability of the results. The results of Breusch Pagan Test are given in Table 5. The Null Hypothesis indicating there is no heteroscedasticity in the model can be rejected at the 1 % significant level. Therefore the results in Table 3 are not statistically reliable.

Table 5. Heteroscedasticity Test

Test	Test Statistic	Prob
Breusch Pagan	6.49	0.0108

The use of the Generalized OLS model is suggested in the heteroscedastic models. In this context, the model is estimated by using Generalized OLS model. Table 6 illustrates the results of generalized cross sectional regression analysis.

Table 6. Cross-Sectional Regression Analysis (Robust)

Dependent Variable: y				
Variable	coefficient	Std. Error	t	prob
k	0.0650	0.028	2.31	0.030**
l	-0.875	0.403	-2.17	0.040**
ef	2.784	1.198	2.32	0.029**
c	-3.965	3.954	-1.00	0.326

R-Square 0.54
F Stat 7.52 **Prob** (0.0011)

As seen in Table 6, all the coefficients are statistically significant at the 5 % level. The capital stock growth rate has a positive impact on economic growth while the labor stock growth rate and the quality of public administration have an impact on economic growth. One unit increase of the quality of public administration increases economic growth by 2.78 percent. An increase in the capital stock growth rate 1 percent rises economic growth by 0.06 percent. The labor stock growth rate has an impact on the economic growth. An increase in the labor stock growth rate 1 percent rises economic growth by 0.87 percent.

5. Conclusion

The term of the quality of public administration started to become important with the acceleration of the flows of the globalization and the change of economic power balances in the world in the 1990s expresses that public management approach based on transparency, the rule of law, ensuring political stability and control of corruptions is developed. It is expected that increases in the quality of public administration encourage economic performance by reducing corruption and by ensuring efficiency resource allocation. In this context, in this study the relationship between the quality of public administration and economic performance is analyzed by using Solow (1956) economic growth model. The findings are corroborated the hypothesis that increases in the quality of public

administration have a positive impact on the economic growth. This hypothesis points out that governments based on principles of equity, transparency and rule of law is essential important for the economic growth.

Especially after the 1990s, important steps towards liberalization and democratization to increase foreign direct investments in the low income countries have been taken and many reforms have been made. Although all low-income countries have a low the score of Democracy Index, they have the same score of economic freedom index as countries with relatively higher income levels. However, insufficiency of infrastructure investments, lack of qualified human capital, political instability and low productivity have impeded economic development and steady growth in the low income countries. The solution of these problems is only possible with strong and rational management.

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