

**PARTICIPATORY DESIGN PROCESS IN POST-  
DISASTER HOUSING PRODUCTION: THE CASE  
OF OCTOBER 30, 2020 IZMIR EARTHQUAKE**

**A Thesis Submitted to  
the Graduate School of  
İzmir Institute of Technology  
in Partial Fulfillment of the Requirements for the Degree of**

**MASTER OF SCIENCE**

**in Architecture**

**by  
Saniye Dilara ÇELİK**

**March 2022  
İZMİR**

## **ACKNOWLEDGEMENTS**

Initially, I would like to thank my esteemed advisor, Assoc. Prof. Dr. Ebru Yılmaz, for her contributions and guidance. She has enlightened my path with her experience, support, unique comments, and suggestions.

Next, I would like to express my gratitude to the valuable jury members of my thesis committee for their comments and contributions.

To my school IZTECH, to AFAD-İzmir Governorship, which gave the necessary permission, and to the Ministry of Environment and Urbanization İzmir Branch Manager, who helped me understand the process better, and finally to the survey and interview participants who are the members of IZDEDA, I owe thank you for your help in preparing this thesis.

I want to thank all my friends who contributed and supported this study with their comments and criticisms.

Eventually, I would like to thank all my family, whose support I have always felt, for their understanding and love. I owe them deeply. I sincerely thank Simone Brolese for his patience, support through all my hardships, and for encouraging me evermore.

## ABSTRACT

### PARTICIPATORY DESIGN PROCESS IN POST-DISASTER HOUSING PRODUCTION: THE CASE OF OCTOBER 30, 2020 IZMIR EARTHQUAKE

A housing problem after a disaster is a problem that can occur suddenly. This thesis will emphasize why participatory design should be preferred, especially post-disaster housing production. Due to the nature of participation, the community can overcome post-disaster traumas in a more comfortable and controlled manner. Society needs to come out of the post-disaster situation with solidarity and unity. Participation can be achieved through solidarity, communication, cooperation, trust, and a sense of belonging.

On the other hand, participatory design answers this urgent problem after the disaster. The thesis aims to examine the concept of participatory design around four main components: actor, process, method, and end product. The first part gives the literature's theoretical explanations and history of participation and participatory design concepts. The second part discussed the post-disaster housing problem, and examples of post-disaster housing projects produced with a participatory design focus were examined. These examples were compared based on the four components of participation. Then, the struggle plan, which was carried out after the devastating October 30 Izmir Earthquake we experienced last year, was examined. For this examination, firstly, information was collected, and then reality measurement was made with survey and interview methods. A study concluded by comparing the statistical data obtained from the questionnaire with the information collected.

**Keywords:** Participatory Design, Housing Production After a Disaster, İzmir Earthquake

## ÖZET

### AFET SONRASI KONUT ÜRETİMİNDE KATILIMCI TASARIM SÜRECİ: 30 EKİM 2020 İZMİR DEPREMİ ÖRNEĞİ

Afet sonrası konut sorunu aniden gerçekleşebilecek bir problemdir. Bu tezde özellikle afet sonrası konut üretiminde katılımcı tasarımın neden tercih edilmesi gerektiği vurgulanacaktır. Katılımın doğası gereği afet sonrası travmalar daha rahat ve kontrollü biçimde atlatılabilir. Toplumun afet sonrası içinde bulunduğu durumdan dayanışma ve birliktelik ile çıkması gerekir. Katılım dayanışma, iletişim, iş birliği, güven ve aidiyetlik duygusu ile gerçekleşebilir. Katılımcı tasarım ise afet sonrası oluşan bu acil probleme cevap niteliğindedir. Tez, katılımcı tasarım kavramını dört ana bileşen etrafında incelemeyi hedefler; bu bileşenler aktör, süreç, metot ve sonuç ürünüdür. İlk bölümde katılım ve katılımcı tasarım kavramlarının literatürdeki teorik açıklamaları ve tarihçesi aktarılmıştır. İkinci bölümde ise afet sonrası konut sorunu ele alınmış ve katılımcı tasarım odaklı üretilen afet sonrası konut projesi örnekleri incelenmiştir. Bu örnekler birbirleri ile katılımın dört bileşeni baz alınarak karşılaştırılmıştır. Daha sonra ise geçen sene yaşadığımız yıkıcı 30 Ekim İzmir Depremi sonrasında yürütülen mücadele planı incelenmiştir. Bu inceleme için önce bilgi toplanmış daha sonra ise anket ve röportaj yöntemleri ile gerçeklik ölçümü yapılmıştır. Anketten çıkan istatistik veri ile toplanan bilgiler karşılaştırılarak sonuca varılmıştır.

**Anahtar Kelimeler:** Katılımcı Tasarım, Afet Sonrası Konut Üretimi, İzmir Depremi

# TABLE OF CONTENTS

LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
LIST OF ABBREVIATIONS.....	x
CHAPTER 1. INTRODUCTION.....	1
1.1. Aim of the Study.....	1
1.2. Research Questions of the Study.....	2
1.3. Framework of the Study.....	3
1.4. Methodology of the Study.....	5
1.5. Challenges of the Study.....	7
1.6. Structure of the Study.....	7
CHAPTER 2. PARTICIPATORY DESIGN IN ARCHITECTURE.....	9
2.1. Implications on Participation.....	9
2.1.1. Definition of the Term of Participation and Conceptual Frame.....	9
2.1.2. Chronological Line of Participation.....	13
2.1.3. Public Engagement and Importance for Community.....	15
2.2. Participation as a Method of Design Process.....	17
2.2.1. Conceptual Framework of Participatory Design.....	18
2.2.2. Chronological Line of Participatory Design.....	21
2.2.3. Components of Participatory Design.....	22
2.2.3.1. Actors.....	22
2.2.3.2. Processes.....	25
2.2.3.3. Methods.....	26
2.2.3.4. Products.....	28

CHAPTER 3. PARTICIPATORY DESIGN PROCESS IN POST DISASTER HOUSING PRODUCTION.....	29
3.1. Post Disaster Housing Problem.....	30
3.2. Operating Participatory Processes in Housing Production.....	32
3.2.1. N. John Habraken’s Approach on Participation.....	33
3.2.2. John. F.C. Turner’s Approach on Participation .....	33
3.2.2.1. WorldBank, John F.C.Turner ve Incremental Approach on Participation.....	34
3.2.3. Henry Sanoff’s Approach on Participation .....	34
3.2.4. Liz Sanders’ Approach on Participation .....	35
3.2.5. An Alternative Approach on Participation: Cooperatives.....	36
3.3. Post Disaster Housing Examples Conducted with Participatory Design Methods .....	36
3.3.1. Examples Throughout the World.....	37
3.3.1.1. Villa Verde Project.....	37
3.3.1.2. Katye Project.....	39
3.3.1.3. Sri Lanka Project.....	40
3.3.2. Examples In Turkey.....	42
3.3.2.1. Düzce Hope Workshop.....	42
3.3.2.2. MEER Project.....	44
3.4. The comparison and evaluation.....	46
 CHAPTER 4. THE CASE OF OCTOBER 30, 2020 IZMIR EARTHQUAKE.....	 49
4.1. General Information and Background of the Project.....	49
4.2. Methods Used in the Analysis of the Case Study.....	55
4.3. The Analysis of the Case Study.....	58
4.3.1. The Findings of the Questionnaire.....	59
4.3.1.1. General Information of the Participants from Container City.....	59

4.3.1.2. The Analysis of the Questionnaire Related to Participatory Design and Its Components.....	63
4.3.1.2.1. Participation Between Actors.....	64
4.3.1.2.2. Participation in The Process.....	65
4.3.1.2.3. Methods of Participation.....	67
4.3.1.2.4. Participation in The Project.....	68
4.3.2. The Findings of the Interview.....	69
4.3.2.1. General Information of the Participants from IZDEDA.....	70
4.3.2.2. The Analysis of the Interview Related to Participatory Design and Components.....	70
4.3.2.2.1. Participation Between Actors.....	71
4.3.2.2.2. Participation in The Process.....	75
4.3.2.2.3. Methods of Participation.....	79
4.3.2.2.4. Participation in the Project.....	81
4.3.3 The Results of Data Triangulation.....	85
4.3.3.1. Actors.....	85
4.3.3.2. Processes.....	87
4.3.3.3. Methods.....	89
4.3.3.4. Products.....	90
4.4. Comparison and Evaluation.....	92
 CHAPTER 5. CONCLUSION.....	 96
REFERENCES.....	102
APPENDICES.....	113
APPENDIX A .....	113
APPENDIX B .....	117
APPENDIX C .....	120

## LIST OF FIGURES

<b><u>Figures</u></b>	<b><u>Page</u></b>
Figure 1: A photo of Villa Verde which shows different individualized units.....	38
Figure 2: A sketch of Katye Project .....	40
Figure 3: A photo of Sri Lanka Project.....	41
Figure 4: A photo of Düzce Hope Workshops' masterplan.....	44
Figure 5: A photo of MEER Project Site.....	46
Figure 6: The location of epicenter of the earthquake .....	49
Figure 7: Project areas where Toki produces housing.....	50
Figure 8: The timeline after the earthquake.....	51
Figure 9: The damaged buildings in Bayraklı after the earthquake.....	52
Figure 10: Photographs from the Container City.....	53
Figure 11: A shot from the conference (10 February 2021).....	54
Figure 12: A shot from the symbolic opening ceremony of IZDEDA (15 April 2021).....	54
Figure 13: A shot of the TOKİ housings in the project area.....	54



# LIST OF TABLES

<b><u>Table</u></b>	<b><u>Page</u></b>
Table 1: Table showing the cooperation-communication ratio of public participation levels in the literature.....	16
Table 2: The table of possible used methods according to the phases of process.....	27
Table 3: Villa Verde Project through participatory components.....	38
Table 4: Katye Project through participatory components .....	40
Table 5: Sri Lanka Project through participatory components .....	41
Table 6: Düzce Hope Project through participatory components.....	44
Table 7: MEER Project through participatory components .....	46
Table 8: The comparison table of projects in terms of participatory components .....	48
Table 9: Reliability analysis.....	57
Table 10: The table shows the demographic data of the survey's participants.....	59
Table 11: The table shows the general information of the survey's participants.....	60
Table 12: Descriptive analysis of participatory design's components through Izmir Earthquake.....	64
Table 13: Table showing the percentage distribution of B.1 questions to answers.....	64
Table 14: Descriptive analysis of part B.1 through expressions.....	64
Table 15: Table showing the percentage distribution of B.2 questions to answers.....	65
Table 16: Descriptive analysis of part B.2 through expressions.....	66
Table 17: Table showing the percentage distribution of B.3 questions to answers.....	67
Table 18: Descriptive analysis of part B.3 through expressions.....	67
Table 19: Table showing the percentage distribution of B.4 questions to answers.....	68
Table 20: Descriptive analysis of part B.4 through expressions .....	69
Table 21: The table shows the demographic data of the interview's participants.....	70
Table 22: The comparison table of projects in terms of participatory components .....	95

## **LIST OF ABBREVIATIONS**

TOKİ	: Housing Development Administration of Turkey
MOEU	: Ministry of Environment, Urbanization and Climate Change
TAMP	: The Disaster Response Plan of Turkey
AFAD	: Disaster and Emergency Management Presidency
LTTE	: Liberation Tigers of Tamil Eelam
EIB	: European Investment Bank
IMF	: International Monetary Fund
MOIA	: The Ministry of Internal Affairs
MOTİ	: The Ministry of Transport and Infrastructure
MOTF	: The Ministry of Treasury and Finance
MOH	: The Ministry, the Ministry of Health
TEDAS	: Turkish Electricity Distribution Corporation
PIU	: Project Implementation Units
MEER	: Marmara Earthquake Emergency Reconstruction
JAK	: Gendarmerie Search and Rescue
UMKE	: National Medical Rescue Team
MOFSS	: The Ministry of Family, Labor, and Social Services
DASK	: Turkish Catastrophe Insurance Pool
IZDEDA	: Izmir Earthquake Victims Solidarity Associati

# CHAPTER 1

## INTRODUCTION

*“Any participation, even in the smallest public function, is useful.”*

*John Stuart Mill*

### 1.1. Aim of The Study

This thesis aims to ascertain that participatory design is a better alternative for post-disaster housing production than conventional housing. Participation as a political spectacle has been in our lives since Ancient Greece; it integrates anytime with democracy. With the democratization of planning and design, participation in design has been augmented. Therefore, participatory design reveals a process in which the user is involved. The general inspiration of this thesis is that if the user can be integrated into the project, the design projects will be more successful.

Participation can be encountered in every human-related phenomenon; it is a social concept. Therefore, it has been expressed by many disciplines and has created subtitles. It first appeared as participation in urban planning, then its popularity increased and outstretched to other design fields. Some components make and maintain participation. The first component for participation in design is the actor; actors are stakeholders who will ensure participation. The other component is the process because participation is not an instantaneous phenomenon but a sequence that spans and progresses over time. The third component, the method, addresses this process. The fourth and final component is the product; participation is done to achieve a goal. Accordingly, in this study, the participatory design will be discussed the relationships with these four components.

The focus of this deconstruction will be the relationship of participatory design with post-disaster housing production. To explain the unpredicted relationship, the solution to the concussion experienced after the disaster passes through both psychological and physical solidarity. The participatory design creates a common ground for these two channels of solidarity. When earthquake survivors develop ideas for the houses to be designed, people will feel more belong to that place. Another point that can

provide psychological solidarity is that the opinions of the earthquake victims will be gathered, and it will be easier to determine their real needs. In line with these needs, more suitable housing will be produced. Participatory design is a more undoubtedly advantageous option to solve the post-disaster housing problem.

In this thesis, the projects produced to solve the post-disaster housing problem with participatory design will be examined within the framework of participation. After this review, the process developed due to October 30, 2020, İzmir Earthquake, an up-to-date example will be conveyed, and an evaluation will be made on the questionnaire and interview data prepared for reality inquiry.

## **1.2. Research Questions of The Study**

This research concentrates on the concept of participatory design and its components. In participatory design, the user is retained in the process. Thus, more effective designs are created for the user's actual conditions; these designs increase the user's awareness of his/her environment. The main point of this thesis is to solve the post-disaster housing problem by using participatory design. The main questions that this thesis focuses on are:

- What are the components of participatory design?
- When the post-disaster housing production procedure is evaluated, can this process be designed more effectively with participatory design?
- Which suggestions can be deducted from the case study analysis for the future post-disaster processes?

In addition to the main problems, the questions that come with the case study of the October 30, 2020, İzmir Earthquake are:

- Could the housing problem after the October 30, 2020, İzmir Earthquake be associated with the concept of participatory design?
- What are the actors, processes, methods, and products of the implemented solution in the case study?

### **1.3. The framework of The Study**

This thesis recommends participatory design and participation in solving problems after natural disasters. Understanding the post-disaster issue is essential to grasp this work. This proposal incorporated the post-disaster housing problem into participation and participatory design literature research. Cause and effect relationships in the formation of the recommendation will be explained within the framework of the study.

As a consequence of the political profile of the 1960s, participation became critical for any decision concerning the public. Participation is essential in every process in the public and private sectors. The public needs to be active throughout the process, not just in decision-making or voting. (HMSO, 1969). The connections of participation as a social concept with other professions have changed this vision. The changing concept of participation has been incorporated into urban planning. Public participation is no longer just a citizen's commitment (Simonofski, Asensio, De Smedt, & Snoeck, 2017). Provincial governments have also tried to ensure public participation. They have been attempting to change the relations between the citizens and the administration.

To give an example, we can articulate about London Urban Planning. It has developed an urban planning model that brought together urban planning institutions, NGOs, and civil society called the "city of London unitary development plan." In this model, the projects should reach the citizens. There should be enough alternative options to choose. Inhabitant participation is included in the project budget. The citizens should be educated to ensure the correct involvement of the citizens. Finally, the opinion of the citizen should be evaluated. This planning model has also positioned an example for other local governments (Baba, 2009).

Participation in urban planning has also been used in other regional governments. Thus, the citizen begins to establish a different relationship with the place. "Participation, on any scale, is not just physical and sociological. It creates a psychological impact in the long run." (Gabtze, 1972). These positive psychological consequences emerge from taking a role, feeling responsible, and contributing. Many participating design theorists valued user input. Habraken explained that the user should demonstrate the interest he/she delivers to his/her environment and contribute to society. Experts encouraged experience to create the physical environment (Habraken, 1985). When the user has a chance to express himself better, he adopts the process, and his desire to contribute to the process

increases (Sanders, 2002). The user, who benefits improve the design process, embraces the approach and mostly wants to participate in these activities (Lee, 2006).

This additive process aims to identify the user's needs accurately. The user's needs are still determined merely by the user (Alexander, 1985). User participation provides easier access to user needs appreciations to the awareness of the participants living there, which is a more successful process (Sanoff, 2000). Projects developed with the knowledge of experts are insufficient to solve social hardships (Sanoff, 2005). Habraken, on the other hand, argued that even if mass housing was produced, social problems could only be solved with user participation. A healthy environment cannot be created only with the knowledge of experts (Habraken, 1985).

The developed framework concluded that user participation is essential to successful undertakings. Natural disasters transpire unexpectedly and create social, physical, psychological, and economic problems. At the same time, these problems and traumas must be solved effectively as soon as possible. A qualified process is expected to be carried out to solve the post-disaster housing problem. In this process, the housing problem and the sociological, psychological, and economic problems are critical. This study strives to determine whether the post-disaster housing problem can be solved by participatory design. According to theorists, it can be said that the above issues can be solved more efficiently with participatory design.

The participatory design retains components. Although these components are components in the conventional technique, their contents have changed. Foremost, these components are actor, process, method, and product. In participatory design, the user is counted to the actors. Participation itself is a process (De Carlo, 1971). The participatory design process also brings many actors together on common ground. The communication between the actors ensures these actors' joint decision-making and cooperation. Communication between actors is called the participation method. While the methods carried out in the conventional process are minimal, these methods vary according to the projects in participatory design. In this process, actors try to reach common goals using different methods. This common goal is the product of the participatory design process.

In terms of process and management, participatory design is parallel to the post-disaster response process. Since the post-disaster problems are multifaceted, more than one actor is needed. Post-disaster response plans are also processes that need to be designed. The method of the response plan must be effectively organized to minimize the damage after the disaster. Likewise, it is essential to keep the communication between

the actors at an optimum level, and this process aims to reach the goal that can be a product.

In other parts of this thesis, five examples that have established the relationship between the post-disaster housing problem and participatory design are examined. These five examples of participatory design, actors, processes, methods, and product components were analyzed and compared. In the light of this information, the thesis focuses on the case study of the October 30 İzmir Earthquake. Participation is effective in solving social problems and solving physical problems. In the post-disaster process, it is necessary to repair the damage to the society and the built environment by using the participation method in the design.

#### **1.4. Methodology of the Study**

This thesis examines the concept of participation in design, which is a socio-cultural issue. The study was prepared within the qualitatively weighted mixed-methods framework to reach a qualitative result. The combination of qualitative and quantitative research is called mixed-method. This approach combines the other two methods, makes up for each other's shortcomings, and produces a thorough investigation. The majority of the thesis was conducted with qualitative research; Questionnaires and interviews were executed to understand the case study. While the survey data were analyzed by statistical analysis, the interviews focused on more subjective interpretations (Creswell, Research Design, 2014). This thesis, which was created based on the participatory design approach, preferred the case study method. The case study was analyzed by crossing the questionnaire and interviews with reality. Specific theories were focused on, and assumptions were made in specific situational frameworks for constructing survey and interview questions. These assumptions turn into a research question and form the focus of the thesis. Abstract concepts are logically related to each other. This association made it easier to connect ideas (Creswell J., 2009).

According to Neuman, seven steps must be followed to conduct qualitative research in the social field. The first of these steps is to accept yourself and the context. At this stage, the subject is resolved. The participatory architecture is chosen based on individual interests. It is aimed to construct this research from a theoretical point of view. The literature was searched for concept research. For the literature review, a path was

followed from the concept of participation to the idea of participatory design. The theoretical and historical backgrounds of these two concepts are blended and conveyed. After the literature review, participatory components were created to follow the participatory design concept (Neuman, 2014).

Participatory design sample projects were questioned, and a relationship was established between these projects and post-disaster housing production. This indirect relationship formed another focus concept of the study. The concept of the post-disaster housing problem has been investigated. First, a literature review was conducted to accumulate data on this subject. At this stage, the central questions of the research emerged. The post-disaster participatory design projects were carried out with a participatory process from around the world and Turkey in post-disaster housing production. These projects were compared, and the project that realized the post-disaster participatory design most optimally was selected to enlighten the way of understanding of participatory design. This project (Villa Verde) was compared to the case study; the similarities and differences were revealed by using participatory design components.

This study focuses on post-disaster housing production and participatory design. In the case study of the Izmir Earthquake, which occurred on October 30, 2020, was chosen. The additional detailed and intense statement is advanced in the case studies by examining a single case. It surveys a particular order and reveals its context (Neuman, 2014). With the case study, the post-disaster struggle process of the Izmir Earthquake was examined step by step. Questionnaires and interviews were conducted to understand the case study better. The methodology of the questionnaire and interviews are described in detail in Chapter 4 before the analyses. Statistical data were obtained by analyzing the questionnaires and interviews with the methods cited before. Reality research was conducted with the triangulation method by associating the case study with these data. Then, it was compared with the mentioned sample project, and a conclusion was reached according to the comparison.



## **1.5. Challenges of The Study**

Participatory design is a theoretically developed and unlimited concept. Many theorists have defined participatory design by revealing its different aspects. On the other hand, genuine examples are minimal compared to theory. Examples of post-disaster participatory design are even less common. Before proceeding to the case study analysis, it was desired to examine the samples from the world and Turkey. Focusing on different points to follow up the other participant processes further limited the number of specimens.

It constructs another constraint in parallel with the fact that the case study is up to date. To investigate the case study process, firstly, news readings, then announcements from the websites of the responsible institutions and organizations, Facebook posts were followed. Additionally, the İzmir Provincial Directorate of the Ministry of Environment and Urbanization's officials were interviewed to obtain deeper information. Not all fragments could be obtained, as government agencies primarily organized the process. Along with these, the process is constantly updated, and transformations ensue. The procedure must be followed simultaneously to convey in chronological order.

Another challenging point was observed when the survey was conducted. The area chosen to carry out the survey is "Container City." With the permission of the governor's office through IZTECH, work in this area continued. The survey was answered in a limited number. The residents of Container City, who do not want to experience the trauma of the earthquake again, did not show interest in the survey. At the same time, since the survey study was conducted during the COVID-19 pandemic period, it reached fewer participants than expected.

## **1.6. Structure of The Study**

This thesis consists of five chapters. Chapter 1 is the introductory part of the study and gives general information about the thesis's purpose, questions, framework, methodology, challenges, and structure. Chapter 2 concentrates on the history and conceptual framework of participation and participatory design and explains the participatory design components created throughout the literature review. Chapter 3, on the other hand, includes the post-disaster housing problem, participatory design, and

housing production methods, and examples of post-disaster housing production solved with the participatory design method. The leading case study is examined in chapter 4. It was analyzed based on the participatory design components of the process carried out after the devastating İzmir Earthquake on October 30, 2020. This analysis is based on survey and interview data, and the survey methodology is explained in this section. In Chapter 5, the place of the case study in the participatory design was evaluated by comparing the case study with a sample (Villa Verde) based on participatory design to solve the post-disaster housing problem.

## CHAPTER 2

### PARTICIPATORY DESIGN IN ARCHITECTURE

The details of the term participation, which is the previous step, should be emphasized to cognize participatory design. Participation contacts many disciplines, and it relates to different fields from different perspectives, why it is versatile and variable. Comprehending this concept's documented background and conceptual framework, which has been with us throughout the human narrative, is fundamental to understanding the following stages. This background and conceptual framework will also alleviate light on participatory design.

#### 2.1. Implications on Participation

The concept of participation was first represented in politics and democracy and maintained this aspect. However, simultaneously, the concept was defined and articulated by different segments, developed other methods, and started to gain different meanings. The concept of participation has gained more importance in making decisions about voting and where one lives. Many disciplines can adopt, use, and shape participation as a social system.

In the Cambridge dictionary, participation is defined as “participating in or being involved in something,” while in a broad framework, participation is defined by many terms in the literature review. These terms are: “co-decision”, “co-production”, “participation”, “empowerment”, “co-create”, “co-creation”, “contribution”, “sharing”, “cooperation” and “organization.” Since participation is a social concept, it will persist to evolve as long as people exist and revise. Therefore, the background of this concept is quite extensive. The conceptual framework and historical background of the term participation are essential to understanding participatory design.

##### 2.1.1. Definition of the Term of Participation and Conceptual Frame

When the dictionary meaning is searched, participation is named and associated with many terms. Theorists have also developed the concept of participation from

different perspectives and created some keywords. These keywords are cooperation, communication, trust, transparency, democratic, equal, voice, and active themes. Rather than a sequential concept explanation, understanding the connections that themes establish is vital for understanding participation.

Considering the historical background of participation, which will be investigated later, one of the first themes is undoubtedly democracy. Democracy is the state of the people's power. It enables the people to participate directly in the government. Moreover, democracy is participatory, and participatory actions are democratic. Hence, participation does not occur only within the political framework. It can be found in other social events. Everyone could express their opinion is related to democracy (Schmidt, 2002). The democratic concept of participation also connects participation with the themes of equality, voice, trust, transparency, and activeness.

Sanoff, one of the critical theorists of participatory design, states that everyone who participates has the right to have a say regardless of their identity to maintain a participatory action (Sanoff, 1992). Participation must be equal for all actors; it can only be a democratic act. To deliver an example from the political framework, we can say that everyone should vote under the same conditions in an election. Exclusively, can we talk about equivalency if the participants actively use their right to speak. In the 1969 Hunt report, researchers stated that participation was not only a decision-making mechanism. Joint decision-making is essential for participation, but this determination should result from the equal participation of all participants (Hunt, 1969).

When we talk about democratic participation, this concept commonly refers to the involvement of the people. We can mention a participation environment where the public and the authority come together. By establishing a network called PARTICIPO in 2017, the OECD aimed to reach stakeholders more efficiently and thus more innovative citizen participation (OECD, 2017). To use the right to speak effectively, one must be aware of what is going on, think about them, and assemble a collaborative decision.

Sanoff, in resemblance, states that participation instills a sense of trust in individuals and carries participation to a social dimension (Sanoff, 2000). İlhan Tekeli, while examining participation in a political context, he talks about the trust between the public and the authority. If democratic participation occurs transparently equally for each individual, the participating individuals feel belief (Bilgin & Göregenli, 1996). According to Wandersman, this bond of trust is imperceptible, yet it unites the citizen with authority and reinforces the citizens' commitment to the environment. With the sense of

responsibility reinforced by this invisible bond, the individual continues to be a part of democracy as long as he feels that he has a say in the place where he lives and continues democratization efforts such as public control and proper decision making (Wandersman, 1981) (Çukurçayır, 2009: 41-48).

As democratic, participatory actions are carried out systematically and equally, the bond established with the local government is strengthened. Individuals who perform these actions increase their awareness of their environment (Burns, 1976). Individuals who are more conscious of their surroundings and perceive situations more quickly realize the power to make decisions about their own lives and change their society with this power (Gujit, 1998). Again in 2017, the OECD emphasized that participation is an act of effort.

Participation, which was encountered in our daily lives after the 1960s, was defined through actor relations by Rittel, who emphasized that it is not enough for the authority to decide alone and that the participants should make a joint decision by executing other participants (Rittel, 1972). Democratic participation is an action that takes place with decision-making flowing from the bottom up rather than from the top down, that changes the standard order and strengthens a participatory actor other than authority. Defining participation in environmental management, Kaypak separates participation actors into two, public and authority. For this reason, he states that there are different communication channels between these two stakeholders, such as expressing opinions from the bottom up or conveying their demands. Kaypak also defines participation as a form of communication where the governed can convey their thoughts to the rulers (Kaysak, 2012: 174). According to Wandersman, although the importance of authority and communication does not disappear, participation is defined as the voice individuals hear when they have a say in their decisions about themselves and their environment. Suppose there is a hierarchy among the participating actors, how the participation becomes more critical (Wandersman, 1981). Participation, which is between the administration and citizens, can transpire how the administration establishes. An egalitarian and voice-based participation system can be created and an environment where citizens can make demands only by preserving the hierarchy. Participation changes the decision-making mechanism and process. These concepts of communication, equality, and voice feed each other by continuing in a loop, not linear. Citizens construct ideas and make demands about their lives and their spaces.

Arnstein, who demonstrated the concept of participation and participation levels with the analogy of a ladder in 1969, differentiated the levels of participation according to the cooperation and communication between them (Arnstein, 1969). On the other hand, Wilcox surveyed the level of cooperation between actors from Arnstein's point of view and explained the participation and levels (Wilcox, 1994). The concepts of cooperation and communication are intertwined because cooperation concerns more than one actor, and these actors must work together in communication. Without transmission, it is not possible to acquire the goal. Kalfa and Atay also defined participation as a multilateral partnership and expressed it as evolving from a unilateral decision-making mechanism to a new stage (Kalfa and Atay, 2008). If we think based on democratic participation, Yılmaz draws attention to healthy communication between citizens and authority (Yılmaz, 2013: 27).

The method, time, and environment of participation are based on the joint opinion and decision of the participants. For these decisions, actors must reach an agreement by transmitting (Churchman, 1987). Only then can we say that we have an equal voice in an environment of democratic participation? If the citizen needs to cooperate with authority in the mentioned participation environment, the communication methods and levels may change, as Arnstein and Wilcox stated. The ideal is to provide equivalent participation regardless of identities, as Sanoff accentuates. However, if the level of cooperation and communication changes, the association turns into a simple supply-demand relationship. For the citizens to have a voice, they should express their wishes and criticize institutions without fear. Thus, the mentioned democratic participation becomes transparent; the citizen has a real say and entrusts the authority. Participation is more manageable when trust, equality, and transparency are ensured.

Following the growing popularity of local governments and participatory planning strategies, the World Bank stated in 2014 that participation is not a linear development but a concurrent process (Worldbank, 2014). On the other hand, Castells and Borja define this process when various actors come together with diverse projects and actions (Castells and Borja, 1997). Participation, a complex process, can proceed differently for actors, and this phenomenon created by many relations and communication is far from linear. Fung also emphasized that participation levels will change within the scope of participation, communication, and decision-making styles and stated that participation could transpire in different ways in an unstable authority and general structure (Fung, 2006).

Although Cogan and Sharpe define participation through the process, they stated that this process can be in different shapes and levels depending on the area where the participation takes place and that this process should be designed simultaneously. (Cogan & Sharpe, 1986 p. 283). Similarly, according to Destan, participation is a rather abstract concept, and he preferred to define this concept as a set of relations and balances rather than process, equality, and trust (Destan, 2003).

In instances of participation, the effects of this system and its components become outstanding. We cannot talk about a pattern or a fixed model to create the phenomenon of participation; Participation is a process that has many components and can naturally be shaped differently by the change of these components. The participating actors carry out this process. We can talk about absolute communication between the actors; the actors determine a transmission approach following the common pursuit. At the same time, actors aim to achieve this goal by cooperating.

While the definitions of participation are being shaped, a historical background has also developed in every social phenomenon. Participation becomes more understandable than before through these steps of history and development. It is necessary to understand how participation materializes from a rigid and restricted framework and becomes flexible and expands into social contexts.

### **2.1.2. Chronological Line of Participation**

In this study, participation is firstly related to the theme of democracy. Democracy, whose foundations were laid in Ancient Greece, represents political participation. Democracy is portrayed as the voice of the major as a concept, so we cannot say that democracy solely protects equality and every individual. Nevertheless, communication must be kept at the same level for each actor to compensate. In the same way, the concept of participation, which we encountered before the nation-state, was applied without considering the principle of equivalency, although certain parties met it. For example, in the French Revolution of 1789, the poor won the right to ratify and demand, either by themselves or through their representatives.

Subsequently, the concept of participation formed to enter the individual's life from different scales in every field, and somehow this concept was named the expression of free thought. The political stance of The 1960s inflamed the need for the concept of community participation. Many social problems brought by the period turned into alternative movements. Civil rights and anti-war were embodied in the people. The framework for political participation has widened, with student protests and citizens exercising their right to speak. As a result, democratic participation took its new form with the cooperation of citizens (Churchman, 1987). Political decisions under constant control have pushed society to be critical in other areas. The concept of democracy in the workplace and the importance of participation have emerged. Thus, democracy has ceased to be only political and has commenced being needed in additional areas in daily life. Participation has evolved gradually more prevalent. In addition, participation was needed in every social environment.

Another example of these social environments is urban planning. Although municipalities in the United States took the first step towards participatory planning, a prosperous participation model was created in London by taking the opinions of academics, non-governmental organizations, officials, and citizens within the scope of the development plan. Participation aimed to educate the citizens, evaluate their opinions, and reach them with more successful and sustainable planning. Participation has been included in the design concept, with macro cities such as San Francisco, London, and Tokyo observing participatory planning. After 1970, it became more popular to evaluate the concept of participation with planning, and it can be called the democratization of planning (Light, 1994).

The word participation was used for the first time at the 1972 United Nations Conference on the Human Environment. In the early seventies, Rittel criticized the unilateral work of decision-making institutions (Rittel, 1972). In 1976 at the Habitat I Conference, sustainability, one of the newly popularized trends, cannot be separated from participation. At Agenda 21 in 1992, the concept of participation is the most natural thing for inhabitants to have a say in the environment in which they live. Without this right, citizens cannot contribute. This element reveals the active role of the people and establishes a link between the individual and the authority.

Many disciplines have embraced participation in the design world through planning. The concept of participation gained momentum in Turkey, especially in the early 2000s, and local governments established city councils and citizen helplines to



cooperate between the European Union and municipalities. This change in local governments has brought the concept of governance through communication.

When we consider human life, the first place where participation emerges is in a physical square. Still, now you can reach a senior manager from social media platforms, create a campaign, make your voice heard, or begin to express an opinion on any subject. The environment in which participation takes place has genuinely evolved. Even if the environment has changed, participation is still a process that aims to reach the end product by trying different methods with a few actors.

In conclusion, Participation is an incomparable concept with its change and differentiation with historical processes. It has been shaped by the social events experienced and will continue to generate itself by humanity.

### **2.1.3. Public Engagement and Importance for Community**

Theorists have described the concept of participation through many themes. The concept has evolved and changed throughout history. Public participation is one of the most important thresholds for the concept of participation, which has become more popular as a result of social concerns. It was formed as a response to all alternating movements. Although the concept has materialized in different social areas, public participation is still noteworthy today.

Arnstein likens patriotic participation to eating spinach, emphasizing that no one objected because it had an individual benefit. Regardless of the scale of participation, participation is a physical phenomenon and a concept that changes society with sociological and psychological effects because public participation is not an instant but an ongoing process (Arnstein, 1969). With the active role of people in decisions about the environment in which they live, a sense of belonging develops (Cengizkan, 2009). Belonging to a place encourages it to be embraced and contributes to the awareness of responsibility towards the environment. The increased sense of commitment and awareness creates the need to decide where one belongs.

Similarly, to give a temporary example, Wandersman said that we remain in the physical world with the help of the body. However, our existence in the social environment will be through participation (Wandersman, 2009). For the demands made by the people to come true, the citizens must express themselves to the local government to deliver their decisions. Participation is establishing communication between the local

government and the person. Participation strengthens the sense of trust in authority through cooperation and strengthens community ties. If participation is managed in an equal and democratic way, the relationship between society and space becomes stronger. Under what conditions, between whom, and when the participation is made is essential.

Public participation is not simply political. With the adoption of participatory principles of urban planning, public participation has gone beyond just voting. There has been a profound development with the inclusion of the citizen in the institutional planning from a limited example of public participation, such as selecting a particular option. In essence, public participation is a unique method for effectively solving problems and informing the public. The public owns the place where they live and the power. It facilitates making more restorative and more sustainable decisions with the trust bond mentioned between the authority and the citizen. For democratic public participation to be healthy and long-lasting, it must embrace an egalitarian approach (Friedmann, 1973).

Table 1. Table showing the cooperation-communication ratio of public participation levels in the literature (Compiled by the author)

	non-cooperative zero communication	passive/indirect communication	active/direct communication
<b>Arnstein, 1969</b>	manipulation, therapy	information, consulting, placation	partnership, delegated power, citizen control
<b>Beyazit, 1982</b>	representative	information, voting, consulting	debative, action
<b>Wilcox, 1994</b>	supportive	information, consultation	deciding together, acting together
<b>OECD, 2001</b>		information, consultation	active participation
<b>Fung, 2006</b>		individual education, advise/consult	communicative influence, co-govern, direct authority
<b>WordBank, 2014</b>		inform, consult	collaborate, empower

Participation, a social concept, also varies from culture to culture. Therefore, we cannot talk about a fixed model for citizen participation; there are many types of participation in which communication is carried out through different channels. The level and form of involvement are shaped differently (Tab.1). Since each society's own culture and the space-public relationship in its collective memory will differ, the aims or methods of participation will vary.

Engaging and maintaining participation is not always easy. Since it aims to share public values equally, it also positively affects society (Friedman, 1973). Even if participation is on an individual scale, people join groups and take time to organize. An organization is incomplete when unique ideas are not united with a common purpose. It slows down the decision-making and implementation process, and as the process slows down, public belief is damaged, and the desire to continue participation may cease. Therefore, stakeholders need to develop a natural framework of understanding and are expected to be open to learning and willing to share ideas. Just like a culture of favoritism, approval of decisions close to authority breaks trust. The process must be managed in a transparent, egalitarian, and democratic manner not to damage this trust. At the same time, if the authority is not satisfied with the recommendations, it can terminate participation by questioning the process and considering that its jurisdiction is limited. For this reason, while managing participation, every stage should be carefully managed, decisions should be based on consensus, and everyone should be taken care of; it is not always effortless to achieve this.

## **2.2. Participation as a Method of Design Process**

As explained in the previous section, participation is a social concept and has changed throughout history. These changes are usually made to solve a problem. With the public's participation, the awareness of the common problems in society has gradually increased. Society wanted to continue this democratic action due to awareness and participation entered other fields. To ensure democracy, participation in political life first became popular in urban planning. Later, the concept established a relationship with design. It has been a good option not only because it is associated with design but also to look with the new needs of the modern world from outside the conventional system. Due to its evolving dynamics, participation changed the relationship between authority and the public and altered the dialectic between architect-project-customers. Although it did not change the actors, it altered the communication methods and the process. The participatory design has developed under the umbrella of participation within the framework of the same themes.

### **2.2.1. Conceptual Framework of Participatory Design**

This section conveys conceptual angles created by participatory theorists by establishing a relationship between specific themes, as in the concept of participation. These themes are cooperation, communication, trust, transparency, democracy, equality, voice, and activity.

It is also necessary to establish a connection between democracy, the first theme that we associate with the concept of participation, and participatory design. If Light named participatory planning as the democratization of planning, we could consider participation in design as the democratization of design. Habraken stated that participatory design is a democratic action by the user and the designer (Habraken, 1985). It is evaluated as the user's right to reach the information that the designer cannot obtain directly. He sees participation as a value for the project and process of design. Likewise, according to Sanoff, participation in design indicates breaking the user's anonymity (Sanoff, 2000). The user contributing to participatory design is the "active user ." When the active user can establish a successful association with the architect or designer, they will preserve this affinity (Sanders, 2002).

On the other hand, Sanders and Stappers divided participatory design theory into user-centered design and participatory design. In user-centered design, they emphasize that the user is still passive since they participate to a certain extent. In participatory design, the user participates in the project stages and is no longer just a spectator involved in the final product. Arnstein also explained the participation levels according to the active stage of the user (Arnstein, 1969).

Wulz argues that while looking from the urban planning environment, the citizen as a user interacts with all spaces, so they have the right to have a say about the area they will operate (Wulz, 1990). Thus, awareness towards the environment and society increases as in participation. Gillem and Gordon also stated that environmental awareness could be created with participatory design, thus strengthening the community bond (Gillem & Gordon, 2010). Here again, it is emphasized that the user realizes that he has the right to speak and chooses to be in the decision-making mechanism for their environment. According to Alexander, the user argues that he knows what he needs better than the designer (Alexander, 1985). Space relations in the city directly concern the citizens (Pateman, 1976). Cengizkan also said that being in a place and adopting it will contribute to the formation of that place. Tekeli supports the same idea, and if a person

does not have an idea for the area he lives in, he consciously blames the user by stating that he has adopted only the consumer identity (Cengizkan, 2009). While emphasizing that Sanoff's projects realized by adopting participation are successful, he says that the most important thing is that the user living there has discovered that they can contribute by creating an awareness of reality. The user, whose awareness of the place he lives in increases, will also feel creative at the end of this process (Lee, 2006).

According to Sanoff, since the user establishes a different relationship with the space than the architect, his ideas would differ from the designer's (Sanoff, 2000). After a particular awareness is created in the user, the communication needs of the user and the designer, which are two different cultures, occurs. At the same time, it can see the problems and problems in the environment more absolutely thanks to its user experiences. If this communication does not occur between the user and the authority, it is possible that environmental problems will grow, or new issues may arise. It has been stated that the environment can change positively with the data that the user can give.

Traditional design balances have changed with the participation of the user. Although the decision-making mechanism was hierarchically at the top-down before, the old hierarchical order had to change as the user's request and foresight are now included in the process. While a top-down approach is observed in conventional design, the participatory design adopts a bottom-up approach (Ersoy, 2010). Participatory design theorists, on the other hand, support changing relationship dynamics. Sanoff stated that professional groups would be insufficient in solving problems, and the user's contribution will always be significant. Emphasizing that experience occupies more space than knowledge in the real world, Sanoff argues that daily life and local knowledge will be specific to that place.

Additionally, professional groups cannot reach that knowledge no matter how much analysis or observation they make (Sanoff, 2000). At the same time, he stated that the designer might overlook the social ties in the production to be made for physical conditions (De Carlo, 1971). On the other hand, he says that the architect is one of the forces that will never diminish for the designed space. The architect will create the space using his knowledge, but the physical relationship of the user in this space is as sharp as the architect's position. It emphasizes that both are so important that they cannot be given up.

The participant interprets the design through the actor. Habraken argues that the designer and the user should cooperate and that the conventional approach is insufficient. It has contributed to the concept of participatory architecture, mostly about housing production. By repositioning the actors, Habraken also reinterprets the process. He divides housing production into elements; these elements are “support” and “infill.” The created metaphor sheds light on the role of the actor. The support part is the load-bearing system and wet areas, designed by the professional team. The filling part is the part that the user will develop within the framework of the user's request. This system brought the user and the expert together and pushed these two actors to cooperate. He stated that the expert is not inaccessible and even needs to support the user. Habraken, who advocates individualization in design and housing, describes the user's participation in the design phase as positive (Habraken, 1982).

Kernohan, Gray, Daish, and Joiner (1996) defined participant and user as two different cultures. They stratified the areas necessary for two different ethnic cultures to learn and know each other and classified the relationship they established in these two cultures. This network of relations consists of the following elements: Language is knowledge, priorities, expectations, perceptions, and relationships. Since these two cultures will explain each element with their knowledge, they need communication methods to assemble a cooperative bond. According to the theorists, this concern causes incompatibility and problems since there is no cooperation in the traditional building construction phase.

Day and Parnell (2003) define participatory design as consensus design and draw attention to cooperation and joint decision making. Participatory design is not a simple ground, but it can succeed when actors come together. Similarly, in the consensus design defined through the actor, the professionals stated that the users should be present with their views and thoughts while participating with their knowledge.

Likewise, another point of consensus is the uniqueness of participation. We can predict that the more diverse the parameters of the participant profiles, such as age, socio-economic status, educational status, gender, and occupation, the more further results can be obtained. Carlo, emphasizing that man is a social being, argues that participation can never occur within the framework of patterns. Likewise, Sanoff explains that each project's engagement direction, impact, scope, and frequency will occur at different levels. Like Sanoff, who said that one of the most important reasons for this change was

the participant profile, Habraken also supported that all participatory processes would be different.

While many theories define the concept of participation from different perspectives, the idea of participation in design is also explained within the framework of the same themes. Participatory design, like participation, is a social concept. It has undergone many changes since it entered our lives. This change was generally shaped according to the requirements of the period. The chronological order of participation in design assists in comprehending the conceptual framework sufficiently.

### **2.2.2. Chronological Line of Participatory Design**

One of the integral parts of participatory design, the user represents the citizen when design meets participation. In the modern and democratic world, citizens should have a say. Local governments have tried to find different representation approaches to provide adequate prospects to the citizens. Even if they are not comprised in the plans and projects created about this environment, the citizens should be notified (Geddes, 1912). After the 1960s, this idea has discovered a place in academic and daily life. Local governments of metropolitan cities aspired to contribute to urban planning instead of just informing the public to increase the level of participation of the people. In 1968, the City of London established a participatory urban planning model. One of the first aims of this prototype is to acquire the citizens to include in the project. The theorists believed that good and original thoughts would appear through participatory design. Municipalities have allocated a budget to ensure user participation in urban design. They emphasized that the citizens must be educated and express their opinions simultaneously. After London, similar approaches have been observed in the metropolises of countries such as the USA and Japan, especially in the cities of Northern Europe (Baba, 2009).

Participation in urban planning has developed with different methods to meet different requirements with each city's diverse cultures and collective consciousness. With the adoption of this approach by the citizens, participation in planning was implemented by smaller local governments. Again with the student protests in The 1960s, society wanted to say its destiny. This political change has been a subject not only in the political field but also in design. In the conventional relationship, where only the architect has decision-making authority, users cannot fulfill the desire to have a say and decide. Thus, the developing participation in urban planning has commenced spreading to all

areas of design. With the conditions of the period, architects demanded to change the relations between the user and the architect as a step of a rebel. Participation theorists in design such as Habraken, Sanoff, and Day & Parnell repositioned the actors and included the user in the process in addition to the designer. The project idea, which will develop within unity and communication, rather than projects created by an expert, makes a splash. Established relationships are reversed. If the demands flow from the bottom up instead of the top-down decisions, a relationship cycle emerges in which suggestions are made if it is top-down. Some describe this structure as an anarchic feature to the design element moving away from the conventional.

After The 1970s, participation in design evolved into a concept on which theories are created in the academic setting. Afterward, it was adopted that if a sustainable future, a structure, or an economy is desired by being associated with the concept of sustainability, which emerged in the same period, this way is through user participation. In 1992, participation in design took place at the UN Conference, an international platform, and two years later, it increased its significance at the Participatory Design Conference. In the 2000s, citizens' participation and user participation were needed in many projects.

### **2.2.3. Components of Participatory Design**

The participatory design contains components like participation itself. These components are actor, process, method, and end product. Participation is a collaborative action so that participation can take place between at least two actors. The period in which at least two actors meet and communicate is called a process. Participation between actors can take place by using many techniques. The actors would like to acquire a product due to participation at the end of the process. These components vary according to the theorists' point of view making the definitions.

#### **2.2.3.1. Actors**

From the standpoint of participatory design, since the first attribute that the user touches the design is urban planning, participatory design actors have also developed as local governments and citizens. Nevertheless, the actors in participatory design are more diverse. Theorists have studied actors in specific groups. Afrassiabi (1985) divided the



participatory design actors into three. This group consists of designers, public and local governments, and users. According to Habraken, actors are divided into users and experts. Turner (1978), like Afrassiabi, includes the state / public administration in the participatory design process alongside the users and designers. Randern similarly grouped the actors involved in the process as designers, urban management groups, and users. Wates (2008) treated actors as facilitators. It has grouped the actors based on their tasks and defines them as facilitators who assure the realization of participatory design. He examined the facilitators in 4 primary groups: state-based, design-related, non-design-related, and community facilitators. State-based facilitators represent local and public administration actors. Facilitators interested in design are designers, planners, design schools, or outside design groups. Facilitators not involved in design include technical consultants from non-design specialties who are not affiliated with the state and do not have a design background. Community facilitators included citizens, local representatives, and non-design NGOs.

While there are actors in the architectural project process in the participatory design process, different actors are added. These actors are mainly local government, designers, private sector, community-oriented organizations, NGOs, universities, professional associations, and users. To explain the roles of these actors in participatory design processes:

- **Local Government:** Local government represents the authority in the process. Coordinates and supervises other actors. They usually deal with the finance of his projects. The participation of the local government in the participatory process accelerates the work as a facilitator. It can quickly evaluate the decisions in terms of budget and ensure more confident progress.
- **Architect, Planner, Designer:** The main task of the design group does not change in participatory architecture examples. This group, also responsible for design and projects, should come together with other actor groups and design according to the users' needs.
- **Private Sector:** This group includes construction companies, contractors, investors, and subcontractors. Although these groups are essential for the operation of the process, they can perform their tasks without direct communication with the user.

- **Community-based organizations:** These organizations are actors that have direct contact with the user. Apart from the participatory design process, it desires to do business with the citizens and resolve the local problems with the citizens. These organizations may have specific links with the local government. It performs as a bridge between the user's local administration and other groups.
- **NGO:** NGOs are also a kind of CBO, but they are not directly connected to institutions such as management or government. It can function for regional, national, or international purposes. It provides communication between actors such as NGOs and CBO, which are usually on the user's side.
- **University:** There are usually universities as education boards in participatory design processes. Universities, students, and academicians are actors that support the phases of the process. At the same time, they can research this process be involved in the design group or with a field of expertise other than design. Universities support communication between the user and other actors and between experts and management.
- **Chambers of Professions:** It can support the communication between expert groups and support the realization of the process in terms of financial and management. It is involved in communication between both local government and experts.
- **User:** We can define the user as the leading actor in participatory design. It is not possible to operate the participatory design process without the user. Participatory design theorists stated that the user should be involved in all actors' processes. Thus, a functional and practical design will emerge. Without the user, the process is conventional; again, top-down design and decisions are made. However, if the user is involved in the joint decision mechanism, the process progresses from the bottom up.

The list of users varies according to the scale and scope of the project; different actors may be involved in the process outside of this list.

### 2.2.3.2. Processes

Participatory design is defined through the process because the actors are involved in the stages according to their tasks. Wulz divides the process into three phases when defining the user engagement action: design, construction, and use. According to Wulz (1990), in traditional design, the user is only involved in the use stage but must also be interested in other processes. Alexander (1975) divided the participatory design process into design and implementation. According to Habraken, design is a productive process, and users and designers must be involved in this process. At the same time, he established the Architecture Research Institute to carry out these procedures more accurately and integrated the user into the pre-design research process. Similarly, Sanoff divided the participatory design model into three. The first stage is design research, followed by participation and design development stages. Although Turner (1978) did not divide the process into stages, he stated that the state should manage the process management and control. Sanders (2002), on the other hand, designed the method, not the process, to carry out the participation, but emphasized that the user should be involved in the design research process to make the design.

Most of the process stages to be explained below were created by theorists. The stages that make up the participatory design process;

- **Searching:** This phase takes place before the design commences. The user and other actors first cooperate in accumulating the necessary data. The user's need or desire emerges at this stage. In other words, this step generates the design.
- **Informing:** This stage usually occurs when the user is passive. If the user does not participate in the research or design stages, the data or project information is presented to the user under information. On Arnstein's ladder, this is not an example of actual participation. However, since it differs from the conventional process, it is involved in the participatory design process. This stage is found in projects where participatory design is low. On the other hand, this stage can also convey information to the user to illuminate a subject unknown to the user.
- **Planning + Designing:** The planning or design phase is the phase that reveals the project. This process is found in both the conventional method and the participatory process. If the user involves in deciding together with the experts to

reveal the design in participatory design, the level of participation can be counted as the maximum.

- **Construction:** This stage is about the practicality of the participatory process. It has been observed that sometimes the user is also involved in the construction process. This stage mainly occurs in projects that aim to increase the sustainability of society.
- **After use:** The user experiences space in all design processes. This stage is also not specific to the participatory design process.

The process does not have to be restricted to these stages. Phases can be increased or decreased as required.

### 2.2.3.3. Methods

Participatory design involves multiple actors who work together in different processes. Actors aim to achieve different goals at different stages. Communication between actors should be ensured at these stages to successful participation. Specific methods are used to ensure communication between actors. On the other hand, methods are shaped according to the objectives of the stages. The stages were determined based on participatory design theories, and the methods were divided according to the steps (Tab.2).

Sanoff has grouped the methods required for participation according to the process stages. Necessary methods for design research are indirect methods of participation, such as surveys and interviews. In the design phase, open-ended methods such as design games, workshops, and meetings occur. Information methods such as exhibitions, panels, and the press are preferred to inform during the design development phase. Sanoff states that workshops are the most crucial method of participating in design. Likewise, Schneekloth and Shibley (1995) define the workshop method as the user and designer's collective mind work. Kernohan and three other theorists (1996) argue that different results will be obtained according to the profiles of users and that each workshop will have individual effects. Day & Parnell (2003) defined the user and the designer as two different cultures and claimed that there would be no participation if the actors did not seek a common language. Sanoff invented a workshop and designed games methods to provide this common language, and Sanders (2002) developed a technique called "make tools."

Sanders (2008) aims to reach what the user thinks, does, and dreams with this method. He argues that there is no specific method but that a unique approach should be produced according to the situation. It accepts all methods used and includes methods based on the user's emotions, such as empathy. Depending on the participatory design coordinator's goal, different stages and methods can be created.

Table 2: The table of possible used methods according to the phases of process  
(Compiled by the author)

<b>SEARCHING</b>	<b>INFORMING</b>	<b>PLANNING+ DESIGNING</b>	<b>CONSTRUCTION</b>	<b>AFTER USE</b>
Fieldwork	Briefing	Being aware	Altering after construction according to need	
Documents, Records	Exhibits and Displays	Understanding	Construct with user	
Surveys	Use of Internet / Social Media / Websites	Deciding Together		
Lab. Work	Sending Posts / Mails to the user	Workshops		
Observations	Information of Repositories	Design Games		
	News Conferences and Media Briefings	3D Models		
	News - Newsletters			
	Panels			
	Informing through NGOs			

The stages and, accordingly, the methods can be grouped in different ways as many groups of methods can be created as the participatory design is ideally divided into stages. Due to this variability, creating a participatory design rule is impossible. Only process and process management are not possible; New stages and new methods can be included.

#### **2.2.3.4. Products**

As a result of the participatory design process, we can imagine a building or structure resulting from the conventional approach. However, the end product is not limited to this. Sanoff argues that the product that will emerge in participatory design will better meet users' needs. At the same time, for Sanoff (2000), who emphasizes the variability of the participatory process, the expected product may change as a result of this process. The product that will come out at the end of this process should also respond to new needs and changes. Habraken (1985) looks at participation from housing production but does not characterize housing as a finished product. It is argued that the user can change the residence, and the user is the one who reaches the final product. In Turner (1978), he supports the idea that the user creates the product. However, as a result of this process, it can occur not only in closed spaces but also in public or semi-public spaces. In addition, participatory design research can turn into an intellectual product. Research and methods used are published and become an inspiration and example to other designers. The product desired to be obtained differs according to the process.

In this section, participation has evolved from democratic participation to public participation and participation in planning. While transforming into public participation, it has concentrated on closely related issues to society. On the other hand, participatory planning provided as an intermediate step the transition from public participation to the concept of participation in design. It can produce spatial solutions for social problems with the participatory design. The participation and participatory design concepts were examined, and relations were established on the same compositions. In addition to these compositions, the participant is associated with four components to embody the design. These four elements are actor, process, method, and product; They are indispensable for participatory design. However, these components cannot be determined by a clear set of rules. Every project is unique, and its components vary depending on many parameters such as the purpose, scope, scale, timeframe of each project. Mastering these four components is essential to examine post-disaster housing projects produced by participatory design in the next section and the case study.

## **CHAPTER 3**

### **PARTICIPATORY DESIGN PROCESS IN POST-DISASTER HOUSING PRODUCTION**

When we look at the examples of participatory architecture today, we see that most of the sample projects from the world and Turkey, exemplified in the following sections, emerged to solve an issue. While the concept of participation evolved from political participation to public participation, this transformation was caused by social concerns. Subsequently, the design was concerned about these situations and wanted to solve spatial problems with participation. One of the problems human lives constantly encounters and will experience is undoubtedly natural disasters. Furthermore, a natural disaster may also unexpectedly cause many types of problems.

The participatory design creates the necessary ground for equal and democratic process management that glorifies cooperation, cooperation, and decision-making together. If participation occurs through involvement and collaboration, solving those problems would be more manageable. Persisting participation depends on this solidarity and communication. Solidarity, communication, and support are the only things required after a disaster. Post-disaster settlement distress is psychological and socio-economic as well as physical.

Some cases tried to solve this complex housing problem with the participatory design. As cited in the earlier chapter, every participatory design sample is distinctive because the issues are exceptional to those circumstances. The components of the participatory design have to be adjustable to the project issue.

The complex housing problem and operating housing with participatory processes should be understood. Five worldwide examples have been examined and compared by synthesizing this information.

### 3.1. Post Disaster Housing Problem

If we talk about what a house is before explaining the problem that occurs after a natural disaster, we can say that the house is our first social and physical space in the world. A person spends the central part of his life in this area; housing is essential, like a social right (Kılınç et al., 2009). “Housing needs” are equal for all, but not everyone has the same right to housing; Although urbanization is accelerating, some social segments cannot reach healthy housing. The definition of housing is different for everyone, yet everyone needs a place to lay their head. This socio-economic situation constructs the “housing problem” (Ertürk, 1996). The housing problem is an issue that has emerged as a result of urbanization and industrialization. It is observed in Turkey and familiar in other developing countries. At the Habitat I UN conference held in 1976, the housing problem was stated that the lack of adequate and qualified housing in these countries constituted a problem. Later, at the 1996 Habitat II conference, while addressing issues such as sustainability and participation, attention was drawn to the global housing problem. The slogan "Adequate Housing for All" advocated that this right should be conveyed to all those who could not obtain this right. Some states have developed a program to solve the housing problem and to meet the housing needs of low-income groups with the concept of "social housing" or "state housing" (Hasol, 2005). State housings are non-profits and sold at the interest rates determined by the government (Tapan, 1996).

In Turkey, this solution is provided by the Housing Development Administration of Turkey (TOKİ) through the state channel. Understanding Turkey's housing problem and TOKİ activities is critical to comprehending this thesis's case study better. The housing problem in Turkey is caused both by the unqualified and unhealthy environments of the existing houses and by the “housing deficit” (Ertürk, 1996). Turkey faced industrialization and urbanization that started in the 1950s. While urbanization and housing needs and production decisions were carried out by the Ministry of Environment, Urbanisation and Climate Change (MOEU), formerly the Ministry of Public Works and Settlement, from 1920 to 1984, TOKİ was established in 1984 with the mission of social housing for all. TOKİ accepts the 1996 Habitat II and Agenda 21 resolutions and aims to produce housing in this direction. At the same time, TOKİ is the institution that is expected to solve the housing problem since it is responsible for the production of housing for the low-income in Turkey's development plans.



Globally, social housing agendas generally include mass housing, so this concept is intertwined with each other (Alkışer & Yürekli, 2004). Although social housing and mass housing are now intertwined, these concepts initially included different market economic targets. (Tapan, 1996). Although mass housing is a solution to the housing problem, which is an urbanization problem, in terms of producing many houses at once and providing low cost, social housing is designed to solve the housing requirement/housing shortage problem. (Alkışer and Yürekli, 2004)

If we describe the post-disaster housing problem, we can define it as the simultaneous occurrence of these two problems. Housing loss after a disaster constructs both a qualitative and a quantitative issue. The currently used housing stock suffers a sudden decline. Although a disaster is a physical possibility, it creates physical, psychological, and sociological effects. Naturally, being homeless adds psychological trauma to the physical trauma as well. The post-disaster housing problem persists until they are settled in permanent housing. After the disaster, temporary housing units were built in a temporary housing area to quickly provide shelter to many people. Even if the state obtains these temporary housing areas, life here is sustainable solely for a specific time. At the end of this period, it is aimed to move to a healthy and solid residence.

If we look at the post-disaster solution in Turkey; The Disaster Response Plan of Turkey (TAMP) was explained as follows by Disaster And Emergency Management Presidency (AFAD), the first institution to assist with the disaster in 2013; “TAMP includes public institutions, the private sector, non-governmental organizations, and people who will take part in effective response to disasters and emergencies of all types and sizes that may occur in Turkey. It is a system that will minimize operational risks during disasters with its integrated planning approach and modular structure.” (AFAD, 2013) In this planning approach, the institutions planned to cooperate by preparing according to the disaster type, and scale are assigned to reach specific solutions. TAMP executive AFAD appointed TOKİ for the post-disaster housing problem. TOKİ should produce housing projects for the damaged buildings during or after the disaster. In this case, the user should unite these projects with the disaster victims by following an economical way. MOEU decides on the temporary accommodation area, and then AFAD establishes these accommodation units as the executor in the transient accommodation area. For TOKİ to make projects easily, mobile teams are formed by MOEU. These teams carry out damage assessment studies and notify TOKİ about which parcel and how many buildings need to be demolished on the island. The finalization of this decision

corresponds to one and a half months after the damage assessment. After the damage assessment studies, the decision becomes final after a 1-month objection period for moderately and heavily damaged buildings and a 2-week evaluation of this objection. In the post-disaster plan of AFAD, the housing problem of the beneficiaries was tried to be solved. It is aimed to provide rental assistance in the determined amount to the tenant status.

The post-disaster housing problem contains two different issues simultaneously and constitutes an urgency. Individuals who experience disasters need support and solidarity in this process and physical space assistance. Although a top-down projecting attitude is displayed to meet these needs, the solution can be more successful if the user is directly asked to meet the requirements more effectively and sustainably. A theoretical conclusion can be reached by comparing this method with the existing way by analyzing how other projects produced with the proposed participatory design for post-disaster housing production are realized. First of all, it is aimed to understand the method better by explaining the examples from the world and Turkey, which have found a solution to the post-disaster housing problem with this approach, and then the housing production in which participatory methods are used.

### **3.2. Operating Participatory Processes in Housing Production**

As cited above, the housing problem is not just a post-disaster reality. Although it is more common in developing countries, it is a problem encountered, especially in the peripheries of developed countries. Although the housing problem commenced with urbanization and industrialization, it still retains its currency today. The government started to build social housing for people who did not have this right. Urbanization accelerates mass housing production and standardization quickly; the user is passive in this scenario. The user can only experience the residence after the construction process. After the democratization that came with the 1960s was reflected in the design, participation in design became preferred in housing production. Since participation in design is a social vision, it has transformed since its inception. To understand this change better, how user participation is integrated into housing production will be listed through examples.

### **3.2.1. N. John Habraken's Approach on Participation**

“Supports: An alternative to Mass Housing,” one of the first written publications of the theory of participation in design, was published by Habraken in 1961. Influenced by the political ground of the period, the architect opposes uniform housing. He argues that individualization is needed, not standardization in housing (Atasoy, 1980). He thinks that this type of product may be suitable for certain people; on the other hand, it will not be a solution to the problems of the majority. According to Habraken, a house can only be successful if the user's thoughts shape it. Only a user can establish an emotional and psychological bond with the place where he will live. With this strategy called Support and Infill, he changed the hierarchy and repositioned the architect. In this reflection, the architect or an expert can only provide support. Infills is the user who will determine the living spaces. The existing project can be reached with the user's thought, while the specialist determines the fixed locations such as the load-bearing system or wet areas (Habraken, 1990). By establishing SAR, he created the Open Building approach, which allowed many architects to do research under the same roof. Open Building is the manifesto that supports the support-infill method created by SAR, where design flexibility and user participation meet in the same spot (Habraken N. , 1985).

### **3.2.2. John. FC Turner's Approach on Participation**

In his books *Freedom to Build* in 1972 and *Housing by People* in 1976, he emphasized that housing production should not be standardized by explaining his ideas against the order, just like Habraken. Turner sees value in the process of building his own home. He characterizes the places named with many names such as *barrio*, *shantytown*, *favela*, *ghetto* according to their location as a source. Here, people built their own houses and chose what kind of place they would live in. He advocates the inclusion of this free movement in other housing production processes. He named this strategy the concept of “self-help.” The Self Help approach states that the user, who decides his own living space, should be provided with financial assistance from institutions such as the state or local government. Hence, it allows legalizing an illegal situation and aims to give people the freedom he mentioned and seeks to solve the housing problem in underdeveloped countries by controlling the unhealthy conditions created by this approach (Turner, 1969). Likewise, Turner, one of the keynote speakers at the 1976 Habitat I Conference, opened

a new window to participation in housing production by revealing how people can build their own houses and solve this problem (UN, 1976).

### **3.2.2.1. WorldBank and Incremental Housing Approach on Participation**

Worldbank was established as an international development agency after the Second World War. Aiming to solve the social problems of societies, the bank seeks a solution to one of these problems, the housing problem. Turner shaped Worldbank's approach to housing production. Its self-help policies aimed to have a say in their own living spaces. Worldbank used the Turner Approach to finance housing production in underdeveloped countries. The management provided the housing core on the project while its development was left to the people. Moreover, each house was customized according to the family to live in. Worldbank has continued its incremental housing production policy in many projects. On the other hand, in the light of Turner's information, some oppose this idea, which the World Bank created. Mike Davis's *Planet of Slums* (2006) argues that the Self-Help Method is an illusion. Stating that this union still lives in unhealthy conditions because people produce spaces without sufficient support, he points to Turner and the World Bank responsible for living in slums.

### **3.2.3. Henry Sanoff's Approach on Participation**

Habraken emphasizes that the architect is a supporter, and Turner states that in addition to this, the project to be produced should also have government support. Sanoff argues that the user should dominate the whole process (Sanoff, 2000). In his book *Community Participation Methods in Design and Planning*, he explained these methods in 2000. Prior to this resource, Sanoff has written books about methods of inclusion for those who have never heard of design under visualization and design games. He then focused this inclusion on participation in design. It does not reveal the use of user participation in specific processes but how groups always work with cooperation and communication.

Sanoff, whose participatory methods were mentioned before, does not say anything different for housing production but emphasizes that these methods can be used in every project. He demonstrated the principles of participatory design. Firstly, alternative solution proposals should emerge with participatory design; while conventional architecture offers a solution to the problem, participatory design can provide more than one option. The user and the designer must have the same level of participation. Design alternatives should be presented to the user transparently, and the user should freely think about these designs. Finally, the designer should respond to changing needs, even if participation aligns with a goal (Sanoff, 2000). Determining the needs of the society/user is the first step in this process described by Sanoff for the participatory design. Then, draft project ideas are produced with the design workshops. Moreover, at the design development stage, alternative design solutions are reached. Thus, the participants decide the most appropriate management among multiple plans to be evaluated (Sanoff, 2000).

### **3.2.4. Liz Sanders' Approach on Participation**

Liz Sanders states that participatory design, like Sanoff, supports the idea of research and co-design while additionally focusing on the user's experience. In his 2002 article "From User-centered Participatory Design," she stated that participants and designers are two different cultures and need different communication methods. Sanders has also worked in sociology and psychology and has concluded that the production of space is not only physical. She created different communication methods by using social science, thanks to his work, to make the conversations with the user more effective. According to Sanders, people say what they think, and people's actions can be observed.

Nevertheless, these are not enough to reach the thoughts of the actual participant. She argued that participatory design would be successful only when people's dreams, feelings, and thoughts can be empathized (Sanders & Elizabeth, 2002). It aims to reflect the user's experience and dreams to the project. She has developed a "say, do, and make tools" method to convey their experiences. The first two aim to reach user requests that can be said and observed. The third is a method for the user to visualize their experience and imagination. She uses methods, which she calls "cognitive toolkits," like mapping, 3D functionality models, diagrams, and cognitive models. She also accepts artifacts, such as collage and diary, on which individual thoughts of the person are reflected as a source

and are called emotional toolkits. She reaches information by using direct and indirect methods and aims to create alternative design solutions like Sanoff by interpreting them.

### **3.2.5. An alternative approach on participation: Cooperatives**

Cooperative provides the economic situation that can meet that need within mutual aid and solidarity with other individuals who have the same purpose. The individual economic power is not completed to meet the requirement. The basis of cooperatives is cooperation. The result of collaboration can be anything, or it can be a residence. Collaboration and the cooperative concept, which brings together multiple stakeholders, create the appropriate environment for participatory design. The people who support the cooperative in our country do this with the dream of owning a house rather than investing. In this case, it is not impossible for the people who will live here to have a role in the design by making a joint decision about where they will live. With this method, economic expenditures from the design of the conventional house to the construction process can be saved, the user can own a home at a more affordable price, and the opportunity to increase the satisfaction of the dwelling is created as the decision of the living space is made with the community.

### **3.3. Post-Disaster Housing Examples Conducted with Participatory Design Approaches**

Finding a solution to the housing problem in participatory architecture is possible with the above methods. So how do we solve the housing problem after a natural disaster? Participatory architecture prepares an environment where users can express their wishes without being anonymous. Likewise, by being aware of the participants' ideas, designers or experts, they both become involved in the process and feel more secure. It offers the opportunity to produce its own living space with the cooperation and support it needs. Based on the participatory design for a successful post-disaster housing production, which project actors reveal which products by following what process and method? Different projects have been examined to understand participatory design and its components. Eventually, five different projects were selected from different locations. The relations between these dynamics and components, examples from the world and Turkey, are

explained better. In the long run, the comparison among five projects was constructed according to the parameter of participatory design, and the best-conducted example has been chosen through this path.

### **3.3.1. Examples throughout the World**

Although participatory architecture is a developed concept, in theory, it is still shallow despite the number of conventional building productions. Participation may not be preferred both because of the challenging environment created by involvement and because it is thought that the process will take longer. Participatory design is less preferred, especially if tested with the process. Participatory design, preferred in many different places in social housing production worldwide, is used less in post-disaster approaches. However, it is possible to find applications that will shed light; these applications will be explained first and then examined in terms of participatory architecture principles mentioned at the beginning.


#### **3.3.1.1. Villa Verde Project**

Chile, which faced many natural disasters until this time, was almost destroyed in 2010 by an 8.8-magnitude earthquake. Since the earthquake also created a tsunami, the remaining house or materials became utterly unusable. Alejandro Aravena, the chief architect of Quinta Monroy, another example of participatory design, was chosen in 2003 for the master plan, which had to be created due to the large area destroyed by the earthquake and tsunami. Villa Verde forms the residential production phase of the PRES Constitucion master plan. Aravena explains that his architectural philosophy involves society's involvement in the process. In this project, the society was first encouraged to participate, and then interviews were held with the community. The real problems of the people emerged in these meetings. Even though the project is taking place after a disaster, people have said that the next natural disaster will happen after 20 years, but every year rain affects people's lives negatively. We can say that with participatory design, neglected situations arise.

If we examine the housing production phase of this masterplan project, we can say that actors built 484 incremental houses, and these houses were initially 57 m<sup>2</sup> and

could expand up to 85 m2. Although Aravena used incremental housing production in the light of Turner in this project, as Habraken mentioned, it made a support plan and developed the infill process with the user (Fig.1).

Table 3: Villa Verde Project through participatory components (Generated by the author)

<b>VILLA VERDE PROJECT</b>				
<b>PROJECT ID</b>	<b>YEAR</b> : 2010-2010 <b>LOCATION</b> : Constitución, Chile <b>CAUSE</b> : 8.8 Mw Earthquake Figure 1. A photo of Villa Verde shows different individualized units (Source: DIVISARE 2010)			
	<b>PARTICIPATION IN THE PROJECT</b>	<b>ACTORS</b>	<ul style="list-style-type: none"> <li>• Local Government</li> <li>• Architect, Planner, Designer</li> <li>• Construction Firms</li> <li>• Community-Based Organisations</li> <li>• NGO</li> <li>• University</li> <li>• User</li> </ul>	<b>PROCESS</b>
<b>METHODS</b>		<ul style="list-style-type: none"> <li>• N. John Habraken's Approach</li> <li>• John F.C Turner's Approach</li> </ul>	<b>PRODUCT</b>	<ul style="list-style-type: none"> <li>• Shared Media</li> <li>• Public Space</li> <li>• Semi-public</li> <li>• Housing</li> </ul>

As public institutions, the Ministry of Housing and Urban Planning, the Regional Government of Maule, and the Municipality of Constitución provided management support to the project. While Arauco's private sector firm was responsible for the project's finance, the project was designed by ELEMENTAL and engineered by ARUP. ELEMENTAL carried out its participation through the consultancy firm Tironi Sociates. Talca University supported these researches were responsible for organizing people with the NGO Fundación Chile consulting firm and the university. Although The local



government determined a short period of 3 months to execute a participatory project, user ideas were influential in determining the concept at the first stage. Then the participants discussed the emerging project with the users again. In the first stage, the problems were determined by meeting with the participants as a strategy—the designer team presented at the other set to involve the users through question and answer. At the end of this process, while semi-public and public spaces such as the library and the square were designed, the Villa Verde housing project was completed simultaneously. Villa Verde continues its formation thanks to its flexible development feature. (ELEMENTAL, 2018).

### **3.3.1.2. Katye Project**

The capital of Haiti, Port-au-Prince, one of the developing countries, the Ravine Pintade, with houses built with weak supports, has turned into a huge wreck. USAID, which set out to rebuild the neighborhood, created the Katye project. The program is intense, as reconstruction after major disasters requires rebuilding buildings and building relationships and social relations. USAID touches on 3 points in this project: a healthier neighborhood that can reach public service, basic human needs are met, and, thirdly, building solid structures against other disasters to come. In terms of a smaller footprint in the project, two-story shelters were built, it has the potential to increase up to 12 m<sup>2</sup> even if the unit creates 8 m<sup>2</sup> (Fig.2).

CHF International, which the USAID managed as a unit, developed a housing production program. The local government, which was experiencing financial difficulties, could not support the project as it was affected by this earthquake as much as the citizens. In this project, which lasted 17 months, 386 units of shelters were built. The construction process was carried out by Caravan Engineered Structures, during which the user also participated in the construction process. The user participating in the construction process has been taught to build a healthier house. User participation in the construction process determines the parcel, toilet, and water points. Neighborhood residents participated in the mapping, numbering, planning, and decision stages, and the decisions were evaluated the findings, creating an environment where experts and residents could discuss. At the end of this process, health, infrastructure, and service improvements were made in addition to 386 shelters. The transportation in the neighborhood has been reconfigured, and a more lively living space has been obtained. (Worldbank, 2016) (UN World Urban Forum, 2012)

Table 4: Katye Project through participatory components (Generated by the author)


<b>KATYE PROJECT</b>					
<b>PROJECT ID</b>	<p><b>YEAR</b> : 2010-2010</p> <p><b>LOCATION</b> : Port-au-Prince, Haiti</p> <p><b>CAUSE</b> : 7.0 Mw Earthquake</p> <p>Figure 2. A photo of the Katye Project which shows different individualized units (Source: UN World Urban Forum, 2012)</p>				
	<b>PARTICIPATION IN THE PROJECT</b>		<b>ACTORS</b>	<ul style="list-style-type: none"> <li>• Architect, Planner, Designer</li> <li>• Construction Firms</li> <li>• User</li> </ul>	<b>PROCESS</b>
<b>METHODS</b>			<ul style="list-style-type: none"> <li>• John F.C Turner's Approach</li> </ul>	<b>PRODUCT</b>	<ul style="list-style-type: none"> <li>• Public Space</li> <li>• Semi-public</li> <li>• Housing</li> </ul>



### 3.3.1.3. Sri Lanka Project

A tsunami followed the 9.1 magnitude earthquake in the Indian Ocean in 2004. Although many countries were affected by this disaster, four-thirds of Sri Lanka's coastline was heavily influenced by this tsunami. Many countries have returned financially to the country's calls for help, and NGOs have started the restructuring process. Although the participatory design approach was used due to the size of the project area, conventional housings were produced. In the method the user does not participate, the success rate is shallow. The civil war in Sri Lanka, which has been going on for years, did not end in this period and even emerged in project areas such as corruption and bribery. The people who were already aggrieved fell into a worse situation.

Table 5: Sri Lanka Project through participatory components (Generated by the author)

<b>SRI LANKA PROJECT</b>				
<b>PROJECT ID</b>	<p><b>YEAR</b> : 2004-2004</p> <p><b>LOCATION</b> : Coastal line of Sri Lanka</p> <p><b>CAUSE</b> : 9.1 Mw Earthquake</p>			
	<p>Figure 3. A photo of the Katye Project which shows different individualized units (Source: UN World Urban Forum, 2012)</p>			
<b>PARTICIPATION IN THE PROJECT</b>	<b>ACTORS</b>	<ul style="list-style-type: none"> <li>• Local Government</li> <li>• Architect, Planner, Designer</li> <li>• Community-Based Organisations</li> <li>• NGO</li> <li>• University</li> </ul>	<b>PROCESS</b>	<ul style="list-style-type: none"> <li>• Searching</li> <li>• Informing</li> <li>• Planning</li> <li>• Construction</li> <li>• After Use</li> </ul>
	<b>METHODS</b>	<ul style="list-style-type: none"> <li>• John F.C Turner's Approach</li> </ul>	<b>PRODUCT</b>	<ul style="list-style-type: none"> <li>• Public Space</li> <li>• Semi-public</li> <li>• Housing</li> </ul>

On the other hand, the residents were more satisfied with the study carried out by NGOs. The main difference between these two projects is the miscommunication between the project manager and the user. The aggrieved user in the process questioned the fate of the appropriations as a result of this lack of communication; they complained because the trust in the project was shaken. However, in Sri Lanka, where corruption is high, no rectification has occurred due to these complaints. On the other hand, many meetings were organized in the project produced by NGOs.

Although Post Tsunami Operational Management was signed between the Sri Lankan government and Liberation Tigers of Tamil Eelam (LTTE), LTTE carried out the project rather than the government. The tsunami-affected part was divided into smaller areas to

carry out the fieldwork. The organizations responsible for the housing production in these areas with the donor system were selected. Many interviews were set up in 3 different phases to start the housing production. In the first stage, an unframed interview was conducted to understand the living conditions. The second stage was to decide where and how many households should be built. In the third stage, on this road to design, the user was interviewed again and with the employees of the NGO and the institution. This process was carried out specifically for each location, sorted location-specific problems and urgency. In this process, many NGOs cooperated with semi-structured interviews, which community-based organizations conducted. Community Development Society, Death Donation Society, Religious Society, and Women's Society, while the Christian Children Fund and AMURT provided other discussions. The process took 17 months, and the user indirectly participated in the design decisions, and a total of 143 exemplary houses were built. (Joint Report of the Government of Sri Lanka and Development Partners)

### **3.3.2. Examples in Turkey**

Post-disaster participatory design is of great importance for Turkey. According to the statistical information between 1900-2016, Turkey ranks seventh globally. For Turkey, a country of disaster, both pre-disaster preparation, and post-disaster plans are essential. Again, we encounter less participatory examples in post-disaster housing production. Nevertheless, it is possible to discuss a few projects that participatory design experienced after the 2000s. A few of these projects will be explained with participatory design principles. At the end of the chapter, the examples in Turkey and the world will be compared.

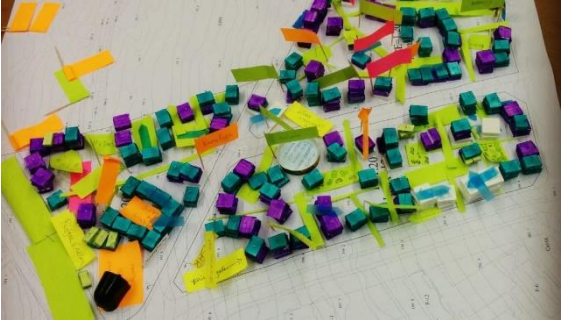
#### **3.3.2.1. Düzce Hope Workshop Project**

Düzce Hope Workshop, chosen as the first example, continues its struggle despite many impossibilities. The 1999 Düzce earthquake greatly affected not only Düzce but also Kocaeli, Sakarya, and Istanbul. The housing production area for the post-disaster was quite large. The project area was divided into seven parts. These projects, which would operate differently, did not produce an alternative solution for the tenants. First of all, DepDer was established to solve the housing problem, and the collective construction

of İmece houses was started. In 2003, the Homeless Earthquake Victims Housing/Building Cooperative was established; thus, mass demonstrations were held for safe and healthy housing demands. The cooperative, which started its activities in 2003, could not reach the land it requested until 2014. The workshops held in 2004 for everyone in this struggle to be Hope were called the Hope Workshop. MoEU approved the plan in 2013, and TOKİ made the zoning plan in 2014. According to the latest news about the project dated July 26, 2020, 234 families were expected to have their homes.

If we examine the participatory process of Düzce Umut houses, whose history is told, under the name of Düzce Umut Atölyesi, academicians from many different disciplines from Mimar Sinan University, Istanbul Technical University and Yıldız Technical University, active students, graduates of these schools, as well as professionals from many fields came together. Erasmus Mundus students had the opportunity to contribute to the design. After the land was determined, Düzceli Homeless, DEPDER, Building Cooperative, and the professionals, as mentioned earlier, came together with the workshops to create the design. The participants were first separated into focus groups to work more efficiently. Then it was aimed to get the opinions of the earthquake victims by experiencing the possibilities with a 3D game called Simulation. With this game, alternative situation plans were designed, and then it was tried to be decided by discussing (Fig. 3). The participant's idea was taken not only for the design of the site plans but also for the creation of user interior designs. This movement, which has conflicted with the management for a long time, also entered the top 10 in the World Habitat Awards in 2017. Although the end product of this project, which has been going on for 20 years, is incomplete, this point reached by starting from scratch with participatory design is a success story.

Table 6: Düzce Hope Project through participatory components (Generated by the author)

<b>DÜZCE HOPE PROJECT</b>				
<b>PROJECT ID</b>	<p><b>YEAR</b> : 2000 - Continues</p> <p><b>LOCATION</b> : Düzce, Turkey</p> <p><b>CAUSE</b> : 7.6 Mw Earthquake</p>			
	<p>Figure 4. A photo of Düzce Hope Workshops' masterplan</p> <p>(Source: Düzceumutatölyesi.wordpress.com)</p>			
<b>PARTICIPATION IN THE PROJECT</b>	<b>ACTORS</b>	<ul style="list-style-type: none"> <li>• Architect, Planner, Designer</li> <li>• Construction Firms</li> <li>• Community-Based Organisations</li> <li>• NGO</li> <li>• University</li> <li>• Chambers of Professions</li> <li>• User</li> </ul>	<b>PROCESS</b>	<ul style="list-style-type: none"> <li>• Searching</li> <li>• Informing</li> <li>• Planning + Designing</li> <li>• Construction</li> </ul>
	<b>METHODS</b>	<ul style="list-style-type: none"> <li>• Liz Sanders's Approach</li> <li>• Henry Sanoff's Approach</li> <li>• Cooperative Approach</li> </ul>	<b>PRODUCT</b>	<ul style="list-style-type: none"> <li>• Shared Media</li> </ul>


### 3.3.2.2. Marmara Earthquake Emergency Reconstruction (MEER) Project

Another participatory design example is the Şirinköy project, intended to be built after the same natural disaster. There are numerous participants in the project led by the World Bank; World Bank, IMF, EIB, Japan, Korea, the Islamic Development Bank, and Gulf Cooperation Council financing support and organizations and countries. While the project was supervised by the local PIU offices established by the World Bank, the

municipalities, the Ministry of Internal Affairs (MOIA), the Ministry of Transport and Infrastructure (MOTI), Ministry of Treasury and Finance (MOTF), the Land Registry and Cadastre, the Prime Ministry, the Ministry of Health (MOH), MOEU, and Turkish Electricity Distribution Corporation (TEDAS), which enabled the project, worked in cooperation. The project steps were examined by constantly transmitting with the mentioned public institutions and Project Implementation Units (PIU). Koç University and Marmara University supported the process, and Yeditepe University conducted a survey. Municipalities, Universities, and NGOs have been assigned to inform about the work done. Many organizations have established communication channels with the victims to carry out the studies more easily; Thanks to the professional chambers of Architects and Urban Planners, municipalities, private architectural offices, and international local government units, the community has been included in the work.

To not experience any loss of income before moving on to the household designs, first, the demographic data of the victims were tried to be obtained. Then the compensation evaluation studies of the households affected by the takeover were carried out. Later, they made a design according to their data and did not include the user at this stage. Although user information meetings are held throughout the design period, we can characterize this as user-active design rather than active user participation. As a result of the project, we can consider the reports provided by the World Bank, the survey study and its derivatives, and the planning called MEER. The Worldbank built infrastructure work, health improvement, psychological aid, economic aid, public recovery, education areas in this project, which is not limited to housing production due to the large size of the project area and the high level of destructiveness of the earthquake. At the end of the project, the OED, a World Bank unit, created a survey and measured satisfaction and gave him a passing grade for this project. However, in the interviews conducted by Emel Ganapati, the residents of Şirinköy, especially the headman of Şirinköy, do not find the houses built applicable enough. Asking, “How much can an American know about our culture?” they state that they have housing that is not suitable for them. We can pass here that the demographic data is not sufficiently reflected in the design.

Table 7: MEER Project through participatory components(Generated by the author)

<b>MEER PROJECT</b>					
<b>PROJECT ID</b>	<b>YEAR</b> : 2000-2006 <b>LOCATION</b> : Düzce, Turkey <b>CAUSE</b> : 7.6 Mw Earthquake Figure 5. A photo of MEER Project Site (Source: Ganapati & Ganapati 2009)				
	<b>PARTICIPATION IN THE PROJECT</b>	<b>ACTORS</b>			<ul style="list-style-type: none"> <li>• Local Government</li> <li>• Architect, Planner, Designer</li> <li>• Construction Firms</li> <li>• Community-Based Organisations</li> <li>• NGO</li> <li>• University</li> </ul>
	<b>METHODS</b>	<ul style="list-style-type: none"> <li>• Turner's Approach</li> </ul>	<b>PRODUCT</b>	<ul style="list-style-type: none"> <li>• Shared Media</li> <li>• Public Space</li> <li>• Semi-public</li> <li>• Housing</li> </ul>	

### 3.4. Comparison and Evaluation

Five applications from the world and Turkey approached the post-disaster housing production with participatory design integration, first the project details and then the participatory design details were explained. As a result of this briefing, the data were tabulated to compare these five examples of participatory design with each other more easily. The results to be drawn from these tables are as follows;

- Although the participation of experts is at the highest level in the Meer Project, we can state that the level of participatory design is shallow since the user is only involved in the research process as a participant. According to Arnstein, participation in the research and information process is false participation.



- Another result is that the user participated in the research and information phase in all of the projects mentioned.
- The process management of Düzce Hope Houses, which has participants from many different groups without the support of the local government, is longer than other projects and the housing project, which will be the final product, is still ongoing.
- As a result of the evaluations, the participation levels of the five samples were compared with each other. According to the table in chapter Two, user participation in projects is ranked based on the participation level. Although the Turner's approach was chosen as the participatory approach in the MEER and Sri Lanka project, this method was not used as it should be. Since the user's participation is meager than the process, it is considered passive participation. Because user participation, which remains at the level of information and solidarity, is considered passive participation. The highest user participation was detected in Villa Verde. Although the process of Düzce Hope Houses is based on participation, the success rate is lower than Villa Verde, where the process takes longer than expected.

To summarize, the post-disaster housing problem is a sudden problem. Social states must produce solutions to solve this problem. At this stage, it is explained by the methods of participatory design theorists that housing production can be carried out together with participatory design. Then, five examples that construct the post-disaster housing problem with the participatory design approaches are explained. The examples were compared among themselves in terms of actor, process, method, and final product. As a result of comparing these examples, Villa Verde was chosen to complete the participatory process in the post-disaster housing production. Villa Verde and the October 30 Izmir Earthquake, which is the case study of the thesis, will be compared with each other.

Table 8. The comparison table of projects in terms of participatory components (Generated by the author)

	ACTORS IN THE PROJECT								USER INVOLVEMENT IN THE PROCESS					PARTICIPATORY DESIGN METHOD IN HOUSING PRODUCTION					PRODUCT THROUGH PARTICIPATION			
	LOCAL GOVERNMENT	ARCHITECT, PLANNER, DESIGNER	CONSTRUCTION FIRMS	COMMUNITY BASED ORG.	NON GOVERNMENTAL ORG.	UNIVERSITY	CHAMBERS OF PROFESSIONS	USER	SEARCHING	INFORMING	PLANNING + DESIGNING	CONSTRUCTION	AFTER USE	HARAKEN	TURNER	SANDERS	SANOFF	COOPERATIVE	SHARED MEDIA	DESIGNED PUBLIC SPACE IN PROJECT	DESIGNED SEMI-PUBLIC SPACE IN PROJECT	HOUSINGS IN THE PROJECT
VILLA VERDE P.	Orange	Orange	Orange	Orange	Orange	Orange	White	Orange	Orange	Orange	Orange	White	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
KATYE P.	White	Yellow	Yellow	White	White	White	White	Yellow	Yellow	Yellow	Yellow	White	Yellow	White	Yellow	White	White	White	White	Yellow	Yellow	Yellow
SRI LANKA P.	Green	Green	Green	Green	Green	Green	White	Green	Green	Green	Green	Green	Green	Green	Green	White	White	White	White	Green	Green	Green
DUZCE HOPE P.	White	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	White	Brown	White	White	Brown	Brown	Brown	Brown	White	White	White
MEER P.	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	White	White	White	Brown	White	White	White	White	White	Brown	Brown	Brown	Brown

## CHAPTER 4

# THE CASE OF THE 30 OCTOBER 2020 İZMİR EARTHQUAKE

### 4.1. General Information and Background of the Project



Figure 6. The location of epicenter of the earthquake (Source: USGS 2020)

A devastating earthquake with a magnitude of 6.6 Mw according to AFAD data, 6.9 Mw according to KOERI, and 7.0 Mw according to USGS took place on 30 October 2020 in İzmir, one of the fault line breaking points and located on the first earthquake zone. The earthquake depth, the epicenter of which was determined as Samos, was approximately 17 km, and the earthquake interval was measured as 16 seconds. The earthquake was felt in İzmir but also in the surrounding provinces of Aydın, Manisa, Muğla, and Denizli. A small-scale tsunami occurred in the follow-up of the earthquake in Seferihisar, which is the closest point to the earthquake focal point. According to AFAD data, 1230 aftershocks occurred with magnitudes varying between 1.0 and 5.1, enduring 62 days. One thousand thirty-four people were injured, and 119 people died.

As with every natural disaster, Turkey's Disaster Combat Plan (TAMP 2013) came into effect. Search and rescue efforts started after the earthquake. Provincial AFAD directorates of Istanbul, Afyon, Bursa, Sakarya, Kütahya, Eskişehir, Çanakkale, Muğla and Balıkesir, Manisa, Konya, Denizli, Uşak and Isparta, especially İzmir AFAD, were

referred to the region. Besides AFAD, Gendarmerie Search and Rescue (JAK) and other NGOs came together to help in the phase of search and rescue. National Medical Rescue Team (UMKE) and 112 Emergency Assistance were assigned for the people who needed medical assistance due to the earthquake and pandemic. While the search and rescue efforts continue, 960 tents have been set up to meet the need for emergency shelter at the same time. Turkish Red Crescent vehicles supported the earthquake victims with 112 personnel and 137 volunteers directed to the region. On 31 October 2020, MoEU and the Ministry of Agriculture and Forestry immediately were executing damage assessment studies. Psycho-social working groups have also started their work in the region. AFAD Presidency 3.000.000 TL; The Ministry of Family, Labor, and Social Services sent 5,000,000 TL of emergency aid (AFAD, 30 October-31 October 2020). Izmir Municipality opened the Hilton Hotel to earthquake victims, and tent centers were established throughout Izmir.



Figure 7. Project areas where Toki produces housing (Source: TOKI 2020)

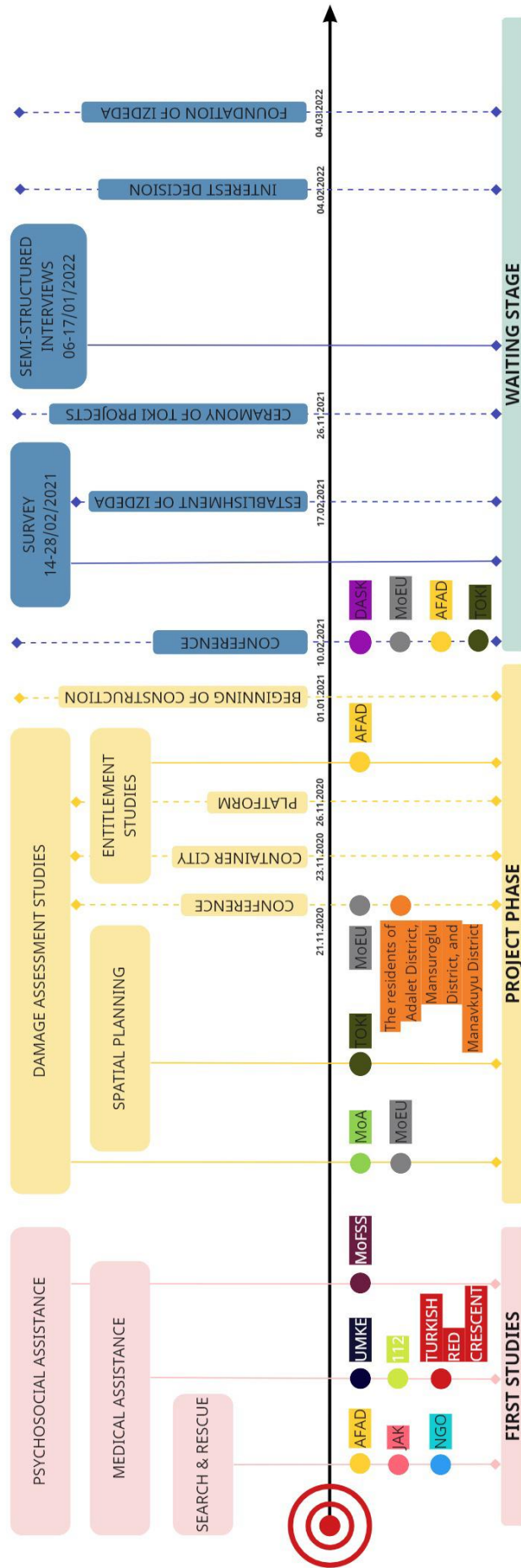


Figure 8. The timeline after the earthquake (Generated by the author)

Murat Kurum, the Minister of Environment and Urban Planning held three sessions of assemblages at Tepekule Congress Center on 21 November 2020; He came together with the residents of Adalet, Mansuroğlu, and Manavkuyu Districts and presented Spatial Planning Project prepared by TOKİ. According to the report prepared by the MoEU, the number of buildings that will be demolished urgently is 36, 602 laboriously damaged, and there were 720 relatively damaged, 6,848 lightly damaged, and 54 collapsed buildings. TOKİ has created the project as mentioned earlier by considering the heavily damaged, to be demolished urgently and ruined buildings. TOKİ project has been conceived for seven principal project areas and a reserve housing area. There are currently 1571 residences and 248 commercial areas in Bayraklı Center, while the TOKİ project covers 1405 residences and 187 retail areas for the seven principal project areas. Since the buildings to be built in the seven main project areas could not provide a sufficient number. There was a need for more housing for the earthquake victims. A Reserve Housing area was developed in the upper area of the İzmir City Hospital in Bayraklı. At this meeting, Authorized organizations declared that the housing projects would be yielded within one year. (trthaber, 2021)



Figure 9. The damaged buildings in Bayraklı after the earthquake (Compiled by the author)

Since the earthquake, the MoEU continued its damage assessment studies. Murat Ç., one of the İzmir Provincial Directors of the MoEU, describes the process as follows; *"For three weeks, a field survey was carried out in Bayraklı, Bornova, and Karşıyaka, and buildings that needed to be demolished urgently were identified. After the buildings were announced to be demolished urgently, there was a one-month appeal period. As a result of the objections, a second evaluation and a second announcement were made. We*

*completed the demolition by January and started construction on 01 January 2021."*  
*(From an interview with MoEU staff)*

Yılmaz K., one of the staff members of damage assessments of the mobile team, made a statement, *"AFAD removed the wreckage, the MoEU did the damage assessment. We provided supervised access to buildings that were decided to be demolished. The citizen came and took his belongings. Some buildings were not even allowed for an hour; the pole was demolished. Seventy buildings were demolished. We started construction in January."* (From an interview with MoEU staff)

Afterward, on 23 November 2020, the 21 square meter Container City with a capacity of 493 containers was founded on an area of 46 thousand square meters in Bayraklı Adalet Neighborhood, which was outstretched to earthquake victims. According to official sources, Earthquake survivors filled 117 containers before the end of November. In addition to the earthquake victim containers, there were reinforcement and personnel containers of AFAD, Police officers, the Ministry of Family and Social Policies, and the Ministry of Education in Container City.



Figure 10. Photographs from the Container City (Taken and compiled by the author)

On the other hand, on 26 November 2020, 30 October Izmir Earthquake Victims Platform was established on Facebook. The Platform met with Bayraklı Mayor and AKParti İzmir Provincial Vice President on 13 January 2021. AFAD started to collect applications for entitlement on 14 January. Following Law No. 7269, formal ownership announcements have been made, and objection processes have been completed. The Platform held meetings with Izmir Metropolitan Mayor Tunç Soyer on 19 January 2021 and AFAD Izmir Provincial Director on 20 January 2021. As a result of the meeting on 22 January, the urban transformation was accepted for the heavily damaged buildings outside the project area. The Platform summoned another meeting with the Governor of İzmir on 29 January. A public meeting was held in two sessions on 10 February, and Governorship, DASK, MoEU, AFAD attended this gathering. As of 17 February, the Platform turned into the Izmir Earthquake Victims Solidarity Association.



Figure 11. A shot from the conference (10 February 2021) (Taken by the author)



Figure 12. A shot from the symbolic opening ceremony of IZDEDA (15 April 2021) (Source: İzBel 2022)



Figure 13. A shot of the TOKİ housings in the project area (Taken by the author)



As of 26 November 2021, 741 residences and workplaces have been built, 795 homes and 153 workplaces are still under construction. Similarly, the residences were opened to lots with the ceremony attended by the President on this date. The beneficiary draws were drawn for project areas 2, 4, 6, 7. At this ceremony, the President of the Association, Haydar Özkan, had the opportunity to speak one-on-one with the President and convey the injunctions of the earthquake victims.

In the Official Gazette published on 02 February 2022, the urban transformation loan increased from 200,000 TL to 400,000 TL, considering the current conditions. Izmir Earthquake Victims Solidarity Association (IZDEDA) persists in working to facilitate interest rates and extend maturity. On 05 February 2022, Minister Murat Kurum proclaimed that all houses would be handed over to earthquake victims in 2022. The reserve area project is envisioned to be given in June 2022.

One and a half years have passed since the earthquake, and the project process is still ongoing. As a result of the news, Facebook posts, and meetings examined throughout the process, surveys and interviews were conducted with the earthquake victims. In the process, there was communication between the earthquake victims and the institutions in charge, even though it is albeit limited. The struggle process after the earthquake nevertheless persists. Various methods, which have been exemplified in the methodology, have been operated at different times to reach up-to-date information.

## **4.2. Methods Used in the Analysis of the Case Study**

This thesis research was designed using mixed methods. The mixed-method aims to achieve both qualitative and quantitative results. The mixed-method is formed by incorporating qualitative and quantitative methods and aims to provide more integrated research by making up for each other's deficiencies (Creswell, 2009) (Burke and Onwuengbuzie, 2005).

The literature review was completed, and an ideational framework was created according to the contextual background. Thanks to the conceptual framework, participatory design components were created. Participatory design components formed the basis for sample projects and case studies and compared projects more efficiently. Within the conceptual framework, the 30 October 2020 Izmir Earthquake was chosen as a Case Study to monitor and investigate participation in post-disaster housing production.

The Case Study strives to conclude by analyzing the participatory architectural units created by the previous literature research and comparing them with other projects. A single case study will be made, and the sample project will be interpreted by establishing similarities or contrasts between the other mentioned projects. (Creswell, 2009). The interviews were made to analyze the process after the earthquake, news and Facebook channels were followed. (Saunders et al., 2003:83). Observation, one of the qualitative data collection approaches, was used to understand better the earthquake struggle procedure (Creswell, 2009). The process was better understood through interviews and observations. As a result of these compliances, a questionnaire was created to reach statistical data. Questionnaires aim to acquire statistically significant data among social issues by asking multiple questions. The interviews persisted in crossing with the data of the survey.

The manager, the zoning desk, and the damage assessment team of MoEU were met for non-structured interviews. Thus, the process and the point of view of the institutions were obtained directly. These interviews had been made to understand the process and the role of the organizations.

The survey was carried out face to face between the 14th - 28th of February. It was stated that 202 containers were inhabited in Container City, and 190 families were given two containers depending on the number of people in some families. Eighty-five container residents were requested to accompany the questionnaire; thirty-three people refused to answer. Although fifty-two people answered the survey, four people's survey answers were deemed invalid because they created missing data.

The questionnaire consists of two parts; the first part is generated to obtain demographic information of the participants. The second part, part B, was created through statements using the components of participatory design. It sought to see how much the participation phase of the process takes place in which element.

The questions were formulated within the framework of participatory architecture. It is possible to acquire direct numerical data with closed-ended inquiries. Closed-ended statements follow a particular structure for ease of analysis. The closed-ended questions in section B were created using a five-point Likert scale to measure the participant's level of participation or disagreement. The options for closed-ended questions start with "strongly disagree" and end with "strongly agree ." The Likert scale is one of the most commonly preferred scales for the survey method. Generally, there is an odd number of options in the Likert scale, such as three, five, seven, and nine. Nonetheless, seven and

nine Likert scales are bewildering for the participant. Consequently, a five-point scale was preferred.

Table 9. Reliability analysis

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,844	,846	22

The pilot study was conducted as a first with ten people. The incomprehensible points were evaluated and altered. Before reckoning the questionnaire results, the deficiencies of the questionnaire were reached by performing the reliability and comprehensibility test (Levy and Lemeshow, 1999). The reliability calculation of the Likert scale was measured with the most preferred method Cronbach Alpha. The research scale is  $0.80 \leq \alpha < 1.00$  and is highly dependable.

The frequency, standard deviation, percentage, and mean of the data were obtained using descriptive analysis. The descriptive analysis enables data to create charts, particularly for demographic data. The mean value is useful in determining the general opinion of the participants. The standard deviation is the value that shows how far it is from the mean value. (Agresti & Finlay, 1998, p. 47). The standard deviation can be reckoned with whether people agree with the consensus.

After the survey was perpetrated in the Container City, as a follow up study, semi structured interviews were held with the members of IZDEDA, who took an operational role in the Izmir Earthquake and became one of the actors. The survey was not efficient to capture the thoughts and whole picture. IZDEDA became one of the most important actors in the process after İzmir earthquake. Moreover, survey had being conducted in the early days of IZDEDA establishment. Throughout time, IZDEDA increased the number of members and became more powerful to reach the institutions. Since the interviews were held almost a year after the survey, they were conducted with the aim of gaining more information about the progress. Interrogation questions were created parallel to the survey to interpret them together. The interviews focused more on people's thoughts and were devised to obtain more subjective judgments. Observed and surveyed data were repositioned by integrating them with the comments of the interrogation to make the reality check more impressionistic.

Semi structured interviews for this study were conducted online between 06-17 January 2022 using the Zoom program. A WhatsApp group was formed with IZDEDA members, and semi-structured interviews were held with eight members at appropriate times, not exceeding 1 hour. However, notes were taken during the recorded interviews with the permission of the participants to avoid loss of information. These recordings were attended to again to suffice in the absent notes. The notes were analyzed, and the ones to be interpreted were assigned.

The 30 October 2020 İzmir Earthquake, the focus of the thesis and the case study, has a contemporary and intricate process. There are different stages and multiple groups of actors in the process. Distinguishable methods were used on behalf of the stages of the process and the products desired to be obtained. The case study has the same components as participatory design. Based on this resemblance, the case study will be approximated with the best project using the post-disaster participatory housing production method. The case study was analyzed using more than one method to make this comparison accurately. Opinions of different segments of earthquake survivors were obtained through questionnaires and interviews. Thus, the different time sections of the struggle plan developed after the Izmir Earthquake have emerged. These results were compared using the triangulation technique (Neuman, 2014). Members' comments, survey data, and observed data were crossed with literature references, resulting in more accurate and reliable results.

### **4.3. The Analysis of the Case Study**

Data were obtained due to the approaches chosen to understand the case study. The data acquired from the survey are statistical and subjective assessments have been reached from the interviews. The data created by the survey analysis were transformed into tables and graphics. Semi-structured interviews, which are a follow-up study, were conducted to shed light on the process after the survey. Moreover, the comments from the interviews will be quoted in parallel with the text. Questionnaires and interviews were conducted at different times with different techniques. Interpreting the obtained results by comparing them provided a more holistic acquaintance of the process. This study helped reveal the similarities and differences between the results of particular time sections.

### 4.3.1. The Findings of the Questionnaire

The results of the questionnaire, which consists of two parts, is given in order. Foremost, the demographic and general information of the participants were tabulated. Afterward, the participants of the survey responded the post-disaster process according to the questions prepared within the framework of participatory design components.

#### 4.3.1.1 General Information of the Participants from Container City

Table 10: The table shows the demographic data of the survey's participants

Evaluation Parameters		N	%
Gender	Female	32	66,6
	Male	16	33,3
Age Range	0-18	2	4,16
	18-24	4	8,33
	25-34	4	8,33
	35-49	15	31,25
	50 and above	23	47,91
Level of Education:	Primary education	18	37,5
	Middle school	4	8,33
	High school	9	18,75
	University	16	33,3
	Graduate	1	2,08
Level of Income	0-1500	16	33,3
	1501-3000	18	37,5
	3001-4500	11	22,9
	4500 and above	3	6,25
Insurance	Not available	28	58,3
	Available	20	41,6

For a more straightforward interpretation of the questionnaire, the descriptive analysis of the data and then percentiles were extracted.

Some did not want to answer the questionnaire after a social, psychological, and physical concussion such as an earthquake. Therefore, gender equality policy cannot be mentioned in the survey. The survey was conducted with everyone who answered it. It was observed that the majority of the respondents were women.

As the age spectrum graph shows, twenty-four and above were tried to be chosen for the survey. In the 35-49 age group, 15 people were reached, and this group made up 31.25%, while 23 people in the 50+ segments reached 47.9%.

When the education levels are measured, we encounter a mixed picture. The number and percentage of people are almost equal in university and primary education. Only one person among the participants got postgraduate education.

When it comes to income level, the number of people who receive a salary of 4500 and above is only three, while the percentage is 6.25. While sixteen people have no salary or less than 1500 income, eighteen people have an income level of 1501-3000.

In the current insurance level measurement, it has been observed that twenty-one people out of forty-eight; 43.75% of people do not have insurance.

Table 11: The table shows the general information of the survey's participants

Evaluation Parameters		N	%
Before the earthquake, would you follow the local government decisions about where you lived?	No	28	58,3
	Yes	20	41,6
Are you a member of any Non-Governmental Organization?	No	45	93,75
	Yes	3	6,25
What is your status in your former residence?	Relative house	4	8,33
	Shared rent	2	4,16
	Rent	15	31,25
	Own house	23	47,91

**cont on next page**

**cont of Table 11**

What was the square meter of your old house?	0-60sqm	8	16,6
	61-90sqm	2	4,16
	91-110sqm	9	18,75
	111-130sqm	16	33,3
	131sqm and above	13	27,08
How many people were residing in residence?	1	2	4,16
	2	10	20,8
	3	12	25
	4	12	25
	5 and above	12	25
How many years have you lived in your home?	0-5	8	16,6
	6-10	10	20,8
	11-15	6	12,5
	16-20	15	31,25
	21 and above	9	18,75
Did you have a second property in the area?	Yes, in the project area and heavily damaged	5	10,4
	Yes, in the project area and moderately/slightly damaged or undamaged	6	12,5
	Yes, not in the project area and heavily damaged	0	0
	Yes, not in the project area and moderately/slightly damaged or undamaged	3	6,25
	No	34	70,8

**cont on next page**

**cont of Table 11**

What is the extent of the damage in the building where your former residence is located?	Completely collapsed.	9	18,75
	It has not completely collapsed, but it is dangerous to live. (Medium damaged)	31	64,5
	It is slightly damaged, if it is repaired, it can be lived.	4	8,33
	Undamaged	4	8,33

When the participants were asked whether they pursued the local decisions about where they lived before the earthquake, 58% of the participants stated that they were indifferent to the decisions.

When the participants' status of membership in any non-governmental organization was questioned, 45 people radically answered no.

It was desired to create a profile of the property status by asking the status in the old house. According to this table, it was determined that 8.3% of people lived in a rent-free relative's house, and 4.1% were living in a shared rental type residence. While 39.58% of the participants were tenants, 47.9% were landlords.

16.6% of the houses are 0-60 m<sup>2</sup>, 4.1% are between 61-90 m<sup>2</sup>, 18.75% are 90-110 m<sup>2</sup>, while 33.3% of the houses and 131 m<sup>2</sup> are in the range of 111-130 m<sup>2</sup>. Larger houses than 131 m<sup>2</sup> are 27% of houses.

The majority of participants live with two or more people, who are almost equal.

The number of years spent in the residence was asked where the approximate distributions are seen in the table. While the percentage of those living for 11-15 years is the lowest with 12.5%, the maximum is 31.25%.

When asked if there is a second property in the area, it was seen that option C was not marked at all. The percentage of those who say that another damaged property is 10.41%. While the percentage of people in the Project area with medium/little or undamaged property is 12.5%, the rate of people with medium/little or undamaged



property outside the project area is 6.25%, with the lowest rate. The highest rate was 70.8% of those who did not have a second property.

Most houses are moderately damaged with 64.58%, while the wholly collapsed houses make up 18.75%. The 8.3% cut is both the percentage of slightly damaged buildings and the rate of entire buildings. It is not known why these four undamaged dwellings were not inhabited.

The general information of the interviews' participants is given in the table to compare with the questionnaire. The eight participants are women, and they are a retired or working group over the age of 40. All of them are members of the Association. They follow the Association to be included in the processes of their homes in Bayraklı with different damage conditions and predominantly to get accurate information.

#### **4.3.1.2. The Analysis of the Questionnaire Related to Participatory Design and Its Components**

In part B of the questionnaire, statements were formed depending on the participant design components. The statements are divided into four headings, each expressing the necessary component for participatory design. The statements in this section present five-point Likert options from negative to positive. The average value was determined as three. Descriptive analysis was performed to evaluate the data, standard deviation and mean values were found.

Descriptive analysis data was the first to be evaluated in the survey results. Since the standard deviation is less than 1, it can be concluded that the participants agreed on the four components of the participatory design. The process carried out after the 30 October 2020 İzmir Earthquake is investigated through the participatory design components. The survey participants think that the struggle plan is far from process management and method participation. When the struggle plan is evaluated based on actor and product, the average significance approached 3; Participants remained undecided on this matter.

Table 12. Descriptive analysis of participatory design's components through Izmir Earthquake

		Actors	Process	Method	Product
N	Valid	4	4	4	4
	Missing	0	0	0	0
Mean		3.0625	2.7054	2.6417	3.1708
Std. Deviation		,70398	,67420	,70253	,79892

#### 4.3.1.2.1 Participation Between Actors

Table 13: Table showing the percentage distribution of B.1 questions to answers

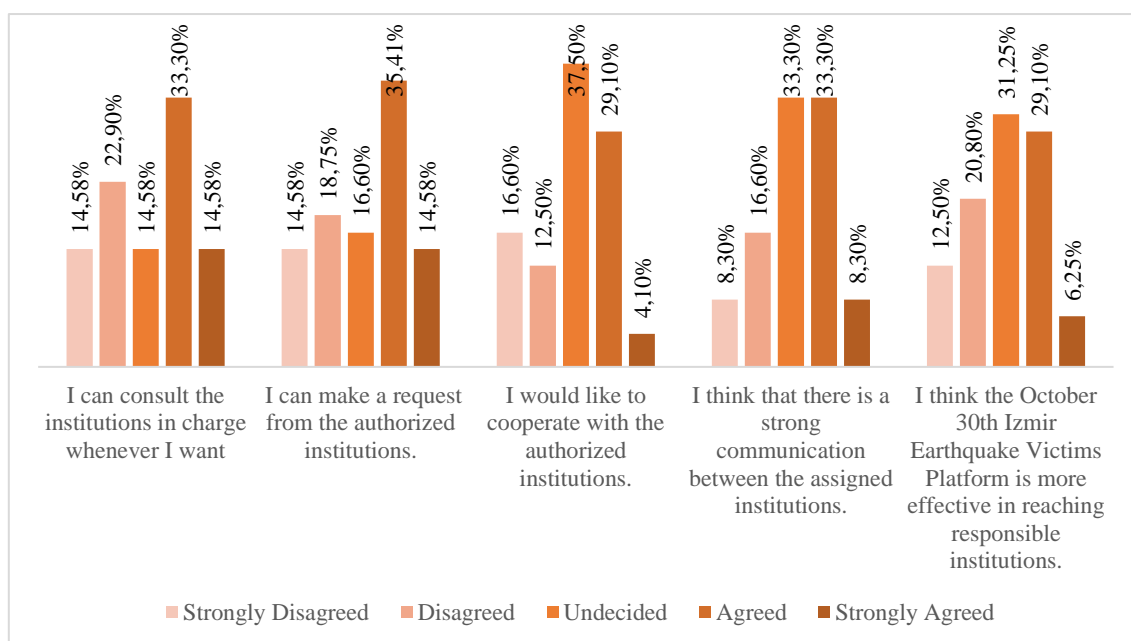


Table 14. Descriptive analysis of part B.1 through expressions

Invalid	4	4	4	4	4
Missing	0	0	0	0	0
Mean	3.1042	3.1667	2.9167	3.1667	2.9583
Std. Deviation	1,32472	1,31008	1,12672	1,07848	1,12908

At this stage, the transmission level between actors and earthquake victims was measured with the questions asked. The connection of earthquake survivors with the institutions in charge is demonstrated.

Firstly, the participants' ability to consult with the authorized establishments was questioned. While 33.3% of the participants stated that they could consult, 22.9% stated they could not. The other three options are equivalent to 14.58%. When the status of requesting the authorized institutions was asked, they answered positively with a rate of 35.4%, similar to the situation of being able to consult.

When the collaboration situation with the authorized organizations was questioned, although it was positive with 29.1%, 37.5% stated undecided. In this case, even if a negative result cannot be directly reached, indecision may result from not trusting the communication between the institutions in charge.

When the communication status of the incumbent institutions was measured, in a similar situation, the option "undecided" was equal to 33.3%. When asked whether the 30 October İzmir Earthquake Victims' Platform could reach the responsible institutions more easily, 20.8% disagreed, 31.25% were undecided, and 29.1% of people selected the "agreed" option.

#### 4.3.1.2.2 Participation in The Process

Table 15: Table showing the percentage distribution of B.2 questions to answers

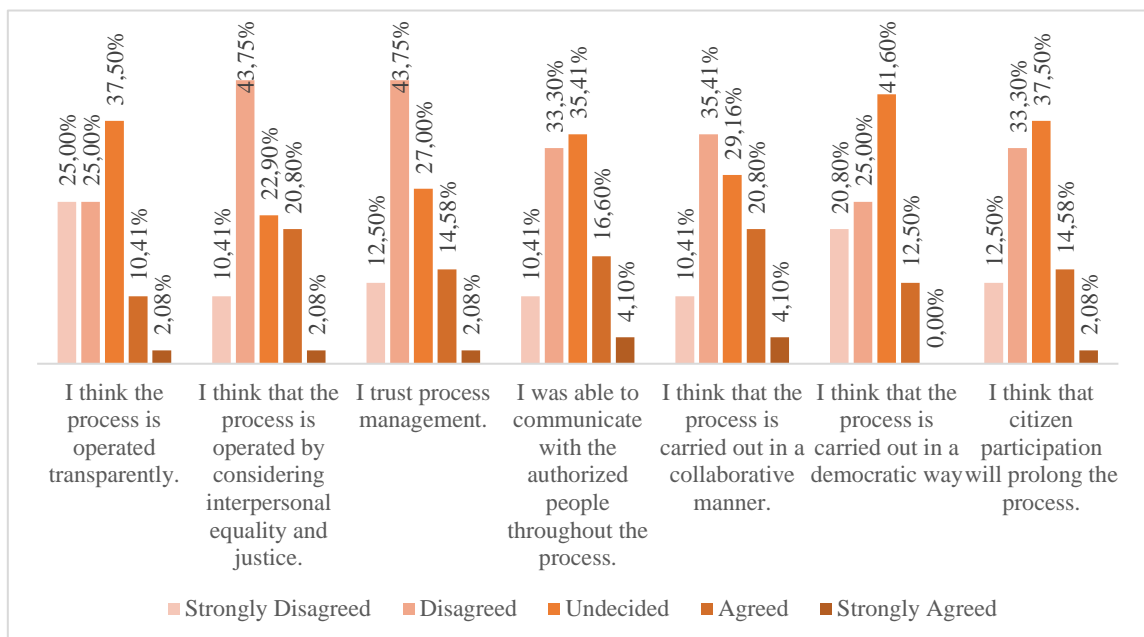


Table 16. Descriptive analysis of part B.2 through expressions

Valid	4	4	4	4	4	4	4
Missing	0	0	0	0	0	0	0
Mean	2.3958	2.8542	2.8958	2.8333	2.8958	2.4583	2.6042
Std. Deviation	1.04657	1.07168	1.11545	1.03827	1,07663	,96664	,96182

In participatory design, every actor in the procedure should be equal, democratic, and transparent to each other. The management of the process is presently related to the trust and connection between the actors. In this section, the perception of the earthquake victims of the struggle process that started from the Izmir Earthquake and continues was measured.

While 37.5% of the majority abstained about the transparency of the process, 25% stated that they disagreed. The other 25% of people had chosen the of strongly disagree. In measuring equality and justice among the actors in the procedure, most people disagree with 43.75%.

As a result of whether the process is democratic or not, the "strongly agree " option was not selected at all. 41.6% of the participants were undecided, 25% did not agree, and 20.8% chose the option of strongly disagree.

Inequity in the process management and communication failure, in parallel with the results in terms of the reliability of the process, 27.08% undecided participants, 43.75% of people reflected that they did not participate. While twenty-seven people did not participate in total, eight people agreed.

The possibility of prolonging the process if there is citizen participation was asked. Although most were undecided, 33.3% thought that the process would not be prolonged.

### 4.3.1.2.3 Methods of Participation

Table 17: Table showing the percentage distribution of B.3 questions to answers

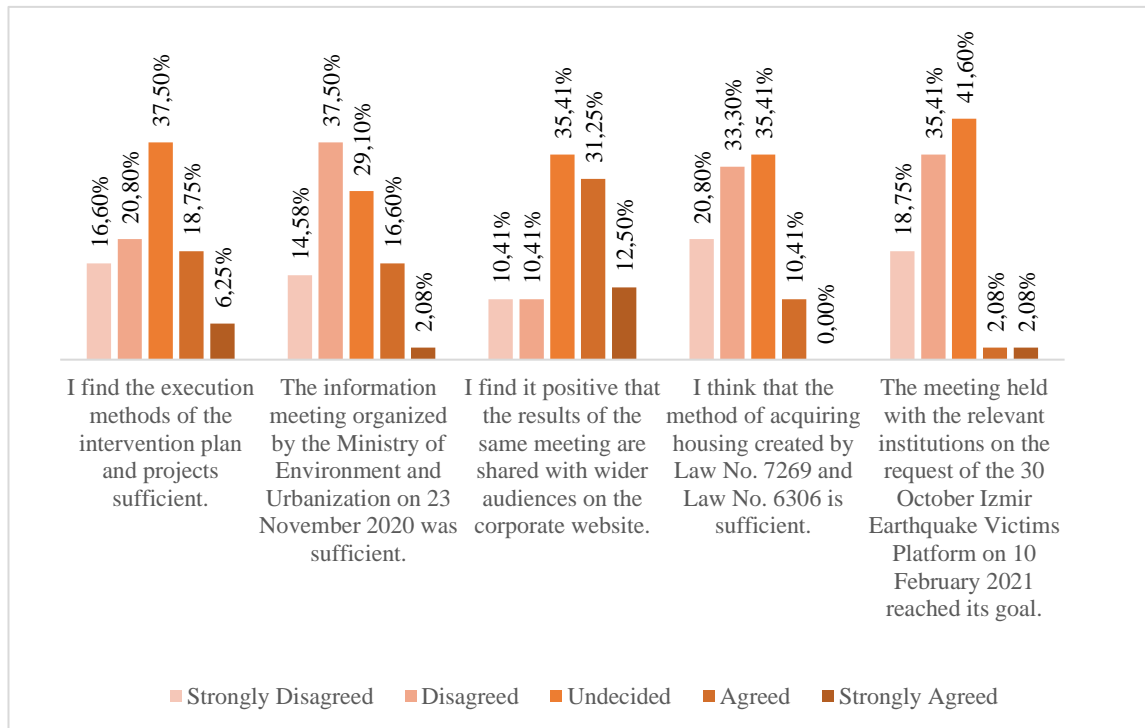


Table 18. Descriptive analysis of part B.3 through expressions

Invalid	4	4	4	4	4
Missing	0	0	0	0	0
Mean	2,7500	2.5208	3,2500	2.3542	2.3333
Std. Deviation	1,15777	1.03121	1.13924	,93375	,88326

The third component is the method that expresses how participation appears. In this section, the adequacy levels of the tools and approaches used for the management of the struggle process were estimated.

When the participants were asked about the methods of carrying out the post-disaster recovery plan, results were obtained parallel with the process. The majority were undecided, with 37.5%, and 20.8% agreed that these methods were insufficient. The MoEU's meeting was held after the earthquake to inform the public, and earthquake victims achieved their purpose. 37.5% of the majority argued that the meeting was not sufficient. However, the fact that the results of this meeting were easily accessible on the website was found more positive by the participants. The meeting, which was the second

information meeting held on 10 February 2021, was similar to the first. Although most remained undecided, 35.4% stated that this meeting did not target.

It was asked to question whether the laws no. 7269 and 6306, which are regulations after the disaster, were sufficient as a method. The percentages of those who chose strongly disagree and disagree are 20.8% and 33.3%, respectively. At the same time, the strongly agreed option is not ticked at all. Thus, it became clear that the participants did not find these methods correct and sufficient.

It was observed that the residents of the Container City did not adopt the methods chosen after the disaster. It was revealed that the participants' expectations sought a different answer. Although the general opinion of the participants is that they disagree, the information transfer of the process in the social media environment was evaluated positively.

#### 4.3.1.2.4. Participation in The Project

Table 19: Table showing the percentage distribution of B.4 questions to answers

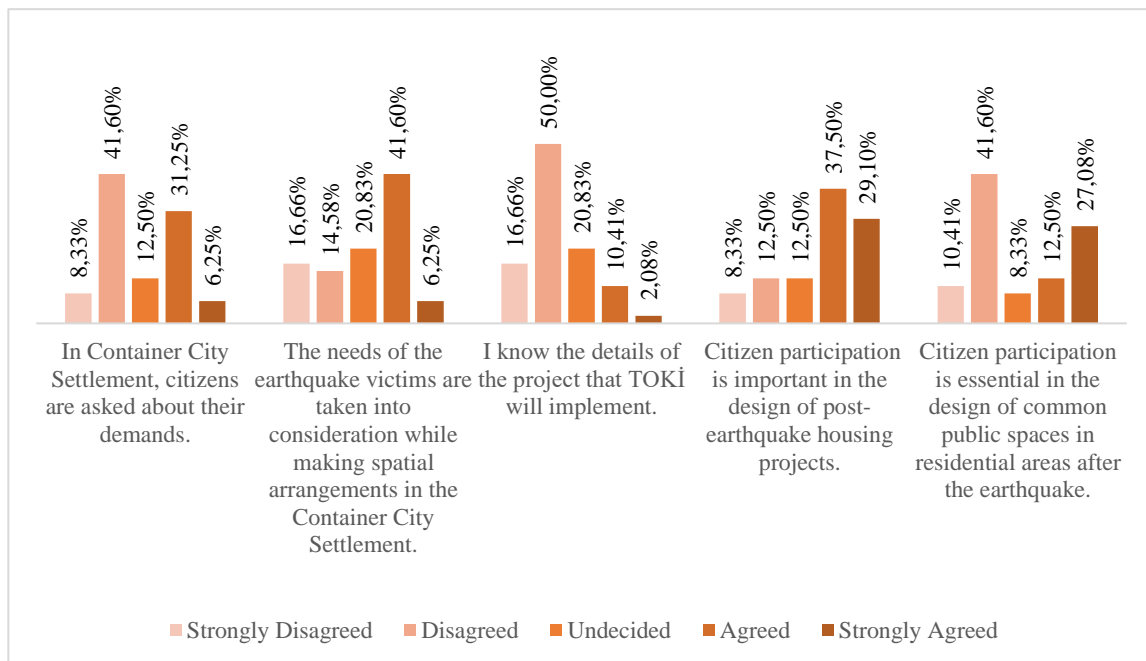


Table 20. Descriptive analysis of part B.4 through expressions

Invalid	4	4	4	4	4
Missing	0	0	0	0	0
Mean	3.1875	3.0625	2,3125	3.6667	3,6250
Std. Deviation	1.14216	1,22746	,94882	1,26042	1,29853

The last component, which can be seen as the purpose of participation, is the final product, the participants' thoughts about the project and how much they participated. It is noteworthy how much the user is involved in the emergence of the product, which is the last stage of the process.

When measuring whether or not the residents of Container City are asked about their demands, 41.6% of the respondents say that they are not asked. 31.25% of people claimed to have been asked. Seventeen people stated that they disagreed with whether the spatial arrangements in the Container City were taken from the residents or not.

It was requested to get the participants' opinions about the main project to be provided by TOKI. It has emerged that the details of the TOKI project are not known. 50% of the participants stated that they had no idea about the project. The necessity of participation in the house to be built after the earthquake was measured; 66.6% agreed with this idea.

### 4.3.2. The Findings of the Interview

The results of the semi-structured interviews consisting of two parts are given respectively. As in the survey, the participants are tabulated and labeled, and indicated in the quotations. According to the questions prepared within the framework of the participatory design components covering the post-survey process, the participants conveyed their thoughts on the post-disaster operation and developments.

### 4.3.2.1 General Information of the Participants from IZDEDA

Table 21: The table shows the demographic data of the interview's participants

	Participants	Age	Occupation	Membership	Property Status	Damage Status
Interviewee 1	F.	58	Retired	Member	Own property	Moderately Damaged
Interviewee 2	G.	54	Retired	Member	Own property	Heavily Damaged
Interviewee 3	S.	63	Retired	Member	Own property	Slightly Damaged
Interviewee 4	F.	58	Retired	Member	Own property	Slightly Damaged
Interviewee 5	A.	48	Computer Engineer	Member	Own property	Heavily Damaged
Interviewee 6	H.	42	Manager	Member	Own property	Slightly Damaged
Interviewee 7	B.	47	Bank Employee	Member	Own property	Heavily Damaged
Interviewee 8	T.	47	Real Estate Investment Consultant	Member	Own property	Slightly Damaged

The general information of the interviews' participants is given in the table to compare with the questionnaire. The eight participants are women, and they are a retired or working group over the age of 40. All of them are members of the Association. They follow the Association to be included in the processes of their homes in Bayraklı with different damage conditions and predominantly to get accurate information.

### 4.3.2.2 The Analysis of the Interview Related to Participatory Design and Its Components

Semi-structured interviews were conducted eleven months after the survey and were conceived to comprehend what transpired during this period in addition to the survey data. This analysis, which is the continuation of understanding the case study, was created



with similar questions to be interpreted with the questionnaire. Unlike the inquiry, the questions did not aim to measure the level but to reach the comments and thoughts of the earthquake victims directly. Therefore, the questions brought the story and created a suitable ground for thematic content analysis.

#### **4.3.2.2.1. Participation Between Actors**

Regarding the communication established by the actors, the first theme concentrated on the initial response after the disaster. Both the first steps of the incumbent institutions in the struggle process and how the effort of the association started are escalated.

*“It started with aid; the first aim was to reach the right help to those in real need. The first contact was made with the Governorship, Municipality, and AFAD.”*  
(Interviewee 1)

*“We are earthquake victims; we are not partisans. That is why Haydar President talked to every institution you can think of such as MoEU, Governorate, AFAD, municipalities... He even spoke to the President when he came to Izmir.”* (Interviewee 2)

*“In other words, we are meeting with everyone from the government to the opposition, from the local to the central government, and we want to tell everyone about our problems.”* (Interviewee 6)

*“The association was not established as an active association firstly. In the first days of the earthquake, no one wanted anything from institutions besides information. The Platform was generated by three or five people, as no one knew what to do next, who to apply to, and how to proceed. Haydar Özkan took the lead; friends gave support. We worked on aid and tents in the first ten days, and then we improved as problems arose.”*  
(Interviewee 8)

The collaborative action situation, which develops depending on the transfer between the actors, is associated with the next statements. The members of the association commented that they were the partakers that desired to cooperate in this procedure and that they had success from time to time.

*“In other words, since there is **a mutual dialogue** at every stage of the process, something is done in common. For example, on the precedent, Tunç President listened to us and made regular visits. **It's all a collaborative effort**” (Interviewee 7)*

*“I can say that **we did collaborate**, for example, on the issue of precedent. Although the decision was different, the municipality has listened to us and changed the decision.” (Interviewee 2)*

*“**We're trying to cooperate**. Our buildings are reported as slightly damaged, but they are uninhabitable, so not healthy for living. Bayraklı Municipality also sees these buildings as risky structures. But we are classified as urban reformers. **Our efforts continue to change this.**” (Interviewee 4)*

Although the housing problem is the most important problem for the earthquake victims, it was also stated that there are other issues that the association focuses on. Because the earthquake did not only create a physical change, it also created various scenarios and problems. The association also communicates and tries to cooperate with other institutions to find solutions to earthquake-related problems.

*“I was responsible for the scholarship and education of the Association. We wanted scholarships from many İzmir Based Institutions for earthquake-affected students. We deliver goods to homes, stationery, and test books to children. However, we have corresponded with the Turkish Psychological Association to provide free psychological support. We cooperated significantly with many organizations such as İzmir Officers' Wives Association, Borusan, Turkish Women's Union, Aegean Forest Foundation to find a scholarship. **Of course, everyone needs a home, but there are other important issues.** We have a project for young people and children with Bayraklı Municipality; We want to know them and be helpful. Soon we will do projects about women.” (Interviewee 5)*

In this part, the participants of the interview commented on the communication between the institutions in charge throughout the process. Although the communication of the incumbent organizations was fast and practical at the first response, it was observed that misunderstandings increased with the prolonging process.

*“So the **first aid was swift**. Tents were set up very quickly, aid was **distributed rapidly and adequately**, but the resolution process **did not go so smoothly anyway**; it was caused by **miscommunication between the institutions**.” (Interviewee 7)*

*“Yes, everyone has their job description. Every institution knows something in that context and tries to do it. Nevertheless, they still **do not know the whole process**. The communication among themselves and **Intra-institutional communication was also not very organized**. For example, we could not work with MoEU Izmir Provincial Directorate, there are neither not competent officers, nor I do not know what. We worked with the original MoEU in Ankara. We are constantly told that this is not the case; we go to another bureaucrat, the same reaction. **Everyone sits on one's hand**. Are you an **opposition or a supporter**? There is always this invisible debriefing. We do not see it as a friendly match to help people. **We are unable to contribute together**. They cannot carry out that coordination, no unity at all. The MoEU does not even dominate the law. The member of the Association knows the laws better and is now leading the way.” (Interviewee 8)*

*“**First, everyone was in do-anything mode**. However, none of the institutions were united; citizens suffered agony in any case. Within a month, they bound up wounds and worked together. Nevertheless, then every institution **farmed out to another after the aid and rescue process**.” (Interviewee 1)*

*“None of them communicate with each other. If establishments communicated with each other, we would have something tangible after all this time. They do not know about any information. I am sure the deputies in that parliament forgot that the earthquake was on October 30th. They do not know anything, they came there, they will vote about us, but they have no information.” (Interviewee 2)*

*“One wall of our apartment collapsed, MoEU categorized us as minor damage in the report; they did not change the house's condition. We doubted the training of MoEU staff. Look at the DASK; the money-giving institution gave a report that shows the apartment has tremendous damage, the MoEU still says it has been slightly damaged. So there is segregation here.” (Interviewee 4)*

*“DASK worked awfully in this earthquake. There was no permission to enter the building, we had to take our belongings, so our house was gone with our belongings, but DASK took so long to pay the money even in this condition. Private insurance firm paid*

*before DASK. For the first ten days, I tried to get information from the institutions individually; then, I left because none gave them accurate information. The staff was very incompetent. The mayor of the neighborhood had more information on the subject. We could not find a contact. That is how the Association appeared. **The Association is chasing after knowledge, getting its confirmation. We cannot rely on information from institutions.***” (Interviewee 7)

The participants described how the effort of the association, of which they are also a member, began and how it continues now. They conveyed not only the momentary status of the association but also their individual thoughts on how the association could be more successful.

*“The Association is not professional and planned. An organization was shaped by the WhatsApp group, which apartment managers in current life created. It was established when we wanted to get information and transfer it correctly. **Because when you are an individual, public institutions do not care about you.** The possibility of getting an appointment with any bureaucrat is almost zero. **We use the power of corporate identity here**, just like student clubs. Unfortunately, it does not have a chance to be more active because we do not have that much authority. The platform / Association was created by a group of amateur people under the leadership of Haydar Bey. I do not know what can be done better than this. **Maybe better planning could have been done if there had been a more professional approach.** Nevertheless, for now, it is the best.”* (Interviewee 8)

*“I think the Association works very well. They helped many people who had no money. They arrange one-on-one meetings, and they are considered by the counterparties. We put much effort into the precedent. Even though it was not exactly what we wanted, we could still get a right. **Meeting a minister is not easy. We are in constant conversation.**”* (Interviewee 7)

*“Whether it's our friends or our President, we work devotedly. As long as they put both their time and health, they worked without saying there was a disease. They also managed the process very well. We are on a fine line; if you approach one side, you are with that party; you are with the other if you come to the one side. **The association conducts its negotiations impartially.** The Municipality, MoEU, AFAD know us. **Although 80 thousand households were affected by the earthquake, we only have 2000-***

*odd members. We made our voice heard with this many people; maybe we would be more effective if we were more. We could have gotten more rights. Our people are afraid to join the Association. (Interviewee 1)*

*“We have a group that is very attached. **We communicate from there all the time.** I wish we had more people.” (Interviewee 2)*

*“The Association realized many firsts. Some other earthquake victims contacted us from Van, Malatya, Elazig to ask how you achieved those things. We stand by each other; we are always thinking about what we can do. **We did not know either; we learned because it happened to us.** Haydar Bey transfers information to us from everywhere.” (Interviewee 4)*

*“**We could have organized faster.** We could reach more things, but we didn't know either. We found out after the earthquake. Nobody knows anything anyway. The one who experienced the quake knows its pain and grief. If only the government had stepped in before the victims... For example, we consult a lawyer to seek our rights, but many people cannot consult a lawyer. How will they learn? We want to be a solution to these situations. earthquake victims should be educated on what to do; we are ignorant. (Interviewee 6)*

#### **4.3.2.2.2. Participation in The Process**

Upon evaluating the process by the association members, the first statements were conveyed what the current situation is and how this situation was reached. In addition, the transparency of the process, its democracy, and equality for all were emphasized. It has been observed that the communication established by the actors in the process is problematic.

*“The state destroyed our building; there were buildings to be demolished immediately on its right and left. Buildings to be demolished urgently benefit from AFAD, **but I am treated as an urban transformation. So, I am going to get a loan with high interest.** Nevertheless, people will pay 20 years interest-free for their heavily damaged home. There is already a crisis. At first, reported heavy damage; then, they changed the report. My apartment was demolished on the same day with the building to be destroyed urgently, so it is unreasonable. We take a path with the Association; **the process is more***

*transparent than other people because we know how it will be. Also, I personally attend the meetings; I go with Haydar Özkan. Maybe the process seems transparent to me. I ask my questions directly to the interlocutor, but I cannot say that I am an egalitarian. In addition, we cannot get a complete answer to every question, but we know more than people who have nothing to do with the Association.” (Interviewee 8)*

*“I do not think we are in control of the process. We exist as we learn. In other words, we do not know how TOKİ works.” (Interviewee 7)*

*“It was transparent but still there must have been something wrong. I have not witnessed it personally, but there are complaints; unfortunately, people have different stories for each institution. Because everyone puts the actions on other organizations' shoulders. **The institutions do not take responsibility.**” (Interviewee 1)*

*“We are going through a ridiculous process. We don't know what will happen; something happens outside of us. I would never say democratic or egalitarian.” (Interviewee 3)*

*“So, we can say that the search and rescue part was transparent and egalitarian. However, now we are stuck in a procedure everywhere. **Crisis management is not well established.** Everything develops at once; decisions are not analyzed, and it is not the same for everyone. Everyone has different problems.” (Interviewee 6)*

In this part, the statements on the trust of the earthquake victims in the procedure are given. It has been observed that earthquake victims feel confident when involved in the process. They stated that they delegate the association's activities, not the process management of the institutions throughout the process.

*“When MoEU converted our building from heavily damaged to slightly damaged, I went to the provincial directorate of the MoEU with the notification. I talked to the person who signed it personally and, he said that your severely damaged case was rejected; I'm sorry. So, unfortunately, **we cannot trust because of the incident I told.** We should have checked it from the state's website. **Wouldn't I believe the report with the letterhead memorandum of the MoEU and check it from the state's website? How reliable is it in this situation?** I was going to wonder if the Ministry of state wrote it wrong.” (Interviewee 8)*

*“As I do not trust the process, I think about why are we waiting for this treasury loan? I think we are waiting for the election. We are seen as an investment of election.”* (Interviewee 7)

*“I do not trust. I’m not at all sure. I have a lot of concerns about that too. I trust our President of the Association. I trust our Association.”* (Interviewee 2)

*“I trust the most in this struggle of our side, our President in the process. We have consistently achieved something as a result of our struggles. AFAD set up a crisis desk in Mustafa Kemal High School for has ownership. We went too; the officer was upset with me because of reading the document they distributed. “Everyone signs the document; why do you check?” I became guilty because I wanted to comprehend. Just because I wanted to know what would happen to me.”* (Interviewee 4)

*“Our building was categorized as slightly damaged by the MoEU. Nevertheless, the municipality does not even allow us to live; it says the building is dangerous and derelict. Nevertheless, we cannot solve this quickly. Moreover, rights holders (us) will be held responsible when anything happens. If something falls on someone's head from there, we are responsible. The authority allows the building to remain in that state and do not help us find a solution. How can we trust this way of administration?”* (Interviewee 6)

Questionings were asked about the involvement of earthquake victims in the process. Members of the association communicated from time to time with incumbent institutions involved in the process. Owing to this communication, they were sometimes able to make decisions with the incumbent institutions. However, they could not obtain sufficient information about the project design process of the houses after the earthquake survivors and could not be involved.

*“We couldn't intervene in the houses Toki built anyway. No one was included. They have not asked anyone. They neither asked the owners nor the municipality; they have just started. Because the path already has been drawn, a discussion with citizens would have been better. Maybe the process would have taken longer, but they didn't consult anyone neither. Exemplary, they built a small balcony for the houses in İzmir. Those projects are not suitable for İzmir anyway.”* (Interviewee 1)

*“There should have been another alternative besides TOKI. We should have chosen among the alternatives advantageously. **The choice could be asked. There has been a great injustice.** It was very hasty, okay, TOKI is doing it, but how do they do it? We don't have an idea. The houses have shrunk a lot.” (Interviewee 2)*

*“I think we're included. **At least the members of the Association are included.** Because we also have a struggle on this issue.” (Interviewee 4)*

*“**So, most people weren't involved.** We could have had more members. People are getting nervous. They don't even know the purpose of the establishment; they think if something will happen after attending into an association. They have right to think like because of the conditions, but more citizens could have been involved in the process.” (Interviewee 6)*

Association members then expressed the progress made to date as a percentage. Although the process evaluation parameters are different for everyone, it was stated that the process was not close to the end yet in the opinions in the statements.

*“**Let's say 15 percent.** Let's say that those in the reserve and project areas will end. Eighty thousand households were affected by the earthquake, and these projects do not meet this number anyway. **There is a solution for 5 thousand houses, only 75 thousand, what will happen?**” (Interviewee 8)*

*“**I'd say it's 5% done** even though half of the five percent didn't know either. Five thousand houses have been designed, but only 1500 houses will be delivered in time. It's been 14, 15 months, 430 days; we are counting the days now.” (Interviewee 1)*

*“At most, **30 is too much,** TOKI is building houses, but the housings have many problems.” (Interviewee 3)*

*“The aid was provided as soon as the disaster occurred and was one hundred percent. But two months later, people were forgotten. **With the aid, it is only 50%.** I can say that it is not finished in the 50% parts. (Interviewee 4)*

*“**We have a long way to go.** Nothing is clear yet. Nothing is sure about what will happen in the urban transformation process. A very lengthy process awaits us.” (Interviewee 7)*



#### 4.3.2.2.3. Methods of Participation

The approaches used in the post-earthquake period were evaluated. Initially, association members stated that the conferences used as a method of information were not sufficient. Projects were launched at the first gathering, but the assigned institutions did not resolve the problems of earthquake victims at these meetings.

*“Not much has been resolved. MoEU said that information would be given, but only a half-assed briefing was given.” (Interviewee 2)*

*“So, I followed the media, but there was no information around. State institutions operate within themselves. It could be something like an information line to call. Not everyone was able to attend those meetings.” (Interviewee 6)*

*“MoEU held the meetings as they wanted. They showed the project, there were objections about them. Additionally, I can't say that it has been resolved. Some friends left the meeting very angrily.” (Interviewee 7)*

*“MoEU held a meeting in November, yes. The minister attended, there were governors, and district governors. That meeting was held once; then, nothing was done. What you heard, that's it. That meeting was already something like a launch. They did not do what they showed in the meeting they held. What was decided and what was done did not match. Then, the Association made a request, and another meeting was held again. Without the Association, the second meeting would not have taken place. If the Association did not exist, other deputies would not have made a statement. So those meetings were not very effective. The first reports were given, and the real ones do not match anyway. Seven different construction companies have already worked in seven regions, all of which are of varying quality.” (Interviewee 8)*

Two different laws were used as the projecting and planning method of earthquake survivors' houses. While the law numbered 6306 covers the urban transformation of areas under disaster risk, the law numbered 7269 aims to bring solutions to the living spaces affected by the disaster. Between the two laws, earthquake survivors are positioned differently. The members of the association stated that the laws that are different in the content are not satisfactory.

**“I don't think it's sufficient.** One offers the opportunity to pay with zero interest, and the other forces us to take a loan from the bank. If we were to withdraw 100000 TL from the bank, we would have to pay 190000 TL. **The state must produce methods of financing.** We can't be homeowners this way.” (Interviewee 7)

“For one thing, **the laws are from the 1960s. It should be renewed urgently.** The law is based on the housetop (dam in Turkish), which housetop? Is there a housetop left in this period? Alternatively, the law should be separated into urban and rural. I can understand that they use these laws to act quickly, but the laws no longer cover us. **It should be more detailed.**” (Interviewee 8)

“There are very vague meanings in the law, so legal dilemmas need to be corrected to prevent the misunderstanding. **Different laws and treatments cannot be applied to earthquake victims.** There was an earthquake, and **the earthquake damaged my house,** and so were others' houses. We did not decide to demolish our houses out of nowhere. What urban transformation is this? The people are treated differently. Everyone has had different grievances.” (Interviewee 1)

**“We want disaster loans, not urban transformation.** Everything has been raised, we are in crisis. We don't know how to build these houses anyway. One is treated under another law. I want to think well. **We came together because of the earthquake; we all have one problem, and that's our home.**” (Interviewee 2)

“I wish that TOKİ had built my house, yes, my square meter would decrease, **but at least we would not have to deal with it.** Although I live alone, the TOKİ houses are not large enough for families with children. So, I don't know which one is good for all of us. I think everyone's house had to be appropriately built by TOKİ.” (Interviewee 3)

“I had a tenant in the house, it was heavily damaged, but we are going through an urban transformation now. The process works in reverse. There was an architect in the apartment, she drew the project, and it was revised several times; of course, the project process took a long time because a lot of people were involved. If I was buying a house, I would pay money, but I would buy a place I wanted, right? Now we are trying to do as we want in this way. **Otherwise, everything would be uncertain, and we would have to wait.** At least that's how we'll feel.” (Interviewee 7)

As one of the actors in the process, the association persisted in its communication using diverse methods. The recognition of the association has increased with the effective use of social media. It established uninterrupted communication not only with the institutions in charge but also with other earthquake victims.

*“Well, it's been months; we've been twitting to all the official institutions via **Twitter**.” (Interviewee 3)*

*“The Association has a **lawyer**. We analyzed everything together. We are trying to provide **psychological support to young people**; we are in contact with **institutions** in every way. **By phone, e-mail, or using social media...**” (Interviewee 4)*

*“When we did impact people on Twitter, the people started to support more. I wish it had been earlier. Everything would be faster. Apart from that, the Association did a lot of research. We do not only ask to the institutions but also work hard, offer solutions, and report. **The Association kept people perpetually informed.**” (Interviewee 7)*

*“There are **“aunts of Twit”**, we have a group, we determine our agenda what to write on WhatsApp. We tag everyone. We even reach ministers.” (Interviewee 2)*

#### **4.3.2.2.4. Participation in the Project**

The most important product in the process is the TOKİ project. In this section, the details of the TOKİ project are accentuated and some earthquake victims have interpreted these projects and compared them with former houses. The entitlement status, positive and negative aspects of the houses in the projects are expressed.

*“At first, we calculated the project **delivery dates as eight months, they said so. More than a year passed, they did not comply with that date. Project areas and projects were selected quickly. I think TOKİ had ready-made projects and implemented them here. So, Toki always does like that everywhere. They did not think if this would fit Izmir. All the cities looked alike, so ugly...**” (Interviewee 7)*

*“They determined an area called the project area. TOKİ built the houses in the area of heavily damaged buildings like Emrah Apartment or Barış Apartment. They built 5-story structures, and there were 8-10 floors houses here before; **people's homes got smaller. I am not in the project area, but according to what the friends' writings, they do not have much information** about the development of the process anyway. How will the*

*houses be distributed? The elections will be by lot, so it is unknown which part of the project will be your house. They don't know how much they will pay right now for the housing in the reserve area neither. We did not have clear and complete information about project areas in the immediate process.” (Interviewee 4)*

*“I don't want to comment. The housing projects have pros and cons. The state covered 50 percent of the buildings within a year. **Their houses were not the same before. The loss of rights was too much.** Everything is blurry for those with slightly and moderately damaged houses.” (Interviewee 6)*

*“I don't think it's very high quality, but its foundations are solid. **But the square meters decreased to 60-70 sqm. As I said, there is no balcony, İzmir is very hot, we go out to the balcony even in winter.** What happens in the summer, those houses? There is a French balcony instead of the normal one. The project has never been suitable for Izmir and has no transparency. Houses, gardens, everything has changed. Buildings are cramped. They built something like a minaret on one of the houses on the street, and it left a distinct stamp on their dome-like tops. Ottoman breeze, I guess.” (Interviewee 1)*

*“So, nothing was complete, **there was uncertainty, right holders signed a blank paper.** Would you sign on blank paper? We don't know what will happen to us. How much will we pay and when will our houses be built?” (Interviewee 2)*

*“We are not in the project area. My aunt got the right from there, we are happy for her, but the houses have nothing to do with the old houses. At least the state did it; we say that you will pay less. Frankly, we are consoled. Nothing was asked to us but she'll be going home next month at least. She knows what is going to happen for her.” (Interviewee 6)*

*“**It was not asked, they did a project, so they stopped it for a while.** I already have a desire to control everything as a character. For example, I am not on the damaged building committee now, but I want to know if it is done correctly. I have no control over TOKİ's projects; we could not look at the housings. They did not let us to see the buildings.” (Interviewee 7)*

In the face of the necessity brought by the earthquake, the earthquake victims encountered compelled displacement. While some of the temporary accommodation crisis was covered by the state organs, some earthquake victims could not benefit from

this right and tried to solve this problem individually. They stated that they prefer temporary accommodation that can be resolved in their own order and location.

*“Of course, if asked, **we would have accepted immediately.** I want my house in the same way, in the same place, in the same square meter. Nobody wants to change their house out of the blue.” (Interviewee 2)*

*“Of course, **I would, because you have to rent another house at that moment.** If we were offered such a thing, we would have accepted it. First, offers were made to the residents of the demolished flats and those with severe damage. There was not even a place for us in Uzundere residences. Nobody wants to rent out. We already have an economic loss. We've been paying rent for months also. We are not in our buildings. We are not where we are used to.” (Interviewee 8)*

Although the temporary accommodation problem is somehow solved by the earthquake victims, the solution of the permanent housing problem is more difficult for the earthquake victims. This difficulty can be overcome by cooperating with responsible institutions and the process of earthquake victims can be facilitated. Earthquake survivors are more involved in the process and can make decisions about their homes. Likewise, the interviewees stated that this is a fundamental right. They remarked thoroughly on participation in the process in such housing problems as it forms the basis of cooperation and solidarity.

*“**Being in this process is my most fundamental right.** We just watched the project. Am I giving money here? Am I going to pay? Under normal circumstances, won't I choose my house according to my taste? **We should have been consulted.** We are trying to find the common idea of 40 flats, that requires a very long time, but whatever. In addition, every region doesn't have to be commercial, they built skyscrapers here, but they compacted our building floors—no mention of stability. I mean, they pretend not to see it, but they don't listen to us.” (Interviewee 7)*

*“**It's good to ask for opinions. I would like to be asked about this. At least I would feel more motivated.** Okay, when we give an extra 5 TL at the apartment meeting, we have long discussions. Still, the administration should contact the citizens to participate effectively and quickly in the project process. They could send three different projects home. **Citizens could choose whatever they wanted.** It has come from this hill,*

*and we have no right to say where we will live. For example, there were people who owned more than one house in the apartment. If every house belonged to someone else, the building, which was built by TOKI, would not be enough for all of us. In other words, there would be those who had to leave the place where they lived, which happened in different apartments.” (Interviewee 8)*

It is aimed to emphasize why participation is critical in the production of common space. Association members mainly talked about streets and derelict buildings. They stated that they had an unhealthy environment and that the actors did not take any action in this regard. As much as they accepted the significance of shelter for earthquake victims, they also acknowledged the importance of living environment and making decisions on this issue.

*“**The condition of the streets is terrible.** It's like we just came out of war. İzmir is like the cities of Cyprus with abandoned buildings right now. It does not suit İzmir at all. **These partly collapsed buildings are standing in the middle.** It poses a significant risk to the public. There is a stop in front of our house, children go to school, people go to work, they are still in use, so those stops. What if one day those houses were destroyed. The state needs to find a solution to this urgently. The government tells people to build these houses, but we do not have the economic power. We need to get out of the mess quickly. I want us not to experience anything terrible due to irresponsibility after the disaster.” (Interviewee 4)*

*“I mean, I think it's impossible for institutions to come and ask questions in every job they do. Forty people of us could not get along for our apartment. **Otherwise, it would take longer.** But municipalities and **other institutions should already know how to use that demographic data effectively.** They should serve the people. What we need should be determined by the institution. If a park and garden are to be built, I cannot participate in a survey every time. You are building a house; you are trying to bring it back to life. If only they had created options for the victims. The Bayraklı region should have remained decent or normal. It was jam-packed now.” (Interviewee 7)*

*“**Of course, it's essential, I had to move to another place.** We've moved away from the neighborhood we've been in for years. Of course, we want our old neighborhood back in the same way. Let them have some conscience. The process started too late for us anyway; our building would be demolished. we surrounded the building with panels but*

*thieves stole the panels. So uncontrollable... So unless the management should do something, such things continue to happen.” (Interviewee 6)*

### **4.3.3 The Results of Data Triangulation**

The second part of the analysis explains the case study using participation components. The process was questioned to measure participation through the four components cited earlier. The data of questionnaire and interview were crossed over the literature references by using triangulation method, and the resemblances and contrasts between the results were interpreted. The statistical data that materialized in the survey was intended to be interpreted with the commentaries of IZDEDA members. Associations were established between the explanations of the concepts in the literature and subjective interpretations, and the grounds of the survey data became concrete.

#### **4.3.3.1. Actors**

Participation needs two or more people to occur (Kalfa and Atay,2008). In participation, it is expected that the actors will cooperate, and there will be sustainable communication between the actors. In this part, the communication between the residents of the Container City and the institution in charge is measured.

Participation is the process of establishing communication between designated institutions and individuals (Wandersman, 2009). Earthquake survivors have communicated in different ways. While the residents of Container City were able to communicate with the institutions in charge within the Container City, the Association was the institution that requested and obtained this communication. The local government should cooperate with the citizens, one of the other actors, in the services that will occur in the public sphere (Bayazit, 1982). In the example of the Izmir Earthquake, the demand for sustainable communication came directly from the citizens, thus establishing a bottom-up relationship with the organizations in charge of the town (Ersoy, 2010).

According to Miessen, the basic building block of participation is cooperation; This concept consists of the actions and demands of individuals due to their needs to responsible institutions. (Miessen, 2010). The Association demands and does much work to solve the problems.

Sanoff expresses that while architecture can solve a physical problem, solving social problems is through user participation (Sanoff, 2005). The Association did not only concentrate on the post-disaster housing problem. At the same time, they aimed to produce solutions for other problems that unfortunately occurred because of the earthquake. Problems that arise after a catastrophe can change over a period. The user will still be the most accurate stakeholder to describe the problem in the social environment (Sanoff, 2000).

Communication between actors is crucial to cooperation (Kernohan, Gray, Daish, and Joiner). Actors are different cultures, and each actor has a different mandate. These cultures articulate language, knowledge, priorities, expectations, perceptions, and cooperation relationships. Thus, it becomes easier for the actors to know further their framework while completing their tasks. Unfortunately, these institutions with the same objective and plan could not parallel after the search and rescue phase. In particular, the wrong and incomplete decisions in the MoEU and DASK reports, and the MoEU and AFAD teams were unable to give detailed responses to the questions had a very negative effect on the citizens' confidence. The post-disaster recovery plan was insufficient to prevent the political struggle between institutions. Earthquake survivors made extra efforts to be impartial. Although the residents of the container city think relatively positively about the teams of the institutions in the container city area, the members of the Association accentuated that the relationship between the institutions in charge is partially broken.

If a common goal does not unite individual ideas, the organization is not complete, and it takes more time to reach the goals. However, the organization cannot form all at once; as time passes, trust in the association enlargements and participation increases (Friedman, 1973). Although the locals of the container city do not have a definite judgment about the Association, the members of the Association also demonstrate their deficiencies while describing themselves.

When we look at the prevailing opinion, it is highlighted that the Association always works selflessly. Some members think they could go a long way if the Platform established to provide information transfer could be organized faster. They also stated that the Association was not established professionally and that it is an institution that



learns what to do when problems arise and act accordingly. Likewise, they think they would get more rights if they could have more members.

Although it was observed that the first efforts regarding the Izmir Earthquake were carried out effectively during the post-disaster struggle, both the lack of information in the responsible institutions and the insufficiency of communication among themselves were reflected both to the container city inhabitants and the Association members. Although the residents of the container city could not clearly express their indecisive opinions, the members of the Association spoke more distinctly about the events and expressed their expectations. People who consider being a member of an association and taking a political side, in the same way, may have avoided being a member of the Association and may not have given straightforward replies to the inquiries.

#### **4.3.3.2. Processes**

This section aimed to gather statements about the process of participation, which is another element of participation. The participation process needs to be transparent and uphold the rights of equality for all. If the communication between the actors is healthy, communication inevitably conveys trust.

When the commissioned establishments ensure the participation of the citizens, the citizens trust the authority more. A democratic and egalitarian approach is needed for healthy participation. The trust between the authority and the user consolidates with transparent and fair process management (Firedman, 1973).

It is not only the residents of Container City who think that the process is not managed in an egalitarian and democratic way. The members of the Association also agreed on this idea. The first of the reasons is based on the classification of earthquake victims with two separate laws after the earthquake. While one party was deemed survivors of the earthquake, those who had rights to buildings with minor or medium damage were declared urban regenerative. Because of this particular proceeding, we cannot talk about equality in the process. They also stated that due to the information network provided by the Association, the process was assumed out more transparently than other non-member earthquake survivors. Even though they see the process as transparent, the fact that they still have questions and institutions like TOKİ announce the decisions suddenly reflects poorly on the process's transparency.

Participation is an abstract concept; this concept is achieved through communication, equality, and trust between the actors, keeping the balance (Destan, 2003). The credibility of the process has been denied on both sides, just like the principles of equality and democracy. Incorrect damage assessments made during the process and AFAD teams taking action without informing within the scope of their duties reduce the trust in institutions. It also questions how the struggle plan is carried out. However, those who are members of the Association only trust the Association, receive news from the Association and act with the Association.

In essence, public participation is based on solving problems more effectively, getting more accurate information, and cooperating with responsible institutions (Friedmann, 1973). When asked about the existence of citizen participation, which is one of the issues that Container City residents are undecided about, they emphasized that they try to be involved in the process in every way possible. IZDEDA members are not in the decision-making mechanism but create a driving force. Accordingly, they stated that the institutions in charge could communicate more with the citizens. On the other hand, they stated that if the number of members in the Association increased, more could be achieved and progressed more democratically. Interpreting citizen participation in the housing project, they underlined that more suitable houses would be built for İzmir and earthquake victims if there were citizen participation.

The result in terms of the process was more negative than the actor data. All the data were found to be less than three, and it was revealed that participation was not observed in the process. The survey was conducted in the third month of the earthquake, reflecting the first section of the process. IZDEDA members, on the other hand, were asked at what stage the process was and how much was completed in the interviews held one year after the earthquake, and the following results emerged.

Although the percentages differ according to the members' answers, it has been repeatedly underlined that the process is still incomplete. They also stated that the houses that should have been completed were not completed on time, and everything was up in the air because they did not know how much loan they would pay. Loans and rates were determined on 02.02.2022, and it was observed that the earthquake victims could not reach the amount they wanted. The process is still uncertain and full of questions for the

earthquake victims who follow the process closely and count the days after the earthquake.

#### **4.3.3.3. Methods**

The case study will be evaluated with the third component of participatory design. The success of a process carried out with more than one person is directly commensurate to the transmission between the stakeholders. The process, which is divided into stages, must be actualized by certain methods.

Citizen participation is of great importance for social life. Informing the citizens and collecting their thoughts about being told is one of the most effective methods to solve a social problem (Creighton, 1994). Ensuring user participation, especially at the housing scale, makes the physical environment healthier and livable (Habraken, 1984). The first meeting organized by the Ministry was held to explain the projects to the public. In the second meeting held at the Association's request, no precise responses were given to the participants' questions. However, the institutions made a statement about the current situation. The earthquake survivors, who could not reach the accurate information from the institutions, argue that the meetings did not get their goal.

The reports created to explain the project do not match the reality of the projects. This case created another point that damaged the bond of trust. Earthquake survivors from the associations also agree with container city residents. Although these methods are seen as insufficient in the survey data, the content of these laws, applied differently to earthquake victims in the interviews made with the members to explain the reason, is also different. These laws, which negatively affect the equality of the process, were also not found sufficient as post-disaster housing methods. While law no. 7269 was applied to the buildings destroyed or severely damaged during the earthquake. The urban transformation law (no.6306) was deemed appropriate for the victims in the buildings with light and medium damage. At the same time, they stated that these laws are not up to date and therefore insufficient.

Participation is a social concept and is open to change. Communication and cooperation methods used in participation vary on examples (Sanoff, 2008). It was also asked which methods the Platform uses during this process. IZDEDA tried to

communicate with each institution in many ways. However, the Association's recognition has increased due to the effective use of social media.

The strategies used in the example of the Izmir earthquake were not found to be effective. The information conferences held were not sufficient, and the techniques of acquiring housing constructed inequality among the earthquake victims. Earthquake survivors do not tolerate being seen as urban regenerators. In addition, the continuity of communication between earthquake victims is ensured by the association. The association has both established bureaucratic relations and created an information network by using social media channels.

#### **4.3.3.4. Products**

It is necessary to be aware of the problem, perceive the situation, and be active in the process to use the right to speak effectively (Burns, 1976). Only projects made in this way can be evaluated. Belonging to a place is associated with responsibility towards the environment. The consciousness that develops against the environment creates the need to make decisions about the environment (Cengizkan, 2009) (Wandersman, 2009). The members of the Association certainly have more ideas about the TOKİ project. The members of the Association aimed to have information about the projects through their efforts. It aimed to get more accurate approaches by communicating its problems to the institutions in charge. However, from the beginning, it is thought that the projects are not reflected by the public very transparently.

Contributing to the development of the individual built environment creates an individual effect. It provides the development of social concepts such as social ties, sense of belonging, and sense of responsibility (Habraken, 1985). Public participation was not ensured during the decision phase of the projects, and the institutions did not focus on the wishes and needs of the people. A project that does not fit the area has been presented to the earthquake victims. At the same time, the members who think that TOKİ has not made a project for İzmir Bayraklı believe that these projects are already in place. They could not reconcile the projects with İzmir in terms of aesthetics. They stated that they know much less about the reserve area project outside the project areas.

The earthquake survivors, who do not want to rent and leave their neighborhoods, stated that they would accept the temporary housing offered in the area. Thus, adverse physical, social, and psychological effects could be reduced to a lesser extent.

The housing problem that cannot be solved with mass housing production is the ignorance of user participation (Habraken, 1985). The housing problem is not only quantitative but also qualitative. Projects where user participation is ignored create physical space but cannot respond to users' problems and needs (Day and Parnell). The members of the Association emphasized the importance of citizen participation in the project processes as the majority.

Professionals should play an auxiliary role in forming the physical environment, while users should also contribute (Habraken, 1982). While designing with the user, it is possible to reach more accurate targets and increase the sense of belonging (Sanoff, 2000). It was wanted to measure whether they agreed with the need for public opinion in the common areas designed after the earthquake. The majority again agreed with the need for participation in public spaces. As a result of this section, it was revealed that the earthquake victims' opinions about temporary and permanent residences were not taken. Members of the Association, who stated that common areas are as crucial as residences, underlined those derelict sites pose a danger even if they are not in the project area. On the other hand, association members also argue that central government institutions such as municipalities should already have an opinion on demographics. The right services should be applied by analyzing the data without considering everything.

Consequently, the analysis leaning on the common opinion concluded that the details of the TOKİ project are not known. On the contrary, earthquake survivors think participation is essential in housing and public space production. The products that emerged in this process appeared independently of the user. The projects designed without evaluating the user's requirements were not found eligible for İzmir by the earthquake victims.

## 4.4 Comparison and Evaluation

The post-disaster struggle process, revealed by the survey analysis, was compared with Villa Verde, which was informed about the project in the previous section. The comparison was made based on the participation components on which the thesis supports. Thus, the similarities and differences between the projects emerged.

- It was observed that the local government participated in both projects. In the example of Villa Verde, the institutions and the user worked by communicating at every stage. In the example of the Izmir Earthquake, the user has limited communication with the institutions, and at the same time, the communication between the institutions was problematic.
- In the case of Villa Verde, the user has been as active as any participating actor. In the example of the Izmir Earthquake, the user tried to be partially involved in the process.
- The fact that the user is as active as other actors have enabled him to witness every stage. In particular, the user, who participated in the research and design stages, could decide for himself. The TAMP process, which was carried out after the Izmir earthquake, did not give this opportunity to the earthquake victims. Although earthquake victims were not included in the decision-making process, IZDEDA members continued to communicate with the institutions that would take decisions and managed to convey their demands.
- The information meetings held after the Izmir Earthquake were insufficient for the survivors.
- In the example of the Izmir Earthquake, institutions are only responsible for doing their duties, and there is no cooperation.
- Although the Villa Verde project continued with the participatory design, it quickly reached the result, like 100 days. In the example of the Izmir Earthquake, long bureaucratic processes occurred due to the lack of organization of institutions. Although the project was completed within three weeks, not all future projects could be completed.
- In the Villa Verde project, Habraken and Turner's methods were chosen to cooperate with the user. The user also contributed to the design in a way that would not impair the durability of the building. At the same time, to create

flexibility for the user, empty spaces are left to be designed by themselves, allowing the user to shape them according to their needs and customize the houses. On the other hand, the housing project was presented to the earthquake victims about three weeks after the earthquake. However, within these three weeks, TOKI did not take the opinion of the earthquake victims. TOKI, which is responsible for producing social housing, has delivered projects in the project areas determined by the MoEU.

- Both projects have published the details and shared media. Spatial features such as housing types, parking conditions, and shop square meters were introduced in these publications. Villa Verde is not just a housing project; it is a project that recreates social life and includes neighborhoods and community centers.
- On the other hand, in the spatial planning carried out by TOKI, the project's content remained limited to residences, parking lots, and shops.
- In Villa Verde, although the residences are produced in a single type, flexible design has been used to change in the future. This flexibility cannot be mentioned in the housing projects produced after the earthquake.
- In the Villa Verde project, the active role of the user and the local government and the number of residences and other functional buildings were decided together. In the example of the Izmir Earthquake, the areas where houses will be built are divided into two. The number of houses built in the project area did not exist before the earthquake. The housing need has been tried to be met in the Reserve area. The earthquake victims who will live in the project area will be determined by drawing lots. The survivors who do not want to live in the reserve area, on the other hand, will live in a place where they do not have the right to speak, even though they will find their homes because they do not want to change their living Space.

As a result, although there was more than one actor in the fight against the Izmir Earthquake, these actors acted only within the scope of their job descriptions. It is not possible to talk about uninterrupted communication as in participatory design. The user involved in the process is the Association and its members who have been involved through their efforts. Although the authority organizes meetings to communicate with earthquake victims over time, the scope of the meetings is limited to informing the current situation. It was the Association that continued this communication. The Association

made more requests to meet with the responsible institutions and kept this process alive. The Association provides access to clear information while providing control of the process for every earthquake victim. According to the demands from earthquake victims, the design or construction phases were not formed. Any participatory design method was used throughout the process. As a result, the resulting products emerged without a participatory process.



Table 22. The comparison table of projects in terms of participatory components (Generated by the author)

	ACTORS IN THE PROJECT							USER INVOLVEMENT IN THE PROCESS					PARTICIPATORY DESIGN METHOD IN HOUSING PRODUCTION					PARTICIPATION THROUGH PRODUCT				
	LOCAL GOVERNMENT	ARCHITECT, PLANNER, DESIGNER	CONSTRUCTION FIRMS	COMMUNITY BASED ORG.	NON GOVERNMENTAL ORG.	UNIVERSITY	CHAMBERS OF PROFESSIONS	USER	SEARCHING	INFORMING	PLANNING + DESIGNING	CONSTRUCTION	AFTER USE	HABRAKEN	TURNER	SANDERS	SANOFF	COOPERATIVE	SHARED MEDIA	DESIGNED PUBLIC SPACE IN PROJECT	DESIGNED SEMI-PUBLIC SPACE IN PROJECT	HOUSINGS IN THE PROJECT
IZMIR	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red
EARTQUAKE	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red
VILLA VERDE P.	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red

## CHAPTER 5

### CONCLUSION

*"What we are trying to do by asking people to participate is envision what the question is, not what is the answer. There is nothing worse than answering the wrong questions well."*

*Alejandro Aravena (www.re-thinkingthefuture.com)*

The vision of participation has existed throughout history and will persist as long as humankind exists. With the democracy that appeared in ancient Greece, the foundations of participation were laid and have endured today. Like every social concept, participation has changed throughout history. It has not only changed but also evolved. These developments accelerated after participation met with various disciplines. The concept of participation, previously depicted from within politics, has been incorporated with different perspectives today. One of these standpoints belongs to design. The design expedition of participation has initiated with urban planning and then spread to other areas of design. Thus, participation created an exceptional architectural practice. This unconventional understanding turned affinities and hierarchy upside down. Participatory design is more accessible, cooperative, and alternative; it seeks a standard resolution for everyone. This more human-focused form of practice can be used to unravel the post-disaster housing problem.

This study aims to contribute to the participatory design method literature, which can effectively use architectural practice's alternative and social dimensions. In this context, this study explains that participatory design will be a more effective method for the post-disaster housing problem. I think it is essential to understand this dual dialect and their relationship. Thus, stereotypical techniques can be avoided, and solutions tailored to the needs of the victim/user can be offered. It may be possible to eliminate post-disaster social, psychological, economic, and physical traumas and debris with this method.

To apprehend better the October 30, 2020 İzmir Earthquake, the case study of the thesis, interviews, and surveys were performed. The questionnaire, interviews, and literature review were analyzed using the triangulation method. As a result of the analysis and comparisons, the following results were conveyed:

- Participatory design projects have facilitated sustainable communication and practical cooperation between institutions as a post-disaster housing method.
- Participatory design is not a well-known concept and architectural practice in Turkey yet.
- Although the participatory design is not very common, the idea of a participatory process was endorsed by earthquake victims.
- The users' participation in the design phase gives them the freedom to decide on their own living space.
- The user should take a role in every disaster administration process. With the user's participation in the research phase, the prospect to get to know the user better arises.
- Owing to IZDEDA, the members reached the assigned establishments more efficiently and conveyed their requests.
- As a result of this transmission, IZDEDA had the opportunity to collaborate with institutions.
- IZDEDA members have partially guaranteed citizen participation by participating in the process with their efforts.
- Although IZDEDA members could access the institutions and get more precise information through interviews, the process was not transparent to other earthquake victims.
- Communication with the assigned institutions was inadequate.
- It has been observed that the relationship between the assigned institutions is broken.
- Earthquake victims could not receive clear and correct responses from the authorized institutions.
- As a result of wrong decisions, lack of information, and miscommunication between the institutions in charge, the disaster victims have lost their confidence in the process.
- Different housing production strategies are destructive to earthquake victims.
- TOKİ projects were not delivered in the expected time, and earthquake victims live in temporary houses more than they think.

- Members of the association did not adopt the projects made by TOKİ and think that the housings are unsuitable for İzmir.

Turkey is a country that has faced many disasters and will continue to face them due to mostly its geographical location. Turkey is in tenth place in the countries' average annual losses due to disasters. A significant portion of 51.7% of the population lives in regions where disaster risk is high. Although it is impossible to stop natural tragedies, it is necessary to minimize the loss to be experienced and to create a disaster-resilient society. To make the effective management of the processes after disasters and emergencies sustainable and citizen-friendly, the 30 October, 2020 İzmir Earthquake, which is the case study of the thesis, has been examined, and strategic suggestions that may be useful in the future have been developed. These recommendations are:

- The social and healing power of participatory design should be operated in post-disaster planning.
- The actors involved in TAMP should be revised and more inclusive; All institutions that work and will work during the disaster should be coordinated more accurately.
- The duty descriptions of the actors in TAMP should be made more explicit.
- Institutions working within the scope of TAMP should constantly exchange information, and the institutions' decisions should not conflict with each other. If it is inconsistent, the institutions should decide not to victimize the disaster survivors.
- Institutions in TAMP should provide continuous and updated information to the victims. Information should be made using more than one method and delivered to as many people as possible.
- Institutions working within the scope of TAMP should also receive feedback from the victims.
- TOKİ, which is in charge within the scope of TAMP for the housing problem after a disaster, should know the project area better and produce a house belonging to the ground.
- TOKİ, which oversees TAMP's scope, should better know the user and their needs and produce suitable housing for the disaster victims.

- The quality of the staff of the assigned institution should be increased, and they should be qualified to provide disaster support.
- The victim should be involved in every step of the process, and most importantly, they should be able to make decisions for themselves.
- The process should be transparent, egalitarian, and democratic for the victims and every actor.
- In the process, some of the disaster victims should not be separated by subjecting them to the urban transformation law and some to the disaster law.
- The disaster law no. 7269 should be revised urgently and should be adapted to today's conditions.
- The disaster law no. 6306 should be revised urgently and should be adapted to today's conditions.
- The victims should not be dragged between permanent and temporary housing; they should have housing that can meet the conditions before the disaster.
- After the damage assessment study, institutions should not change the treatment on the categorical separation of buildings. Every building and residence affected by the disaster should be equally important.
- The institutions should produce alternative solutions for tenants living in the disaster area and affected by the disaster and minimize psychological and social losses.

When the outcomes are reviewed, it is possible to discuss the participatory step, although we cannot thoroughly confer participatory design after the Izmir Earthquake. The earthquake survivors of Izmir were able to contain and participate in the procedure more systematically. They were involved in the post-disaster planning process voluntarily. Institutions have also taken steps to cooperate with earthquake victims. These actions were initially evaluated as positive. Considering the recommendations provided above, they should be included in the process over time, and thus a more interactive and sufficient resolution should be planned for the disaster victims. All psychological, sociological, economic, and physical traumas experienced by disaster victims should be minimized with the plan's scope. It is fundamental to find the correct answers to the pertinent questions in the post-disaster struggle process. This can only be achieved by

learning the fundamental requirements of the victims and seeking solutions concurrently with them. In conclusion, based on the case study analysis, it has been seen that participatory design is also desired by the victims and will reflect positively on the struggle process. It is possible to create a more inclusive struggle process by integrating participatory design into the struggle process.

With this study, the housing problem after the disaster was approached from an alternative perspective. The study strived to designate a relationship between participatory design and the post-disaster housing problem. Post-disaster housing projects that integrate participatory design have been analyzed to assure the established relationship. A base was created for the case study Izmir Earthquake example by comparing these projects. The struggle process carried out after the 30 October Izmir Earthquake was investigated in terms of participatory design components, and it was observed that steps were taken for participation. The thesis emphasizes that participation is essential during the struggle process, regardless of the scale of the involvement. Concurrently, this study has demonstrated that participatory design is a more precise method than a standard post-disaster struggle strategy. This argument, advocated by exemplary projects, was endorsed by earthquake victims. Consequently, participatory design should be increased in the post-disaster process, and the healing and unifying power of the nature of the participation should be used during the struggle.

It is essential to regard the participatory design independently of the post-disaster housing production. Participation has conveyed social problems into focus while developing. It tried to find solutions to these problems in unity and solidarity. Likewise, participatory design helps to find answers to social issues. It is more valuable for the designer group to come together with the user group and solve the common problem rather than the customer-designer relationship. Throughout the design education, architecture students learn that the created structure or space should belong to the context. Could space be independent of the user? The reading of the space becomes meaningful when integrated with the user and the user's needs. The customer-designer connection is problematic at present. The designer designs the space according to the capital and presents it to the market. To what extent can the user integrate with a space where the designer does not come into contact with the user? The user is a designer's catalog in participatory design. By being involved in the process, the users have the prospect to

convey their needs and problems. Thus, the designer can conceive more effectively by directly encountering a parameter.

This study was noted hoping that participatory design would be preferred more in Turkey. Participatory design can also produce programmed and effective solutions for common problems. It also helps to seek more accurate answers to social issues and crises. Although it takes longer than the conventional method for users, designers, and other possible groups to produce solutions, it is precious. The design process needs to be managed more democratically, equitably, and transparently for everyone but the user.

This thesis was documented on the Izmir Earthquake of October 30, 2020, which continues to struggle, and the current situation until today has been investigated. From today, it is necessary to design more planned, communication, and high cooperation processes not solely for the earthquake victims from Izmir but also for all disaster victims. I hope that all responsible institutions, the government, and the public will give an ear to the disaster victims to alter them no longer victims.

## REFERENCES

- Abbott, J. (1993). *The Theory and Practice of Community Participation in the Provision of Urban Infrastructure*. Johannesburg.
- AFAD. (2013). *Türkiye Afet Müdahale Planı*. AFAD.
- AFAD. (2018). *Türkiye'de Afet Yönetimi ve Doğa Kaynaklı Afet İstatistikleri*. İstanbul: AFAD.
- AFAD. (2020). *30 Ekim 2020 İzmir Deprem 2020*. İzmir: Afad.
- AFAD. (2020). *30 EKİM 2020 EGE DENİZİ, SEFERİHİSAR*. İzmir.
- AFAD. (2020, 11 20). *AFAD*. www.afad.gov.tr: <https://www.afad.gov.tr/izmir-seferihisar-depremi-duyuru-80-20112020---1730> adresinden alındı
- AFAD. (2020, 11 26). *AFAD*. www.afad.gov.tr: <https://www.afad.gov.tr/izmir-seferihisar-depremi-duyuru-81-26112020---2100> adresinden alındı
- AFAD. (2021, 10 30). *AFAD*. www.afad.gov.tr: <https://www.afad.gov.tr/izmir-depreminin-1-yil-donumu-basin-bulteni-30102021> adresinden alındı
- AFAD. (2021, 11 05). *AFAD*. izmir.afad.gov.tr/: <https://izmir.afad.gov.tr/30102020-izmir-depremi-hak-sahipligi-basvurularini-29092021-13102021-ek-surede-yapan-afetzedelerin-komisyon-kararlarina-iliskin-duyuru> adresinden alındı
- Akarsu, A. (2019). *The Qualitative Research Culture: Reflections From the Field*. Ankara: Hacettepe University.
- Alshehri, D. M., & Murp, B. A. (2016). *Post-Disaster Housing in Islamic Nations: The Conceptualization of Sociocultural Sentivity By the WorldBank*. Texas: Texas Southern University.
- Archdaily. (tarih yok). *Archdaily*. www.archdaily.com: <https://www.archdaily.com/10775/quinta-monroy-elemental> adresinden alındı
- Arnstein, S. (1969). *A ladder of Citizen Participation*.
- ASkar, R. (2018). *From Temporary to Permanente, Incremental Housing Vision for the City of Homs*. University of Minho.
- Assembly, U. G. (2010). *Report pf the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context*. UN.
- Assembly, U. G. (2011). *Right to adequate housing*. UN.
- Atmaca, C. (2020, 11 20). *Haberler.Com*. www.haberler.com: <https://www.haberler.com/konteyner-kent-calismalarinda-sona-gelindi-13748369-haberi/> adresinden alındı



- Atölyesi, D. U. (2017, 12 13). *Düzce Umut Atölyesi*. [duzceumutatolyesi.wordpress.com](https://duzceumutatolyesi.wordpress.com/):  
<https://duzceumutatolyesi.wordpress.com/> adresinden alındı
- AV. (2010). *PRES Constitución Masterplan, Constitución*. [arquitecturaviva.com](https://arquitecturaviva.com/):  
<https://arquitecturaviva.com/works/plan-urbano-pres-constitucion-1> adresinden alındı
- Avcıoğlu, O. (2012). *Public Participation in Local Decision-making processes, The case of Bodrum*. Ankara: ODTÜ.
- Ay, G. (2017). *Düşük Gelir Grubuna Yönelik Sosyal Konut Üretiminde Kullanıcı Katılımlı Sürecin İredelenmesi*. İstanbul: İTÜ.
- Aydın, S. (2003). *Türkiye'de Konut Sorunun Ekonomik Boyutları*. Ankara: Ankara Üniversitesi.
- Ayna, E. (2019). *Neighborhood Satisfaction and Participation: A Qualitative Analysis in the Context of Quality of Life in Urban Renewal Areas of Ankara*. Ankara: T.C. Ankara Yıldırım Beyazıt University.
- Baba, E. C. (2009). *Küreselleşme sürecinde yüksek yapılanmanın kullanıcı-çevre ilişkisi bağlamında irdelenmesi*. İstanbul: MSÜ.
- Balcı, Y. (297-315). *Türkiye'de Konut Sorunu*.
- Balyemez, S. (2010). *Kentsel Mekanın, Deprem Risklerinin Azaltılmasına Yönelik Yeniden Organizasyonu ve Bir Toplumsal Katılım Süreci*. İstanbul: İTÜ.
- Barilolynei, B. F. (tarih yok). *Kullanıcı Katılımı Yaklaşımların mimari tasarım ve uygulama süreçleri üzerinden değerlendirilmesi*.
- Battisti, A., & Cimini, S. (tarih yok). A participate action to regenerate historical small town centres. *Abitare Insieme*, 1338-1348.
- Bavilolyaei, B. F., & Ökem, S. (2015). KATılımcı Mimari Tasarımda Yanıltıcı Simge Değer Olgusu ve Bir Sözde Katılımcılık Örneği Olarak Sulukule Kentsel DÖnüşümü. *Megaron*, 247-263.
- Benson, M., & Iqbal, H. (2021). Self-build homes: social values and the lived experience of housing in practice. M. Benson, & H. Iqbal içinde, *Self-Build Homes* (s. 1-14).
- Berg, L. B., & Lune, H. (2017). *Qualitative Research Methods for the Social Sciences*. Malaysia: Pearson Education Limited.
- Beyazıt, E. (2006). *Yerel Demokrasi ve Katılım*. Hatay: Mustafa Kemal Üniversitesi.
- Bilau, A. A., Witt, E., & Lill, I. (2018). Practice Framework for the Management of Post-Disaster Housing Reconstructions. *Sustainability*, 1-26.
- Bilge, B. N. (2018). *Yer'in Kavranma ve Mimari Tasarıma Katılma Biçimleri*. İstanbul: İTÜ.

- Bingöl, Ö. (2019). Sosyal Konut Yerleşmelerinde Kentsel Mekan Üretimi: İstanbul Kayabaşı 24. Bölge Sosyal Konut Yerleşmesi. *Megaron*, 83-99.
- Bossen, C., Sejer, I. O., & Dindler, C. (2016). Evaluation in participatory design : a literatur survey. *14th Participatory Design Conference*.
- Brodie, E., Cowling, E., Nissen, N., Ellis, P. A., Jochum, V., & Warburton, D. (2009). *Understanding participation: A literature review*.
- Buluklu, B. (2014). *Konutta Kullanıcı Katılımı*. İzmir: DEU.
- Buluklu, B. (2014). *Konutta Kullanıcı Katılımı Bağlamında Esneklik ve İki Adımlı Ev Sunumu Sistemi*. İzmir: DEÜ.
- Bulut, H. (tarih yok).
- Bulut, H. B. (2016). *Mimarlıkta Katılımcı*. İstanbul: YTÜ.
- Bulut, H. B. (tarih yok). *Mimarlıkta Katılımcı Tasarım Yaklaşımlarının analizi ve küçükçekmece örneğinde irdeleme*.
- Cankurt, S. (2015). *Açık Kamusal Kent Mekanlarının Tasarımında Katılım: Bursa Atatürk Stadyumu ve Çevresi Kentsel Tasarım Projesinin İrdelenmesi*. İstanbul: İTÜ.
- Cantürk, E. (2016). Cumhuriyet'ten Günümüze Türkiye'de Konut Sorunu ve Konut Politikalarının Gelişimi. *ALTÜST*.
- Capell, T., & Ahmed, I. (2021). Improving Post-Disaster Housing Reconstruction Outcomes in the Global South: A Framework for Achieving Greater Beneficiary Satisfaction through effective Community Consultation. *buildings*.
- Carp, J. (1990). *Design Participation: New Roles, New Tools*. (H. Sanoff, Dü.) North Carolina.
- Chapin, D., & Sackman, L. (1995). 1930s Housing Environmental Design Research: A project. *Journal of Architectural and Planning Research*, 36-57.
- Chowdhury, S., & Schnabel, M. A. (tarih yok). A communication System in Urban Design Process: An Algorithmic Neighbourhood Design Approach. *Design Communication Association*, 271-279.
- Claridge, T. (2004). *Designing Social Capital Sensitive Participation Methodologies*. Social Capital Research.
- Coalition, D. H. (tarih yok). *Seven Key Principles*.
- Colistra, J., & Vakil, N. (2020). *Participatory Design in Housing*. University of Kansas.
- Comerio, M. (1990). *Design and Environment: 20 Years of Community Architecture*. (H. Sanoff, Dü.) North Carolina.
- Communities, G. (2012). *Haiti Katye: Rebuilding a Neighborhood*.

- Cornwall, A. (2009). Locating Citizen Participation. *IDS Bulletin*.
- Creswell, J. (2009). Mixed Methods Procedures. J. Creswell içinde, *Research Design* (s. 203-224). California: SAGE Publications.
- Creswell, J. (2014). *Research Design*. California: SAGE Publications.
- Crooke, P. (1974). Towards participatory urban settlement and housing systems. *Ekistics*.
- Cropley, A. (tarih yok). Introduction to Qualitative Research Methods: A practice-oriented introduction for students of psychology and education. A. Cropley içinde 2021: University of Hamburg.
- Çengel, M. (2019). *Siyasal Katılımda Sosyal Ağların Rolü: Üniversite Öğrencileri Üzerine Bir Araştırma*. Burdur.
- Çetindaş, C. M. (2019). *Afet Sonrası Kalıcı Konutlarda Katılımcı Yaklaşım*. İzmir: YTÜ.
- Çınar, A. K., Ekici, Y., & Baysan, N. (2021). *30 Ekim 2020 Ege Denizi Depreminin Düşündürdükleri*. İzmir: TMMOB.
- ÇŞB. (2020, 11 04). *T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı*. izmir.csb.gov.tr: <https://izmir.csb.gov.tr/deprem-calismalari-haber-257122> adresinden alındı
- ÇŞB. (2020, 11 23). *T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı*. izmir.csb.gov.tr: <https://izmir.csb.gov.tr/sayin-bakanimiz-murat-kurum-izmir-depreminin-ardindan-kentsel-donusum-yapilacak-alanlarda-yasayan-mahalle-sakinleriyle-bir-araya-geldi.-haber-257255> adresinden alındı
- ÇŞB. (2021, 01 21). *T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı*. izmir.csb.gov.tr: <https://izmir.csb.gov.tr/kesin-hasar-tespit-raporlarinin-ilani-ve-itiraz-basvurularina-iliskin-kamuoyu-uyurusu-uyuru-411995> adresinden alındı
- Day, C. (2003). *Consensus Design*. Oxford: Architectural Press.
- Day, C., & Parnell, R. (2003). *Consensus Design: Socially inclusive process*. Burlington: Architectural Press.
- Dayaratne, R. (2016). Creating places through participatory design: psychological techniques to understand people's conceptions. *Journal of Housing and the Built Environment*.
- De Carlo, G. (1971). Participation of the Consumer in the Decision-making and Management of the Urban Environment Architecture's. *Parametro5, Special Issue*.
- Der, V. (2005). *Konut Uygulamalarında Kaliteyi Arttırıcı Bir Yöntem Olarak Tasarımda Kullanıcı Katılımı: Düzce-Beyciler Evleri Örneği*. İstanbul: YTÜ.
- Der, V. (2005). *Konut Uygulamalarında Kaliteyi Arttırıcı Bir Yöntem Olarak Tasarımda Kullanıcı Katılımı :Düzce-Beyciler Evleri Örneği*. İstanbul: YTÜ.

- Development, I. C. (2016). *The Search for High- Density Multi-Story Incremental Housing*.
- DHA/İHA. (2021, 11 26). *Hürriyet*. www.hurriyet.com.tr:  
<https://www.hurriyet.com.tr/gundem/izmirli-depremzedeler-yeni-evlerine-kavusuyor-cumhurbaskani-erdogan-konutlari-bugun-teslim-edecek-41947782>  
adresinden alındı
- DIVISARE. (2010). 01 15, 2022 tarihinde <https://divisare.com/projects/265944-elemental-alejandro-aravena-villa-verde-project> adresinden alındı
- Doğan, G. G., Yağcıner, A. C., Yüksel, T., Ulutaş, E., Polat, O., Güler, I., . . . Kanoğlu, U. (2021). *The 30 October 2020 Aegean Sea Tsunami: Post-Event Field Survey Along Turkish Coast*. Birkhauser.
- Duarte, A. M., Brendel, N., Degbelo, A., & Karal, C. (2018). Participatory DEsign and Participatory Research: An HCI Case Study with Young Forced Migrants. *ACM Trans Comput*.
- Erdoğan, O. (2019). Yerel Yönetimlerde Katılımcı Mekanizmalar ve Trabzon Büyükşehir Belediyesi Örneği. *BEÜ İİBF AID*, 295-310.
- Ersoy, Z. (2010). Mimari Tasarımda "Kullanıcı Odaklı" Süreçler. *Mimarlık Dergisi*.
- Esengil, Z. (tarih yok). *Planlama ve Tasarım Sürecine Katılımın Kamusal Projeler bağlamında irdelenmesi: Antalya Kent Örneği*.
- Evleri, U. (tarih yok). *Umut Evleri*. www.umutevleri.org: <https://www.umutevleri.org/>  
adresinden alındı
- Farrell, V., Mouzakis, K., & Pilgrim, C. (2006). PICTIOL: a case study in participatory design., (s. 191-198).
- FEMA. (2020). *Planning Considerations: Disaster Housing*.
- Fernando, N. (2010). *Graduate Research Series vol. 6: Forced Relocation after the Indian Ocean Tsunami 2004-Case study of vulnerable populations in three relocations settlements in Galle, Sri Lanka* . Colombo: University of Colombo.
- Filippi, S., & Cristofolini, I. (2010). *The Design Guidelines Collaborative Framework*. London.
- Ganapati, N. E., & Ganapati, S. (2009). Enabling Participatory Planning After Disasters: A Case Study of the World Bank's Housing Reconstruction in Turkey. *Journal of the American Planning Association*, 41-59.
- Garces, M. (2017). *Post-earthquake recovery in Chile: The case of PRES Constitucion as an innovative approach*. columbia University.
- Gedik, S. E. (2003). *Marmara Depremi Acil Yeniden Yapılandırma (MEER) Projesinde FIDIC ESASLI İnşaat Sözleşmesiyle Proje Yönetimi*. İstanbul: İTÜ.
- GFDRR, T. H. (tarih yok). *What did we Learn? The Shelter Response and Housing Recovery in the First Two Years after the 2010 Haiti Eartquake*.

- Glasow, P. (2005). *Fundamentals of Survey Research Methodology*. P. Glasow. içinde Virginia.
- Grundmeyer, T. (2012). *A qualitative study of perceptions of first year college students regarding technology and college readiness*. Iowa: Iowa State University.
- Gülen, M. (2019). *Dar Gelirler için Toplu Konut Üretiminde Mimari Tasarım Süreci ve Kullanıcının rolü Üzerine bir model önerisi Van Kenti Örneği*. İstanbul: MSGÜ.
- Habraken, N. (1985). *The Three Ways of Seeing the Built Environment*. London: Pidgeon Audio Visual Series.
- Habraken, N. (1999). *Open Building as a Condition for Industrial Construction*.
- Habraken, N. (tarih yok). Uyabilirlilik, Değişim ve Kullanıcı Katılımı İçin Tasarım. *Mimarlık DErgisi*, 49-53.
- Hacıalibeyoğlu, F. (2007). *Mimari Tasarım Sürecinde Kullanıcı Katılımı Üzerine bir model önerisi*.
- Hacıalibeyoğlu, F. (2013). *Mimari Tasarım Sürecinde Kullanıcı Katılımı Üzerine Bir Model Önerisi*. İzmir: DEÜ.
- Haglund, C. (2013). *Participatory DEsign at a distance*. Malmö: Malmö University.
- Hamdi, N. (2013). *Housing Without Houses*. Warwickshire: Intermediate Technology Publications.
- Hancock, B., Ockleford, E., & Windridge, K. (2007). *An Introduction to Qualitative Research*. Birmingham: University of Birmingham.
- Hasgül, E. (2016). Incremental Housing: A participation process solution for informal housing. *ITU AIZ*, 15-27.
- Hunt, B. (1969). *The Hunt Report*.
- Hurley, A. K. (2019, 09 26). *CityLAB*. [www.bloomberg.com](http://www.bloomberg.com): <https://www.bloomberg.com/news/articles/2019-09-26/alejandro-aravena-on-designing-for-disaster> adresinden alındı
- Hurst, F. (2000). *Architectural Participatory Design Methods*. Wisconsin.
- Hürol, Y., & Salama, A. (2020). *On Open House International, Open Building Approach and Nicholas Wilkinson*.
- İBB. (2020, 12 01). *İzmir Büyükşehir Belediyesi*. [www.izmir.bel.tr](http://www.izmir.bel.tr): <https://www.izmir.bel.tr/tr/Haberler/44395/156> adresinden alındı
- İBB. (2020, 11 30). *İzmir Büyükşehir Belediyesi*. [www.izmir.bel.tr](http://www.izmir.bel.tr): <https://www.izmir.bel.tr/tr/Haberler/44392/156> adresinden alındı
- İBB. (2020, 11 16). *İzmir Büyükşehir Belediyesi*. [www.izmir.bel.tr](http://www.izmir.bel.tr): <https://www.izmir.bel.tr/tr/Haberler/44335/156> adresinden alındı

- İBB. (2020, 11 13). *İzmir Büyükşehir Belediyesi*. www.izmir.bel.tr:  
<https://www.izmir.bel.tr/tr/Haberler/44319/156> adresinden alındı
- İBB. (2020, 11 13). *İzmir Büyükşehir Belediyesi*. www.izmir.bel.tr:  
<https://www.izmir.bel.tr/tr/Haberler/44325/156> adresinden alındı
- İBB. (2020, 11 12). *İzmir Büyükşehir Belediyesi*. www.izmir.bel.tr:  
<https://www.izmir.bel.tr/tr/Haberler/44314/156> adresinden alındı
- İlıkoba, H. (2021). *21. Yüzyılda Kriz Ortamında Alternatif Mimari Pratikler*. İstanbul: İTÜ.
- İncedayı, D. (1995). *İstanbul Kentinde Düşük Gelirli Konutu Planlaması İçin Katılımcı Bir Sistem Önerisi: Pınar Mahallesi Örneği*. İstanbul: MSÜ.
- İncedayı, D. (2003). Toplum Kalite Yönetimi Anlayışı Çerçevesinde Ataşehir Toplu Konut Yerleşmesinin Değerlendirilmesi. *Tasarım+Kuram*, 102-114.
- Involve. (tarih yok). *İnsanlar ve Katılım*.
- İzBel. (2022, February 11). <https://www.izmir.bel.tr/tr/Haberler/depremzedeler-izdeda-catisi-altinda-orgutlendi/44888/156>. www.izmir.bel.tr:  
<https://www.izmir.bel.tr/tr/Haberler/depremzedeler-izdeda-catisi-altinda-orgutlendi/44888/156> adresinden alındı
- İzci, F., & Sarıtürk, M. (2019). Demokratik Toplumlarda Halkın Yönetime Katılımı: Yönetime Kayılım ve Yönetişim İlişkisi. *Uluslararası Yönetim Akademisi Dergisi*, 498-517.
- Jayasundara, P. (2005). *Sri Lanka: Joint Report of the Government of Sri Lanka and Development Partners*.
- Kandilli Rasathanesi ve Deprem Araştırma Enstitüsü, B. (2020). *30 EKİM 2020 EGE DENİZİ DEPREMİ*. İstanbul: Kandilli Rasathanesi ve Deprem Araştırma Enstitüsü.
- Karim, F. (2018). *Architecture and Social Engagement*. New York: Routledge.
- Kaya, A. (2018). *Siyasi Katılım Bağlamında Kadınların Kent Yönetimine Katılımları: Aydın ili Örneği*. Muğla: MSKU.
- Keser, E. (2021). *Architecture, Community and the Aga Khan Award for Architecture*. İzmir: IZTECH.
- Kızmaz, K. C. (2015). *Sosyal Konutlardaki Esneklik Kavramına "Güncel" Yaklaşımlar*. İstanbul: Beykent University.
- Klagge, J. (2018). *Guidelines for Conducting Surveys*. Arizona: Arizona State University.
- Kocaman, G. (2018). *Ekolojik Planlama ve Tasarım Kriterlerinin Sosyal Konut Bağlamında Değerlendirilmesi Düzce Umut Evleri Örneği*. İstanbul: MSGÜ.

- Kothari, C. (2004). *Research Methodology Methods and Techniques*. New Delhi: New Age International (P) Limited, Publishers.
- Kucina, I. (2016). Commoning of the Uncommonness: Developing Urban commons in Post Socialist City. *Intrasformazione*, 106-116.
- Kucina, I. (tarih yok). Citizen Collectives, Co-Design and the Unforeseen Future(s) of the Post-Socialist City . M. Mitrasinovic içinde, *Concurrent Urbanities*.
- Lee, J. (2019). Citizen Participation, Process, and Transparency in Local Government: An Exploratory Study. *Policy Studies Journal*.
- Lizarralde, G. (2014). *The Invisible Houses: Rethinking and Designing Low-Cost Housing in Developing Countries*.
- Lowdermilk, T. (2013). *User-Centered Design*. California.
- MacTavish, T., Marceau, M.-O., Optis, M., Shaw, K., Stephenson, P., & Wild, P. (2012). A participatory process for the design of housing for a First Nations Community. *Journal of Housing and the Built Environment*, 207-224.
- Manahasa, O. (2017). *Children Participation and post Occupancy Evaluation in Developing a Communicative language to (Re)design Educational Environments*. İstanbul: ITU.
- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of Research Design and Methodology*. New Jersey: John Wiley Sons, Inc.
- Melek, J. A., Lim, S., & Tahir, Z. (2019). Understanding The Issues of Citizen Participation. *Journal of Nusantara Studies*, 1-22.
- Milletler, B. (1996). HABİTAT II. BİRLEŞMİŞ MİLLETLER İNSAN YERLEŞİMLERİ KONFERANSI HABİTAT II İSTANBUL DEKLARASYONU.
- Mulligan, M. (2007). *What the World can Learn from Sri Lanka's Post-tsunami Experiences*. RMIT University.
- Nabatchi, T. (2011). *A Manager's Guide to Evaluating Citizen Participation*. IBM Center.
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approached*. Edinburgh: Pearson Education.
- Özen, A. Ö., & Aksoy, M. (2021). User Participation in Social Housing Practices in Turkey. *IZTECH*.
- Öztürk, Y. (2019). *Belediyelerde Kararlara Demokratik Katılıma Bir Örnek Olarak Ermenek İlçe Belediyesi*. Kütahya: Dumlupınar Üniversitesi.
- Pawar, N. (2020). *Type of Research and Type Research Design*. Chaudhary Bansilal University Bhiwani Haryana.

- Poderi, G., & Dittrich, Y. (2018). Participatory design and sustainability: a literature review of PDC proceedings. *H2020 SHAPE ENergy : "What works for Consumer Engagement in Energy Transition: Experimenting a Behavioral-Sociological approach.*
- Power, A. (1997). *The Social Consequences of Mass Housing in Northern Europe.* London: Macmillan Press LTD.
- Pretoria, U. o. (tarih yok). Research Design and Methodology.
- Pustu, Y. (tarih yok). Yerel Yönetimler ve Demokrasi. *Sayıştay Dergisi*, 121-134.
- Reeves, P. (2005). *An Introduction to Social Housing.*
- Robertson, T., & Simonsen, J. (2012). Challenges and Opportunities in Contemporary Participatory Design. *Design Issues*, 3-9.
- Ruige, A., Üskent, S., & Micka, P. (2014). *Yönetişim ve Katılım.* Ankara: Başak Matbaa.
- Ruiu, M. L. (2015). The effects of cohousing on the social housing system: the case of the Threshold Center. *Journal of Housing and the Built Environment*, 631-644.
- Sağol, B. (2021, 09 18). *BirGün.* www.birgun.net:  
<https://www.birgun.net/haber/depremzedeye-kutu-kadar-ev-359090> adresinden alındı
- Sanders, E. (2002). *From User-Centered to Participatory Design Approaches.* Taylor&Francis Books Limited.
- Sanoff, H. (1988). Participatory Design in Focus. *Arch&Comport*, 27-42.
- Sanoff, H. (1988). Participatory Design in Focus. *Arch. & Comport.*, 27-42.
- Sanoff, H. (1990). *Participatory Design, Theory and Techniques.* North Carolina.
- Sanoff, H. (2002). *Schools DEsigned with Community Participation.* North Carolina.
- Sevgi, N. N. (2017). *Konut Alanlarının Dönüşümünde Kullanıcı Katılımı: Emek Mahallesi Örneği.* İstanbul: Bahçeşehir Üniversitesi.
- Somerville, P., & Springings, N. (2005). *Housing and Social Policy.* Routledge.
- Study, N. (tarih yok). *Citizen Participation and Technology.* NDI.
- Stukas, A. (2002). Community Involvement: Theoretical Approaches and Educational Initiatives. *Journal of Social Issues.*
- Şahinler, D. (1994). *İstanbul KEntinde Düşük Gelirli Konutu Planlaması İçin Kullanıcı Katımlı Bir Sistem Önerisi.* İstanbul: MSÜ.
- Şat, N. (2011). *Halkın Yönetime Katılımının Bir Kanalı Sıfatıyla KEnt Konseylerinin Değerlendirilmesi.* Hitit University.
- Şengül, M. (1999). Çevre Yönetimine Katılım Açısından ÇED Sürecine Halk Katılımı. *3. Ulusal Çevre Mühendisliği Kongresi.*



- Şişik, G. B. (2019). *Yerel Yönetimlerde Katılım Yöntemleri: Polatlı Kent Konseyi Örneği*. Konya: Selçuk Üniversitesi.
- Taştan, H. (2016). *Yapılı Çevrede Sosyal Sürdürülebilirlik Bağlamında Kullanıcı Katılımı*. İstanbul: YTÜ.
- Tekeli, İ. (2009). *Gündelik Yaşam, Yaşam Kalitesi ve Yerellik Yazıları*. İstanbul: Tarih Vakfı Yurt Yayınları.
- Tekin, S. (2019). *Yerel Kamu Hizmetlerine Gönüllü Katılım: Denizli Kent Konseyi Örneği*. Karaman: Karamanoğlu Mehmetbey Üniversitesi.
- Tokat, M. U. (2010). *KÜRESELLEŞME SÜRECİNDE EKOLOJİ VE SÜRDÜRÜLEBİLİRLİK KAVRAMLARINA YAKLAŞIM VE MİMARLIK ALANINDAKİ YANSIMALARI*. İstanbul: MSGÜ.
- Toprak, D., & Ertaş, H. (2020). *Ortaklaşa*. Ankara: European Cultural Foundation.
- Toprak, D., & Ertaş, H. (2020). *Ortaklaşa*. Ankara: European Cultural Foundation.
- trthaber. (2021, September 20). *trthaber*. <https://www.trthaber.com/>: <https://www.trthaber.com/foto-galeri/izmirdeki-yeni-konutlar-depremin-yil-donumunde-teslim-edilecek/38627/sayfa-1.html> adresinden alındı
- Tunçer, M. (2017). Marmara Depremi Acil Yeniden Yapılanma Projesi (MEER) Kapsamında Düzce için Hazırlanan Kalıcı Konut Alanları İmar Planlarına İlişkin Planlama Yaklaşımı. 4. *Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı*. Eskişehir.
- Turner, J. F. (1972). Freedom to Build dweller control of the housing process. J. F. Turner içinde, *Housing as a Verb* (s. 148-175). New York.
- Turner, J. F. (tarih yok). *Housing by People: Towards Autonomy in Building Environments*. META Publications.
- Ulutaş, S. (2019). *DEprem Sonrası Kalıcı Konut Yerleşmelerinde Sosyal Sürdürülebilirliğin İrdelenmesi: Van İli Erciş İlçesi Örneği*. İstanbul: İTÜ.
- USGS. (2020, 11 30). *USGS*. [www.usgs.gov](http://www.usgs.gov): <https://www.usgs.gov/news/magnitude-7-earthquake-coast-greece-and-turkey> adresinden alındı
- Uysal, A. (2019). *Housing Production in the Last Thirty Years and Housing Question of the Poor in İzmir*. İzmir: IZTECH.
- Uzunay, E. (2019). *Çevre Yönetimine Katılım: Hatay Örneği*. Hatay: Hatay Mustafa Kemal Üniversitesi.
- Uzunoğlu, K., & Özer, H. (2014). Toplu Konutların Ön Tasarım Aşamasında Değerlendirilmesi. *Megaron*, 167-189.
- Ültanır, M. S. (2019). *Türkiye'de Kooperatifçiliğin Tarihsel Seyri: Devlet İnsiyatifi-Kalkınma İdeali*. Ankara: Hacettepe Üniversitesi .

- Üstün, B. (2000). *Konut Tasarımında Esnek Planlama Amaçlı Yaklaşımlar ve Tasarımda Kullanıcı Katılımının Öneminin Eskişehir Örneğinde İncelenmesi*. İstanbul: MSÜ.
- Valiliği, T. İ. (2021, 02 10). *T.C. İzmir Valiliği*. [www.izmir.gov.tr](http://www.izmir.gov.tr):  
<http://www.izmir.gov.tr/valimiz-yavuz-selim-kosger-depremede-vatandaslarimizla-bir-araya-geldi> adresinden alındı
- Valiliği, T. İ. (2021). *TAMP-İZMİR*. İzmir: T.C. İzmir Valiliği .
- Vanlıoğlu, E. (2015). *Democracy and Participation at the Local Level in the Context of City Council: Women's and Children's Assemblies in Zeytinburnu, Küçükçekmece, Kadıköy and Bahçelievler*. İstanbul: İKU.
- Varolüneş, F. K. (2021). Sosyal Sürdürülebilirlik Performansının Kalıcı Afet Konutlarında Değerlendirilmesi: Bingöl Örneği. *İdealkent*, 757-784.
- Varolüneş, F. K. (2021). Success factors for post-disaster permanent housing: Example of Turkish earthquakes. *The Turkish Online Journal of DEsign Art and Communication*, 115-130.
- Wainer, L. S., Ndengeingoma, B., & Murray, S. (2016). *Incremental housing and other design principles for low-cost housing*.
- Warburilson, D., Wilson, R., & Rainbow, E. (tarih yok). *Fark Yaratmak: Merkezi yönetime halkın katılımını değerlendirmek için rehber*. Involve.
- Weiss, M. (tarih yok). *Housing in the 21 century*.
- Wilcox, D. (2001). *Community Participation and empowerment: putting theory into practice*. London.
- WorldBank, T. (2013, 01 15). *The WorldBank*. [projects.worldbank.org](https://projects.worldbank.org):  
<https://projects.worldbank.org/en/projects-operations/project-detail/P068368> adresinden alındı
- Wulz, F. (1990). The Concept of Participation. H. Sanoff içinde, *Participatory Design*.
- Yılmaz, E. (2016). Konut Sorunu. *Gazi Üniversitesi Sosyal Bilimler Dergisi*, 31-50.
- Yılmaz, N. (2016). *Konut Tasarımı Sürecinde Kullanıcı Katılımı: Adana KEnti Bağlamında Bir Okuma*. Adana: Çukurova Üniversitesi.
- Yılmaz, Y. D. (tarih yok). *Afetlerde İyileştirme Çalışmaları*.
- Yoldaş, Ö. K. (2012). *Dar Gelirliler İçin Konut Üretiminde Bir Yöntem Olarak Mimari Tasarımda "Kullanıcı Katılımı"*. İstanbul: MSGÜ.
- Zeren, H. E., & Özmen, A. (2010). Halkın Belediye Faaliyetlerine Kayılma Duyarlılığı ve Hizmet Memnuniyeti: Karaman Belediyesi Örneği. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 165-173.

# APPENDICES

## APPENDIX A

### ANKET FORMU

Sayın Katılımcı;

Bu anket formu İzmir Yüksek Teknoloji Enstitüsü Mühendislik ve Fen Bilimleri Enstitüsü Mimarlık yüksek lisans programında yürütülmekte olan “**Participatory Design Process in Post Disaster Housing Production: The Case of 30 October 2020 İzmir Earthquake**”

(**Afet Sonrası Konut Üretiminde Katılımcı Tasarım Süreci : 30 Ekim 2020 İzmir Depremi Örneği**) başlıklı tez çalışması için yapılmaktadır. Ankette toplanan veriler sadece bilimsel amaçlı kullanılacak olup, katılımcıların kimlik bilgileri istenmeyecektir. Anketteki soruları samimi bir şekilde ve atlamadan yanıtlamanız bilimsel geçerlilik ve güvenilirlik açısından büyük önem taşımaktadır. Şimdiden değerli katkılarınızdan dolayı teşekkür ederiz.

Doç. Dr. Ebru YILMAZ

Saniye Dilara ÇELİK

İzmir Yüksek Teknoloji Enstitüsü

İzmir Yüksek Teknoloji Enstitüsü

Mimarlık Bölüm Başkan Yardımcısı

Mimarlık Bölümü

(Tez Danışmanı)

#### A. GENEL BİLGİLER

- 1) Cinsiyet:  
( )Kadın ( )Erkek
- 2) Yaş aralığı:  
a)0-18 b)18-24 c)25-34 d)35-49 e)50  
ve üzeri
- 3) Eğitim Düzeyi:  
a)İlköğretim b)Ortaokul c)Lise d)Üniversite  
e)Lisansüstü
- 4) Gelir Düzeyi  
a)0-1500 b)1501-3000 c)3001-4500 d)4500 ve üzeri
- 5) Sigorta durumu:  
( )Mevcut değil ( )Mevcut
- 6) Depremden önce yaşadığınız yer ile ilgili yerel yönetim kararlarını takip eder miydiniz?  
a)Hayır b)Evet
- 7) Herhangi bir Sivil Toplum Örgütüne Üye misiniz?  
a)Hayır b)Evet

- 8) Eski konutunuzdaki statünüz nedir?  
a) Akraha evi      b) Paylaşımlı kira      c) Kira      d) Kendi Evi
- 9) Eski konut m<sup>2</sup>'si nedir?  
a) 0-60m<sup>2</sup>      b) 61-90 m<sup>2</sup>      c) 91-110 m<sup>2</sup>      d) 111-130 m<sup>2</sup>  
e) 131 m<sup>2</sup> ve üzeri
- 10) Konutta ikamet eden kişi sayısı nedir?  
a) 1      b) 2      c) 3      d) 4      e) 5  
ve üzeri
- 11) Kaç yıldır konutunuzda yaşıyordunuz?  
a) 0-5      b) 6-10      c) 11-15      d) 16-20      e) 21  
ve üzeri
- 12) Bölgede ikinci bir mülkünüz bulunuyor muydu?  
a) Evet, proje alanında ve ağır hasarlı  
b) Evet, proje alanında ve orta/az hasarlı veya hasarsız  
c) Evet, proje alanında değil ve ağır hasarlı  
d) Evet, proje alanında değil ve orta/az hasarlı veya hasarsız  
e) Hayır
- 13) Eski konutunuzun bulunduğu binada oluşan hasar ne boyutta?  
a) Tamamen çöktü.  
b) Tamamen çökmedi fakat yaşamak için tehlikeli. (Orta hasarlı)  
c) Az hasarlı, onarılırsa yaşanabilir.  
d) Hasarsız

## **B. AKTÖR/SÜREÇ/YÖNTEM/PROJE'DE KATILIMCILIK ÖLÇÜM**

### **B.1. AKTÖRLER ARASI KATILIM**

- 1) Görevli kurumlara istediğim zaman danışabilirim.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum
- 2) Görevli kurumlardan talepte bulunabilirim.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum
- 3) Görevli kurumlarla işbirliği yapmak isterdim.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum
- 4) Görevli kurumların kendi aralarında kuvvetli bir iletişim olduğunu düşünüyorum.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum
- 5) 30 Ekim İzmir Depremi Mağdurları Platformunu'nun görevli kurumlara ulaşmada daha etkili olduğunu düşünüyorum.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum

### **B.2. SÜREÇTE KATILIM**

- 1) Sürecin şeffaf işletildiğini düşünüyorum.  
a) Kesinlikle katılmıyorum      b) Katılmıyorum      c) Kararsızım      d) Katılıyorum  
e) Kesinlikle katılıyorum

- 2) Sürecin kişilerarası eşitliği ve adaleti gözetilerek işletildiğini düşünüyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 3) Süreç yönetimine güveniyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 4) Süreç boyunca ilgililerle iletişim kurabildim.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 5) Sürecin işbirliğine açık bir şekilde yürütüldüğünü düşünüyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 6) Sürecin demokratik bir şekilde yürütüldüğünü düşünüyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 7) Vatandaş katılımının süreci uzatacağını düşünüyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum

### **B.3. KATILIM YÖNTEMLERİ**

- 1) MüdaH. planının ve projelerinin yürütülme yöntemlerini yeterli buluyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 2) 23 Kasım 2020 tarihinde Çevre ve Şehircilik Bakanlığı'nın düzenlediği bilgilendirme toplantısı yeterliydi.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 3) Aynı toplantının sonuçlarının daha geniş kitlelerle kurumsal web sayfası üzerinden paylaşılmasını olumlu buluyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 4) 7269 no'lu yasa ve 6306 no'lu yasalar ile oluşturulan konut edindirme yönteminin yeterli olduğunu düşünüyorum.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 5) 10 Şubat 2021 tarihinde 30 Ekim İzmir Depremi Mağdurları Platformunu'nun isteği ile ilgili kurumlarla yapılan toplantı hedefine ulaştı.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum

### **B.4. PROJEDE KATILIM**

- 1) Konteynir Kent Yerleşimi'nde vatandaşlara talepleri sorulur.  
a) Kesinlikle katılmıyorum b) Katılmıyorum c) Kararsızım d) Katılıyorum  
e) Kesinlikle katılıyorum
- 2) Konteynir Kent Yerleşimi'ndeki mekânsal düzenlemeler yapılırken depremzedelerin ihtiyaçları gözetilir.

- a)Kesinlikle katılmıyorum b)Katılmıyorum c)Kararsızım d)Katılıyorum  
e)Kesinlikle katılıyorum
- 3) TOKİ'nin hayata geçireceği projenin detaylarını biliyorum.  
a)Kesinlikle katılmıyorum b)Katılmıyorum c)Kararsızım d)Katılıyorum  
e)Kesinlikle katılıyorum
- 4) Deprem sonrası konut projelerinin tasarımında vatandaş katılımı önemlidir.  
a)Kesinlikle katılmıyorum b)Katılmıyorum c)Kararsızım d)Katılıyorum  
e)Kesinlikle katılıyorum
- 5) Deprem sonrası konut alanlarındaki ortak kamusal mekanların tasarımında vatandaş katılımı önemlidir.  
a)Kesinlikle katılmıyorum b)Katılmıyorum c)Kararsızım d)Katılıyorum  
e)Kesinlikle katılıyorum

## APPENDIX B

### GÖRÜŞME FORMU

Sayın Katılımcı;

Bu görüşme formu İzmir Yüksek Teknoloji Enstitüsü Mühendislik ve Fen Bilimleri Enstitüsü Mimarlık yüksek lisans programında yürütülmekte olan “**Participatory Design Process in Post Disaster Housing Production: The Case of 30 October 2020 Izmir Earthquake**” ( Afet Sonrası Konut Üretiminde Katılımcı Tasarım Süreci : 30 Ekim 2020 İzmir Depremi Örneği ) başlıklı tez çalışması için yapılmaktadır. Görüşmede toplanan veriler sadece bilimsel amaçlı kullanılacak olup, katılımcıların kimlik bilgileri istenmeyecektir. Görüşmedeki soruları samimi bir şekilde ve atlamadan yanıtlamanız bilimsel geçerlilik ve güvenilirlik açısından büyük önem taşımaktadır. Şimdiden değerli katkılarınızdan dolayı teşekkür ederiz.

Doç. Dr. Ebru YILMAZ

Saniye Dilara ÇELİK

İzmir Yüksek Teknoloji Enstitüsü

İzmir Yüksek Teknoloji Enstitüsü

Mimarlık Bölüm Başkan Yardımcısı

Mimarlık Bölümü

(Tez Danışmanı)

#### A. GENEL BİLGİLER

Ad Soyad : Yaş :  
Meslek : Dernek üyeliği :  
Eski Konut Statüsü : Eski Konut Durumu :

#### B. AKTÖR/SÜREÇ/YÖNTEM/PROJE'DE KATILIMCILIK ÖLÇÜM

##### B.1. AKTÖRLER ARASI KATILIM

1) 30 Ekim İzmir Depremi Mağdurları Platformunu/Derneği hangi görevli kurumlara, hangi konularda ve neden ulaştı?

2) Platform'un faaliyetlerini nasıl değerlendirir misiniz? Daha etkili olması için neler yapılmalı?

4) Dernek/platform dışındaki görevli kurumlarla iş birliği yaptınız mı?

3) Görevli kurumların kendi aralarındaki iletişim hakkında neler söyleyebilirsiniz?

## **B.2. SÜREÇTE KATILIM**

1) Süreç şu an hangi aşamadır? Sizce ne kadar hedefine ulaştı, yüzde verebilir misiniz?

2) Sürecin her aşaması şeffaf, eşitlikçi ve demokratik bir şekilde yürütülüyor mu?

3) Süreç yönetimine hangi konularda güveniyorsunuz?

4) Süreçte vatandaş katılımından bahsedilebilir mi? Neden?

## **B.3. KATILIM YÖNTEMLERİ**

1) ÇŞB'nın düzenlediği konferansları değerlendirebilir misiniz? (23 Kasım 2020, 10 Şubat 2021) Konferanslar/Toplantılar hedefine ulaştı mı?

2) Platform amacına ulaşmak için süreç boyunca hangi yöntemleri kullandı?



- 3) 7269 no'lu yasa ve 6306 no'lu yasalar ile oluşturulan konut edindirme yöntemlerini yeterli buluyor musunuz?

#### **B.4. PROJEDE KATILIM**

- 1) TOKİ'nin hayata geçireceği projenin detaylarını sürecin başından beri biliyor muydunuz? Toki'nin hazırladığı projeleri yorumlar mısınız?

- 2) Proje alanında bir geçici konut önerilebilseydi tercih eder miydiniz?

- 3) Deprem sonrası konut projelerinin tasarımında vatandaş katılımı sizce önemli midir? Neden?

- 4) Deprem sonrası konut alanlarındaki ortak kamusal mekanların tasarımında vatandaş katılımı önemli midir? Neden?

## APPENDIX C

### KATILIMCI CEVAPLARI

#### AKTÖR/SÜREÇ/YÖNTEM/PROJE'DE KATILIMCILIK ÖLÇÜM

##### B.1. AKTÖRLER ARASI KATILIM

###### 1) 30 Ekim İzmir Depremi Mağdurları Platformunu/Derneği hangi görevli kurumlara, hangi konularda ve neden ulaştı?

*-Yardımlarla başladı, ilk amaç doğru yardımın gerçek ihtiyaç sahiplerine ulaşması amaçlandı. Sanıyorum ki ilk olarak Valilik, Belediye ve AFAD ile iletişime geçildi. (F. K., Emekli, 58, O.H)*

*-Biz depremzedeyiz, partici değiliz. O yüzden Haydar Başkan aklınıza gelen her kurumla görüştü. ÇŞB, Valilik, AFAD, belediyeler...Cumhurbaşkanı İzmir'e geldiğinde onunla bile konuştu. (G..L, Emekli, 54, A.H)*

*-Yani iktidardan muH.fete kadar yerelden merkezi yönetime kadar herkes ile görüşülmeye çalışılıyor, herkese derdimizi anlatmak istiyoruz. (H. H, 42 İşletmeci, Az Hasarlı)*

*-Dernek aktif bir dernek olarak kurulmadı. Depremi yaşadığı ilk zamanlarda hiçbirimiz bir şey istemedik. Daha sonra ne yapılması gerekiyor, kime başvurulması gerekiyor ve hangi yoldan nasıl ilerlenmesini kimse bilmediği için üç beş kişi ile başladı. Haydar Bey başı çekti, arkadaşlar destek verdi. İlk 10 gün içinde yardım, çadırlar gibi konular üzerine çalışıldı daha sonra sorun çıktıkça geliştik. (T. D, 47, Gayrimenkul Danışmanı, Az H.)*

###### 2) Platformu'n faaliyetlerini nasıl değerlendirir misiniz? Daha etkili olması için neler yapılmalı?

*-Dernek profesyonel ve planlanmış bir dernek değil. Güncel hayat içerisinde apartman yöneticilerinin oluşturduğu Whatsapp grupları ile şekillenmiş bir ortam. Bilgileri birbirimizden alalım, doğru aktaralım derken kuruldu. Çünkü bireysel olduğunuzda kamu kurumları sizi çok önemsemiyor. Herhangi bir bürokrattan randevu almanızın imkânı neredeyse sıfır. Aslında burada kurumsal kimliğin gücünü kullanıyoruz. Aynı öğrenci kulüpleri gibi. Maalesef ki bundan daha aktif olmasının da şansı yok çünkü o kadar yetkimiz yok. Bir grup amatör insanın Haydar Bey öncülüğünde oluşturulan bir grup platform / Dernek. Bundan daha iyi ne yapılabilir bilmiyorum. Belki daha profesyonel bir yaklaşım olsaydı daha iyi planlama yapılabilirdi. Ama şu an için en iyisi. (T. D, 47, Gayrimenkul Danışmanı, Az H.)*

*-Bence Dernek çok iyi çalışıyor. Parası olmayan birçok kişiye destek oldular. Birebir görüşmeler ayarladılar ve karşı kurumlarca dikkate alınıyor. Emsal konusunda çok çaba*

sarf ettik. Tam istediğimiz olmasa da yine de bir hak elde edebildik. Bir bakanla görüşmek kolay değil. Sürekli görüşme içindeyiz. (B. H.,47, Bankacı, Ağır Hasarlı)

-Arkadaşlarımız olsun, başkanımız olsun fedakârca çalışılıyor. Hem zamanlarını hem sağlıklarını koydular sürece, hastalık var demeden çalıştılar. Bir de süreci çok iyi yönettiler. İnce bir çizgideyiz bir tarafa yanaşırsan o partili, bir tarafa yanaşırsan öbür partili oluyorsun. Tarafsız olarak yapıyorlar görüşmelerini. Belediye, ÇŞB, AFAD bizi tanıyor. Yine de 80 bin hane etkilenmiş depremden ama 2000 küsür üyemiz var sadece. Bu kadar kişi ile sesimizi duyurduk daha çok olsak belki daha etkili olurduk. Daha fazla haklar elde edebilirdik. İnsanlarımız korkuyor dernek deyince başıma bir şey gelir mi diye. (F. K., Emekli, 58, O.H)

-Birbirimize çok bağlı bir gurubumuz var. Oradan her daim haberleşiyoruz. Keşke daha fazla kişi olsaydık. (G..L, Emekli, 54, A.H)

-Dernek birçok ilkleri gerçekleştirdi. Van'dan, Malatya'dan, Elazığ'dan iletişime geçiyorlar bizimle bunları nasıl yaptınız diye. Birbirimizin yanındayız, hep biz ne yapabiliriz diyoruz. Bizde bilmiyorduk, bizde başımıza geldiği için öğreniyoruz. Haydar Bey her yerden bize bilgi aktarımı yapıyor. (F.,T. 58, Emekli, AzH.)

-Yani örgütlenmeyi daha hızlı yapabilirdik. Daha çok şeye ulaşabilirdik ama bizde bilmiyorduk. Depremin sonrasında öğrendik. Zaten kimse bir şey bilmiyor. Depremi, acısını, kederini yine depremi yaşayan biliyor. Keşke devletten bir öncelik gelseydi. Onlar el ayak olsaydı. Mesela haklarımızı aramak için Avukata danışıyoruz ama Avukata danışamayacak çok insan var. Onlar nasıl öğrenecek? Bu durumlara çözüm olmak istiyoruz. Ama şu gerçek depremzede ne yapmalı konusunda eğitim verilmeli, çok cahiliz. (H. H, 42 İşletmeci, Az Hasarlı)

### **3) Dernek/platform dışındaki görevli kurumlarla iş birliği yaptınız mı?**

- Yani aslında sürecin her aşamasında karşılıklı diyalog olduğu için ortak yapılan bir şeyler var. Mesela emsal konusunda Tunç Başkanın dinlemesi, devamlı ziyaretlerde bulunması aslında bunların hepsi ortak bir çalışma. (B. H.,47, Bankacı, Ağır Hasarlı)

-Ortak iş yaptık diyebilirim, mesela emsal konusu. Karar farklı çıktığı halde bizi dinlediler ve kararı değiştirdiler. (G..L, Emekli, 54, A.H)

-İş birliği yapmaya çalışıyoruz. Bizim binalarımız az hasarlı ama oturulamaz durumda sağlıklı değil. Bayraklı Belediyesi riskli yapı olarak görüyor. Ama biz kentsel dönüşümcü gibi görünüyoruz. Bunu değiştirmek için çabalarımız devam ediyor. (F.,T. 58, Emekli, AzH.)

- Derneğin burs ve eğitim sorumlusu görevini üstlendim. Birçok kurumdan depremzede öğrenciler için burs istedik. Evlere eşya, çocuklara kırtasiye ve test kitapları ulaştırıyoruz. Bununla beraber Depremzedelere ücretsiz psikolojik destek vermek için Türk Psikologlar Derneği ile yazıştık, yakında ortaklaşa çalışabiliriz. Burs konusunda çok iş birliği yaptık. İzmir Subay Eşleri Derneği, Borusan, Türk Kadınlar Birliği, Ege

*Orman Vakfı,... Tabi ki herkesin eve ihtiyacı var ama başka önemli konular da var. Bayraklı Belediyesi ile gençlere ve çocuklara yönelik projemiz var; onları tanımak ve faydalı olmak istiyoruz. Yakında kadınlarla ilgili projeler yapacağız. (A. K, 48, Bilgisayar müh, AğırHasarlı)*

#### **4) Görevli kurumların kendi aralarındaki iletişim hakkında neler söyleyebilirsiniz?**

*-Yani ilk yardımlar çok hızlıydı. Çadırlar filan çok hızlı kuruldu, yardımlar hızlı ve düzgün dağıtıldı ama çözüm süreci bu kadar düzgün gitmedi zaten o da kurumların arasındaki iletişimsizlikten kaynaklandı. (B. H.,47, Bankacı, Ağır Hasarlı)*

*-Evet herkesin kendi masası kendi görev tanımı var. O çerçevede bir şeyler biliyor ve yapmaya çalışıyor. Ama yine de her şeye hâkim değiller. Bırakın kendi aralarındaki iletişimi kurumlar içi iletişim de çok derli toplu değildi. Örnek olarak İzmir ÇŞB ile gerçekten çalışmadık, oradaki kişiler ya işinin ehli değil ya da bilmiyorum ne. Ankara'dakilerle çalıştık. Bize sürekli o öyle olmaz deniliyor, başka bürokrata gidiyoruz yine aynı tepki. Kimse elini taşın altına da koymuyor. MuH.fet misin yandaş mı sürekli bu var. Dostluk maçı gibi göremiyoruz biz. Katkı sağlayamıyoruz. O koordinasyonu, birlik haline gelmeyi yürütemiyorlar. ÇŞB yasalara bile hâkim değil yeri geldi nelerle karşılaştık. Dernek üyesi yasaları daha iyi biliyor şu an öncülük yapıyor. (T. D, 47, Gayrimenkul Danışmanı, Az H.)*

*-İlk herkes her şeyi yaparım modundaydı. Bize aynı yakınlıktaydılar ya da aynı uzaklıkta diyeyim. Ama hiçbiri birbiriyle birlik olmadı, olan yine vatandaşa oluyo zaten. Bir ay içinde sarıp sarmaladılar birlikte çalıştılar. Ama sonra herkes topu birbirine atıyor. (F. K., Emekli, 58, O.H)*

*- Hiçbiri birbiriyle iletişimde değildir ki bunların ben öyle düşünüyorum ben. Eğer bunlar içlerinde birbiriyle iletişimde olsaydı bu kadar süre geçtiğinde elimizde somut bir şey olurdu. Hani diğer belediyelere ve hiçbir şey daha sormamışlar ama birbirlerinden haberleri yok. Hiçbir bilgiyi birbiri bilmiyor. Hele o meclisteki milletvekilleri, depremin. Allah bilir. 30 Ekim olduğunu bile unutmışlardır. Hani hiçbir şey bilmiyor, var, oraya gelmişler, oylama yapacaklar ama hiç bilgi sahibi değil. (G..L, Emekli, 54, A.H). (1)*

*-Evin bir duvarı çökmüş ÇŞB bize az hasarlı verdi değiştirmediler evin durumunuda. ÇŞB elemanlarının eğitiminden gerçekten şüphe duyduk. Dask bakan para veren kurum pert raporu verdi ÇŞB yine de az hasarlı diyor. Yani orada ayrı burada ayrı muamele. (F.,T. 58, Emekli, AzH.)*

*-Dask çok kötü çalıştı depremde. Binaya giriş izni yok, eşyalarımızı almamız gerekiyor yani evimiz eşyalarımızla bir gitti ama DASK parayı ödemeyi o kadar uzattı ki. Özel sigorta DASK'dan önce ödeme yaptı. İlk 10 gün kurumlardan bilgi almaya çalışıyordum bireysel olarak sonra bıraktım çünkü hiçbiri düzgün bilgi vermiyordu. Çalışanlar çok yetersizdi. Muhtarın daha çok bilgisi vardı konuyla. Muhatap bulamıyorduk. Zaten dernekte o sayede ortaya çıktı. Dernek bilginin peşinden koşuyor teyidini alıyor. Kurumlardan gelen bilgiye güvenemiyoruz. (B. H.,47, Bankacı, Ağır Hasarlı)*

## B.2. SÜREÇTE KATILIM

### 1) Süreç şu an hangi aşamada? Sizce ne kadar hedefine ulaştı, yüzde verebilir misiniz?

-Yüzde 15 diyelim. İşte rezerv alan bitecek, proje alanındakiler bitecek diyelim ama 80 bin hane etkilenmiş zaten bu sayıyı karşılamıyor bu projeler. 5 bin konut için çözüm var sadece 75 bin ne olacak? Daha bir çivi çakılmadı. (T. D, 47, Gayrimenkul Danışmanı, Az H.)

-Yüzde 5'i bitti derim. Gerçi onda da yüzde beşin yarısı da bitmedi de. 5000 binin çözümünü var ama daha ancak 1500 evin teslimatı olur onlarda zamanla ancak. 14, 15 ay oldu, 430 gün oldu biz gün sayıyoruz artık. (F. K., Emekli, 58, O.H)

-Yani evler yapılıyor yapılmasına da kredi ile ilgili hiçbir şey yok daha. Bizi bu çok üzüyor. Devletten sıfır faizli kredi bekliyoruz, hibe değil kredi alalım yine ödeyelim ama devletten alalım. (G..L, Emekli, 54, A.H)

-Yani olsa olsa 30 o da fazla fazla, ev yapıyo tamam ama onlarda da bir sürün sorun var. (S. E, Emekli, 63, Az H.)

-Afet olur olmaz olan yapılan yardımlar yüzde yüzdü Fakat iki ay sonra insanlar unutuldu. İlk yardımla beraber ancak %50'dir ki %50'lik kısımda tam bitmedi diyebilirim. (F.,T. 58, Emekli, AzH.)

-Daha çok yolumuz var. Daha hiçbir şey belli değil. Kentsel dönüşüm sürecinde ne olacak hiçbir şey belli değil. Çok uzun bir süreç bizi bekliyor. (B. H.,47, Bankacı, Ağır Hasarlı)

### 2) Sürecin her aşaması şeffaf, eşitlikçi ve demokratik bir şekilde yürütülüyor mu?

-Devlet bizim binamızı yıktı sağında ve solunda acil yıkılacak binalar vardı. Acil yıkılacak binalar AFAD'dan yararlanıyor ama ben kentsel dönüşüm muamelesi görüyorum. Yani faizli kredi alacağım. Ama ağır hasarlı 20 yıl faizsiz ödeyecek. Zaten kriz var. İlk başta ağır hasarlı raporu verdiler sonra raporu değiştirdiler. Acil yıkılacakla aynı gün yıkıldım yani mantıksız. Ha dernekle bir yol alıyoruz diğer insanlara göre daha şeffaf yürüyor süreç, çünkü nasıl olacağını biliyoruz. Bir de bizzat toplantılara katıyorum, Haydar Başkan ile birlikte gidiyorum belki bana şeffaf geliyor olabilir sorularımı muhattabına direk soruyorum ama eşitlikçi diyemem. Ayrıca her soruya da tam anlamıyla yanıt alamıyoruz ama dernekle hiç ilgisiz olmayan kişilere göre daha çok şey biliyoruz. (T. D, 47, Gayrimenkul Danışmanı, Az H.)

-Sürece hakim olduğumuzu düşünmüyorum. Biz öğrendiğimiz kadar varız. Yani TOKİ filan nasıl işlediğini bilmiyoruz. (B. H.,47, Bankacı, Ağır Hasarlı)

-Şeffaftı, illaki bir şeyler olmuştur aksaklıklar. Birebir şahit olmadım ama şikayetler var her kurum için farklı farklı hikayeler yaşayanlar var ne yazık ki. Çünkü herkes topu birbirine atıyor. Sorumluluk almıyor. (F. K., Emekli, 58, O.H)

-Saçma sapan bir süreç geçiriyoruz aslında. Ne olacağını bilmiyoruz bir şeyler oluyor. Demokratik, eşitlikçi demem asla. (S. E, Emekli, 63, Az H.)

-Yani arama kurtarma kısmı şeffaftı, eşitlikçiydi diyebiliriz. Ama şimdi her yerde bir prosedüre takılıyoruz. Kriz yönetimi iyi kurgulanmamış. Bir anda geliyo her şey, kararlar analiz edilmiyor. Herkes için aynı yürütülmüyor. Herkes ayrı problemler yaşıyor. (H. H, 42 İşletmeci, Az Hasarlı)

### 3) Süreç yönetimine hangi konularda güveniyorsunuz?

-Yani anlattığım olaydan dolayı güven duyamıyoruz maalesef. Ağır hasarlıdan az hasarlıya çevirince binamızı tebligat ile beraber ÇŞB il müdürlüğüne gittim. Bizzat imza atan kişi ile konuştum ve kusura bakmayın telefon geldi ağır hasarlı durumunuz reddedildi dedi. E devletten kontrol etmeliymişiz. Bana tebligat gelmiş antetli ÇŞB kâğıdı ile ben ona inanmayıp E devletten kontrol mü edecektim? Bu durumda nasıl güvenilir? Devletin bakanlığı yanlış mı yazdı acaba diyecektim. (T. D, 47, Gayrimenkul Danışmanı, Az H.)

-Sürece güvenmediğim gibi üstüne düşünüyorum da. Bu hazine kaynaklı krediyi neden bekliyoruz? Bence seçimi bekliyoruz. Seçim yatırımı olarak görülüyor. (B. H.,47, Bankacı, Ağır Hasarlı)

-Güvenmiyorum. Hiç emin değilim. O konudan çok tedirginliklerim var. Bütün güven yani Dernek başkanımıza güveniyorum. Benim derneğimize güveniyorum. (G..L, Emekli, 54, A.H)

-Bu süreçteki en çok güvendiğim ki bizim kendi tarafımız başkanımız ve arkasındakilerin mücadelesi. hep yaptığımız mücadeleler sonucunda bir şeyler elde ettik. Kimse bizi alın şunu demedi. AFAD hak sahiplikleri için Mustafa Kemal Lisesi'nde kriz masası kurdu. Bizde gittik, görevli benim kağıdı okumama laf etti. İmzalayın gitsin herkes imzalıyo diye. Ben sorgulamak istedim diye suçlu oldum. Başıma ne gelecek öğrenmek istedim diye. (F.,T. 58, Emekli, AzH.)

-Binamız ÇŞB den az hasarlı aldı. Ama belediye yaşamamıza bile izin vermiyor, metruk bina diyor, tehlike yaratan bina. Ama bunu çabucak çözemiyoruz. Ve herhangi bir şey olduğunda hak sahipleri sorumlu tutuluyor. Oradan birinin kafasına bir şey düşse sorumlu biziz. Binanın o durumda kalmasına göz yumuyorlar çözüm bulmuyorlar. Nasıl güvenebiliriz bu yönetime? (H. H, 42 İşletmeci, Az Hasarlı)

#### 4) Süreçte vatandaş katılımından bahsedilebilir mi? Neden?

*-Toki'nin yaptığı evlere zaten müdahale olamadık. Kimse plamadı yani. Kimseye sormadı zaten. Ne mal sahiplerine sordu ne belediyeye yapıyorum dedi başladı. Ama geride kalanlar daha çok uğraştı tabi. Çünkü karar verilmiş yol çizilmiş. Danışıldıydı daha daha iyi olurdu. Belki daha uzun sürerdi ama kimseye danışmadılar. Yani İzmir'e küçücük balkon yapmışlar. O projeler zaten İzmir'e hiç uygun değil. (F. K., Emekli, 58, O.H)*

*-TOKİ nin dışında başka bir alternatif olmalıydı. Hangisi avantajlı seçmeliydik. Tercih sorulabilirdi. Büyük haksızlıklar oldu. Çok acaleci davranıldı tamam ev sahibi yapıyor ama nasıl yapıyor. Evler filan bayağı küçüldü. (G..L, Emekli, 54, A.H)*

*-Bence bizler dahiliz. En azından dernek üyeleri dahil. Çünkü bizim de mücadelemiz var bu konuda. (F.,T. 58, Emekli, AzH.)*

*-Yani çoğu insan dahil olmadı işte. Daha çok üyemiz olabilirdi. Tedirgin oluyor insanlar. Kuruluş amacını bile bilmiyor aman bir şey olur mu diye düşünüyor. İnşalarda bir yerde haklı ama daha çok vatandaş sürece dahil olabilirdi.*

### B.3. KATILIM YÖNTEMLERİ

#### 1) ÇŞB'nın düzenlediği konferansları değerlendirebilir misiniz? (23 Kasım 2020, 10 Şubat 2021) Konferanslar/Toplantılar hedefine ulaştı mı?

*-Çözüme ulaşan pek bir şey olmadı. Bilgilendirme yapılacak dediler, yarım yamalak bir bilgilendirme yapıldı. Çözüme ulaşacak desem de onlar o seviye de kaldı. (G..L, Emekli, 54, A.H)*

*-Yani ben medyadan takip ettim ama hiç bilgi yoktu ortalıkta. Devletin kurumlar kendi içinde işliyor. Bilgilendirme hattı gibi bir şey olabilirdi. O toplantılara da herkes gidemedi ki. (H. H, 42 İşletmeci, Az Hasarlı)*

*-ÇŞB kendi istediği gibi yaptı toplantıları. Projeyi göstermişler itirazlar filan olmuş ama yani çözüme ulaşmış diyemem. O toplantıdan çok sinirli ayrılanlarda oldu. (B. H.,47, Bankacı, Ağır Hasarlı)*

*-Çşb Kasım'da toplantı yaptı evet. Bakan katıldı, valiler vardı kaymakamlar vardı. O toplantı bir kere yapıldı sonra bir şey yapılmadı. Ne duyduysanız o. O toplantı da zaten lansman gibi bir şeydi. Yaptıkları toplantıdaki gösterdiklerini de yapmadılar. Birbirini tutmadı. Sonra dernek talepte bulundu tekrar toplantı yapıldı. Dernek olmasaydı o toplantı da olmayacaktı. Dernek olmasaydı diğer milletvekilleri de açıklama yapmayacaktı. Yani o toplantılar çok etkili değildi. Verilen ilk raporlarla gerçektekiler zaten uyuşmuyor. Zaten 7 bölge 7 farklı inşaat firması yaptı hepsinin kalitesi bile birbirinden farklı. (T. D, 47, Gayrimenkul Danışmanı, Az H.)*

## 2) Platform amacına ulaşmak için süreç boyunca hangi yöntemleri kullandı?

*-Valla aylardır oldu twitter yağmuruna tutuyoruz tüm görevli kurumları (S. E, Emekli, 63, Az H.)*

*-Derneğin avukatı var onunla çok uğraştık. Herşeyi beraber çözümledik. Psikolojik destek vermeye çalışıyoruz gençlere kurumlarla iletişimdeyiz her şekilde. Telefon mail kişisel sosyal medya...(F.,T. 58, Emekli, AzH.)*

*-Twitterda biraz bi şeyler yapınca bu destek vermeyenlerde vermeye başladı. Keşke daha önce olsaydı. Daha hızlı olurdu her şey. Bunun dışında dernek çok araştırdı. Sadece kurumlara sormadı aynı zamanda çok çalıştı da, çözüm öneriler sundu raporlama yaptı. İnsanları birbiriyle haberdar etti (B. H.,47, Bankacı, Ağır Hasarlı)*

*-Twit teyzeleri var, grubumuz var whatsapp'da ne yazacağımızı gündemimizi belirliyoruz. Herkesi etiketliyoruz. Bakanlara bile ulaşıyoruz. (G..L, Emekli, 54, A.H)*

## 3) 7269 no'lu yasa ve 6306 no'lu yasalar ile oluşturulan konut edindirme yöntemlerini yeterli buluyor musunuz?

*-Yani bulmuyorum. Birinci biri sıfır faizle diğeri ise bizi bankadan kredi çekmek durumunda bırakıyor. Bankadan 100000 TL çekecek olsak 190000 TL ödemek zorunda kalacağız. Devletin finanse etme yöntemleri üretmesi lazım. Bu şekilde ev sahibi olamayız. (B. H.,47, Bankacı, Ağır Hasarlı)*

*-Bi kere yasalar 1960'lardan kalma. Acil yenilenmeli. Yasada damdan basediliyor, hangi gam dam mı kaldı bu devirde. Ya da kentsel ve kırsal olarak ayrılması lazım. Hızlı hareket edebilmek için bu yasaları kullanmalarını anlayabilirim ama yasalar bizleri kapsamıyor artık. Daha detaylandırılmalı. (T. D, 47, Gayrimenkul Danışmanı, Az H.)*

*-Kanunlarda çok belirsiz yerler oluşturuyor, yani yasal ikilemler gibi onların düzeltilmesi lazım. Sen buradan ben buradan diye bir şey olamaz. Bir deprem oldu benim de evim depremden hasar gördü onun da evi öyle. Evlerimizi yıkmaya biz karar vermedik. Neyin kentsel dönüşümü bu? İkiside apayrı muamele görüyor. Herkesin değişik değişik mağduriyet oluştu. (F. K., Emekli, 58, O.H)*

*-Kentsel dönüşüm değil afet kredisi istiyoruz.Her şeye zam geldi. Zaten nasıl yaptırırız bu evleri bilmiyoruz. Bir de başka bir yasadan muamele ediliyor. İyi düşünmek istiyorum. Deprem yüzünden birleştik, hepimizin tek derdi var Evimiz. (G..L, Emekli, 54, A.H)*



*-Durum öyle bir durumki kentsel dönüşüme geçelim mi geçmeyelim mi diye soruyorlar. Keşke benimde evimi TOKİ yapsaydı diyorum evet metrekaresini düşse de ama en azından uğraşmayacaktık. Gerçi ben tek kişiyim çocuklu ailelere de TOKİ nin yapacağı ev yeterli büyüklükte değil. Yani hangisi iyi bilemiyorum. Herkesin evini uygun şekilde yapsaydı.(S. E, Emekli, 63, Az H.)*

*-Benim kiracımda vardı evde, ağır hasar aldı ama kentsel dönüşümden gidiyoruz şu an. Süreç daha ters işliyor. Apartmanda bir mimar hanımefendi vardı o çizdi projeyi birkaç kez revize oldu tabii, çok insan karıştığı için proje süreci uzun sürdü ama olsun. Ben ev alıyordum para ödeyecektim ama istediğim bir yer alacaktım değil mi? Şimdi de bu şekilde istediğimiz gibi yapmaya çalışıyoruz aslında. Diğer türlü her şey belirsiz olacaktı beklemek zorunda kalacaktık. En azından böyle içimize sinecek. (B. H.,47, Bankacı, Ağır Hasarlı)*

#### **B.4. PROJEDE KATILIM**

##### **1) TOKİ'nin hayata geçireceği projenin detaylarını sürecin başından beri biliyor muydunuz? Toki'nin hazırladığı projeleri yorumlar mısınız?**

*-Başta biz 8 ay diye hesaplamıştık proje teslim tarihlerini, öyle demişlerdi. Bir yıldan fazla zaman geçti o tarihe uymadılar. Proje alanları çok hızlı seçildi, projeler çabuk seçildi. Bence TOKİ'nin elinde hazır projeler vardı buraya uyguladı. Yani her yere öyle yapıyo zaten. İzmir' e bu olur mu diye düşünmedi. Bütün şehirler birbirine benzedi, çok çirkin yani. (B. H.,47, Bankacı, Ağır Hasarlı)*

*- proje alanı diye bir alan belirlediler. Evleri orada yapılanların hemen orada ağır hasarlı olanın orada yaptılar hani bu Emrah Apartmanı gibi işte Barış Apartmanı gibi oraya 5 katlı yapılar, 8 10 katlı burada insanların evleri küçüldü, birçok şey oldu şimdi benden proje alan da değilim ama proje alandaki arkadaşların yazdıklarına göre onların onlardan duyduklarına göre sürecin gelişimi ile ilgili fazla bilgileri yoksun. İşte nasıl yapılacak? Sadece metre karelerini biliyordur, hangi cebini bana düşecek, ne kadar para ödeyeceğim gibi proje alandakiler biliyor. Şu anda rezerv alandaki her ne kadar ödeyeceklerini bilmiyorlar. Hangi katmana düşecek, neye göre verilecek olan üstadın kurayla yapıldı. Proje alanların hemen süreçte net tam bilgi sahibi değildi. (F.,T. 58, Emekli, AzH.)*

*- Yorum yapmak istemiyorum ben onların artıları da var, eksileri de var onları biliyorsunuz zaten binalar evet bir sene içerisinde yapımı yüzde 50-ni devlet karşıladı. o bunun içinde. yani evleri birebir zaten olmadı. Hak kayıpları çok fazla oldu. Proje alanındaki ağır hasarlarla ilgili herhangi bir şey yok. (H. H, 42 İşletmeci, Az Hasarlı)*

*-Çok kaliteli değil bence ama temelleri sağlam oldu. Ama metrekaresini 60 a 70 e indi. Balkon yok dediğim gibi, İzmir çok sıcak olur biz kışın bile çıkarız balkona. Yazın ne olur o evler. Fransız balkon yapılmış. İzmir'e hiç uygun olmayan şeffaflık olmayan yaptım oldu bir proje var. Evler, bahçeler her şey değişti. Sıkışık bir şey oldu. Caddedeki evlerden birine de minare gibi bir şey yaptılar, kubbe gibi tepelerine o ayrı bir damga vurdu. Osmanlı esintisi heralde. (F. K., Emekli, 58, O.H)*

-Yani tam değildi hiçbir şey, belirsizlik vardı hak sahipleri boş kağıda imza atmış. Boş kağıda imza atılır mı attırılır mı? Başımıza ne geleceğini bilmiyoruz. Ne kadar ödeyeceğiz ne zaman evlerimiz yapılacak? Ben istemezdim şahsen. (G..L, Emekli, 54, A.H)

-Biz proje alanında değiliz teyzem oradan hak sahibi oldu hani onun adına sevindik ama evlerin eski evlerle alakası yok. En azından devlet yaptı az ödeyeceksin diyoruz teselli ediyoruz açıkçası. Evet, mağdur musunuz? Hiçbir şey sorulmadı, hiçbir şeyle karşı karşıya kalmadığımız ama en azından önümüzdeki aydan itibaren evine geçeceksin. Ne öleceğini bileceksin sen rahat rahat edici üstünlük işi olmadan yani yapım senin olacak diye. (H. H, 42 İşletmeci, Az Hasarlı)

- Sorulmadı onlar gerek bir proje yaptılar be yani onu da durdurdular. Hatta bu hakkın da geri dönüp de almadılar. Sadece bilgilendirme yaptılar. Benim zaten karakter olarak kontrol etme isteğim var. Mesela şu an hasarlı bina komitesinde değilim ama doğru mu yapılıyor bilmek istiyorum. TOKİ'nin projelerinde benim bir kontrolüm yok bakmamıza bile izin verilmedi. (B. H.,47, Bankacı, Ağır Hasarlı)

## 2) Proje alanında bir geçici konut önerilebilseydi tercih eder miydiniz?

-Tabii, kesinlikle sorulmuş olsaydı hemen kabul ederdik. Aynı şekilde evimi istiyorum, aynı yerde aynı metrekarede. Kimse evini değiştirmek istemez durduk yere. (G..L, Emekli, 54, A.H)

-Tabi ki ederdim, çünkü kiraya çıkmak zorundasınız o anda. Eğer öyle bir şey teklif edilseydi bizlere kabul ederdik. Önce acil yıkılan apartman sakinleri ve ağır hasarlılara teklif gitti. O Uzundere konutlarında bile çıkmadı bizlere yer. Kimse kiraya çıkmak istemez. Zaten ekonomik bir kaybımız var ortada.- aydır kira ödüyoruz. Kendi binalarımızda değiliz. Alıştığımız yerde değiliz. (T. D, 47, Gayrimenkul Danışmanı, Az H.)

## 3) Deprem sonrası konut projelerinin tasarımında vatandaş katılımı sizce önemli midir? Neden?

-Bu sürecin içinde olmak benim en temel hakkım. Projeyi sadece izledik. Ben buraya para veriyor muyum veriyorum, ödeme yapacak mıyım yapacağım. Normal şartlarda kendi zevkime göre seçmeyecek miyim evimi? Yani burada da öyle olmalıydı. Bize danışılmalıydı. 40 dairenin ortak noktasını bulmaya çalışıyoruz, o süre çok uzun ama olsun. Yani bu her bölgenin ticari olmasına gerek yok buraya yaptılar gökdelenleri ama bizim bina zeminlerimizi iyice sıkıştırdılar. Sağlık desek yok. Yani oraya göz yumuyorlar ama bizleri dinlemiyorlar. (B. H.,47, Bankacı, Ağır Hasarlı)

-Fikir sormak güzel bir şey. Bende bu konuda fikir sorulmasını istersim. En azından kendimi daha motive hissederdim. Tamam apartman toplantısında ekstra 5 lira bile vereceğimiz zaman uzun sürüyo tartışmalar yaşıyoruz ama yönetim vatandaş ile iletişim halinde olmalı. Üç farklı proje gönderebilirlerdi evlere. Vatandaş seçebilirdi nasıl istiyorsa. Şimdi bu tepeden geldi kondu hiçbir söz hakkımız yok yaşayacağımız yerde. Mesela apartmanda birden fazla hak sahibi insan vardı, eğer hepsi tek olsaydı

yapılan projedeki evlerde yeterli olmayacaktı. Yani yaşadığı yeri terk etmek zorunda kalanlar olacaktı ki diğer apartmanlarda oldu mesela. (T. D, 47, Gayrimenkul Danışmanı, Az H.)

#### **4) Deprem sonrası konut alanlarındaki ortak kamusal mekanların tasarımında vatandaş katılımı önemli midir? Neden?**

-Sokakların bu durumda olması çok kötü. Savaştan çıkmış gibiyiz ya. Kıbrıs'ın terk edilen binalarının olduğu şehirlere benziyor İzmir. İzmir'e hiç yakışmıyor. Bu yıkılmaya yüz tutmuş binalar ortada duruyor. Kamu için büyük risk oluşturuyor. Bizim evin önünde durak var, çocuklar okula gidiyor insanlar işe gidiyor hala kullanılıyor yani o duraklar. Ya bir gün yıkılsa o evler durduk yerde. Buna devletin acil çözüm bulması gerekiyor. İnsanlara diyor ki bu evleri yaptırın ama ekonomik güvücümüz yok. Yıkıntı halinden çabucak kurtulmamız lazım. Afet sonrası tekrarb bir sorumsuzluk sonucunda kötü bir şey yaşamayalım istiyorum. (F.,T. 58, Emekli, AzH.)

-Yani bence kurumların yapacağı her işte gelip bir şey sorması imkansız. Biz 40 kişi anlayamadık, öyle olsa iyice uzayacak işler. Ama belediyeler ve diğer kurumlar zaten o demografik verileri etkin kullanmayı bilmeli. Halka hizmet etmeliler. Neye ihtiyacımız olduğu kurum tarafından tespit edilmeli. Ben park ve bahçe yapılacaksa her seferinde gidip bir ankete katılamam. Ama insanlara da çok yanlış yapıldı. Proje alanındakileri bile mağdur ettiler. Ev yapıyorsun, orayı tekrardan hayata geçirmeye çalışıyorsun. Bari seçenekler oluştursalardı. Bayraklı bölgesi emekli bölgesi öyle nezih kalmalıydı. Sıkış tepiş oldu. (B. H.,47, Bankacı, Ağır Hasarlı)

-E tabiki önemli, ben başka yere taşınmak zorunda kaldım. Yillardır olduğumuz muhitten uzaklaştık. Tabiki eski muhitimizi aynı şekilde geri istiyoruz. Biraz vicdan yapsınlar. Zaten bizim için süreç çok geç başladı, binamız yıkılacak etrafını çevrelettik hırsızlar panelleri çalmış. Yani yönetim bir şey yapmadıkça böyle şeyler olmaya devam ediyo. Çok kontrolsüz yani.(H. H, 42 İşletmeci, Az Hasarlı)