



Examination of Urban Transformation Implementation Legislation: Elazığ Example

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Anahtar Kelimeler

Kentsel Dönüşüm
Kentsel Dönüşüm Modelleri
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Graphical/Tabular Abstract (Grafik Özet)

In this study, it was aimed to examine and reveal the general results of the models applied in urban transformation works in Elazığ province after the 6.8 Mw Sivrice earthquake on January 24, 2020. In addition, a general evaluation of the legislations implemented in the urban transformation process were made and suggestions were made. / Bu çalışmada 24 Ocak 2020 yılında 6.8 Mw büyüklüğündeki Sivrice depremi sonrası Elazığ ilindeki kentsel dönüşüm çalışmalarında uygulanan modellerin genel sonuçlarının incelenmesi ve ortaya konulması amaçlanmıştır. Ayrıca kentsel dönüşüm sürecinde uygulanan mevzuatların genel değerlendirilmesi yapılmış ve önerilerde bulunulmuştur.

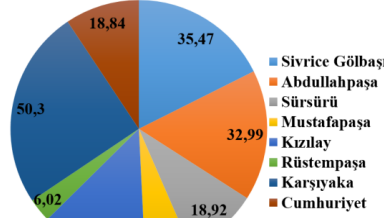


Figure A : Project Area Distribution of Neighborhoods (ha) / Şekil A: Mahallelerin Proje Alan Dağılımı (ha)

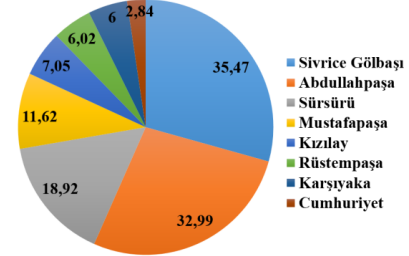


Figure B. Distribution of Application Area of Neighborhoods (ha) / Şekil B: Mahallelerin Uygulama Alan Dağılımı (ha)

Highlights (Önemli noktalar)

- Examining the legislation applied in the urban transformation process. / Kentsel dönüşüm sürecinde uygulanan mevzuatların incelenmesi.
- Examining the models applied in public urban transformation projects. / Kamusal kentsel dönüşüm projelerinde uygulanan modellerin incelenmesi.
- Evaluation of after earthquake urban transformation practices and process. / Deprem sonrası kentsel dönüşüm uygulamaları ve sürecinin değerlendirilmesi.

Aim (Amaç): In this study, it was aimed to examine and reveal the general results of the models applied in urban transformation works in Elazığ province after the 6.8 Mw Sivrice earthquake on January 24, 2020. / Bu çalışmada 24 Ocak 2020 yılında 6.8 Mw büyüklüğündeki Sivrice depremi sonrası Elazığ ilindeki kentsel dönüşüm çalışmalarında uygulanan modellerin genel sonuçlarının incelenmesi ve ortaya konulması amaçlanmıştır.

Originality (Özgünlük): Comparative analysis results of models and legislation affecting the success of urban transformation and making recommendations for future transformation practices. / Kentsel dönüşümün başarısını etkileyen model ve mevzuatların karşılaştırmalı analiz sonuçları ve gelecekte yapılacak dönüşüm uygulamalarına önerilerde bulunulması.

Results (Bulgular): Comparative analysis results of models and legislation affecting the success of urban transformation. / Kentsel dönüşümün başarısını etkileyen model ve mevzuatların karşılaştırılması analiz sonuçları.

Conclusion (Sonuç): The model to be chosen in the urban transformation process is an important parameter in the success of the application and reaching the desired goal. In choosing these parameters, choices should be made by examining each city individually. Because the places within the scope of transformation have their cultural characteristics, economic conditions, and natural disaster risk situations. For this reason, the model to be chosen should be selected and implemented by considering these features. / Kentsel dönüşüm sürecinde seçilecek model, uygulamanın başarısını ve istenen hedefe ulaşmasında önemli parametredir. Bu parametrelerin seçiminde özellikle her kenti kendi özelinde inceleyerek tercihler yapılmalıdır. Çünkü dönüşüm kapsamındaki yerlerin kendine özgü kültürel özellikleri, ekonomik şartları ve doğal afet risk durumları bulunmaktadır. Bu nedenle seçilecek model bu özellikler dikkate alınarak seçilmeli ve uygulamalar yapılmalıdır.



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Abstract

In this study, it was aimed to examine and reveal the general results of the models applied in urban transformation works in Elazığ province after the 6.8 Mw Sivrice earthquake on January 24, 2020. The population of the research, Elazığ province sample, is Karşıyaka, Cumhuriyet, Abdullahpaşa, Mustafapaşa, Rüstempaşa, Sürsürü, Kızılay and Sivrice Country Gölbaşı Neighborhoods. The study is qualitative research in the form of a field study in terms of revealing the results of urban transformation implementation at the sample points. In this context, observation technique, interview technique, and documentary scanning technique were used in the descriptive analysis. General physical-structural characteristics of buildings in the observation technique; in the interview technique, 100 building owners and users' opinions about the buildings; in the documentary scanning technique, the reflections of literature information in practice are interpreted as a whole. In comparing the literature information, project technical documents obtained from the Ministry of Environment, Urbanization and Climate Change and Elazığ Municipality were used. As a result, the model to be chosen in the urban transformation process is an important parameter in the success of the application and reaching the desired goal. More qualified urban transformation applications will be achieved by reducing the problems that arise in public transformation projects, especially in determining the legislation, and by choosing the appropriate model for comprehensive transformation.

Kentsel Dönüşüm Uygulama Mevzuatlarının İncelenmesi: Elazığ Örneği

Makale Bilgisi

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Öz

Bu çalışmada 24 Ocak 2020 yılında 6.8 Mw büyüklüğündeki Sivrice depremi sonrası Elazığ ilindeki kentsel dönüşüm çalışmalarında uygulanan modellerin genel sonuçlarının incelenmesi ve ortaya konulması amaçlanmıştır. Araştırmanın evreni Elazığ ili örnekleme ise Karşıyaka, Cumhuriyet, Abdullahpaşa, Mustafapaşa, Rüstempaşa, Sürsürü, Kızılay ve Sivrice İlçesi Gölbaşı mahalleleridir. Çalışma, örneklem noktalarındaki kentsel dönüşüm uygulama sonuçlarının ortaya konulması bakımından, alan incelemesi niteliğinde bir nitel araştırmadır. Bu bağlamda betimsel incelemede gözlem yapma tekniği, mülakat tekniği ve belgesel tarama tekniği kullanılmıştır. Gözlem yapma tekniğinde binaların genel fiziki-yapısal özellikleri; mülakat tekniğinde 100 bina hak sahibi ve kullanıcıların binalar hakkındaki görüşleri; belgesel tarama tekniğinde ise literatür bilgilerin uygulamalardaki yansımaları bir bütün dahilinde yorumlanmıştır. Literatür bilgilerinin karşılaştırılmasında ise Çevre, Şehircilik ve İklim Değişikliği Bakanlığı ve Elazığ Belediyesi'nden temin edilmiş olan proje teknik dokümanlarından yararlanılmıştır. Sonuç olarak, kentsel dönüşüm sürecinde seçilecek model, uygulamanın başarısı ve istenen hedefe ulaşmasında önemli parametredir. Kamusal dönüşüm projelerinde özellikle mevzuatların belirlenmesinde ortaya çıkan sorunların azaltılması ve kapsamlı dönüşümünde uygun model seçimi ile daha nitelikli kentsel dönüşüm uygulamaları elde edilmiş olacaktır.

1. INTRODUCTION (GİRİŞ)

Cities are transformed due to reasons such as industrialization and migration specific to the urban development process, as well as natural disasters, human-induced positive or negative actions, and

war. This transformation often destroys urban areas. In this context, areas subject to urban transformation are areas that have become obsolete or are outside the zoning plan [1]. In addition, areas in need of urban transformation may arise as a result of natural

disasters such as earthquakes, floods, and fires; urban transformation practices are carried out to eliminate the deterioration that occurs after a natural disaster or to minimize the damage that may occur before a natural disaster [2]. After the building demolitions and loss of life in the Düzce and Gölcük earthquakes in 1999, the issue of urban transformation came to the fore and became one of the most discussed topics. After this date, urban transformation projects began to be developed and implemented to minimize natural disaster risks, transforming unplanned urbanization areas and building safe structures against a possible natural disaster again [3]. Urban transformation practices carried out in the area after the earthquake that occurred in Düzce in 1999 can be given as an example of these applications. It is seen that the first application example of urban transformation in Elazığ started in Süsrü neighborhood in 2013. After the Sivrice earthquake in 2020, priority was given to urban transformation in the city, and approximately 80% of the buildings were transformed and renewed at many points until 2023. In this context, the 6 February 2023 Pazarcık and Elbistan earthquakes were prevented from encountering more severe consequences as a result of the renewal of the building stock in Elazığ province with the transformation works. The urban transformation models that have been and are being implemented in our country do not have similar qualities. There is diversity in terms of transformation techniques, application models, and economic and social dimensions. This diversity among urban transformation models is related to clear indicators of what causes the problem, the types of policies adopted to solve the problem, the aims and level of the intervention to be implemented, and the field of application of the model. Many models have been implemented in urban transformation projects in our country, especially through the public sector. These models are: Between 1950 and 2004, models aimed only at meeting the housing needs of the public and sheltering, the application model within the framework of Law No. 5104, the urban transformation and development project area application model with the 73rd article of the Municipality Law No. 5393, and the conservation area within the scope of Law No. 5366 were declared. renewal area application model in areas where there is a risk, risky area, and reserve building area application model with Law No. 6306, and TOKİ model [4]. Since the urban transformation process is multidimensional, separate model suggestions have been made for each dimension. Şahin [5] considers the urban transformation process as a continuity starting from the definition

of constitutional rights and ending with the planning of daily life and evaluation of environmental impacts. Gün, Pak, and Demir [6] critically mapped and discussed urban transformation processes in Istanbul by following how transformation practices took place on the ground and taking into account the different perspectives of stakeholder groups. Kandaloğlu [7] developed a feasible distribution model proposal by examining the problems regarding the sharing of rent arising from urban transformation practices and the legal dimension of the practices in our country. Yıldız, Kıvrak, and Arslan [8] surveyed 323 participants experienced in the field of urban transformation and evaluated the determination of possible built environment design elements that can be applied in urban renewal projects using factor analysis. Körlü [9] argued that urban transformation practices that do not cover the entire area and do not ensure sustainability and pluralistic participation will be insufficient in the process. Covelli [10] argues that mixed land use is a factor that affects the level of transportation-oriented development of the urban area. In this context, the main purpose of the mixed land use principle is defined as more vibrant, interconnected, and sustainable urban textures. Settlements with a high percentage of mixed land use argue that they provide citizens with sufficient services within walking distance and reduce car dependency. Zinoski and Dimitrievski [11] defined the urban transformation process as a multi-stakeholder process. They argue that citizens should be included in decision-making processes regarding the renewal of their neighborhoods, especially since they pay taxes into the state budget. Chang, Yoshida, Castro-Lacouture, and Yamagata [12] state in their studies that buildings in cities consume high amounts of energy to provide physical comfort, and that some environmental problems arise due to the increasing energy need. In this regard, they proposed a building transformation strategy for energy efficiency and thermal comfort by using a Bayesian multilevel modeling approach to ensure the energy efficiency of buildings and meet the increasing energy demand. Sabeeh Lafta and his colleagues [13] argue that to preserve urban identities and keep cultural heritage alive, it is necessary to raise public awareness of urban transformation practices and the restoration of historical buildings should be carried out within the framework of legislation and by the technique. Wheeler and Beatley [14] evaluated the concept of sustainable urban development from various dimensions. Among the topics discussed in the evaluation of these dimensions: are transportation, land use, social and environmental justice, urban design, restoration, economic development, energy and material use, ecological

planning, and green architecture. Dalla Longa [15] argues that urban transformation model selection focuses on the relationship between the state and the market, especially in metropolitan cities. Lehmann [16] argues that the urban transformation process is still an ongoing problem in industrially developed countries. Wolfram [17] argues that urban design will be more effective and efficient in experimentally restructuring social-ecological-technological systems to eliminate dominant development paradigms in sustainable urban transformation.

In this study, it was aimed to examine and reveal the general results of the models applied in urban transformation works in Elazığ province after the 6.8 Mw Sivrice earthquake on January 24, 2020. The model to be chosen in the urban transformation process is an important parameter in the success of the application and reaching the desired goal. More qualified urban transformation applications will be achieved by reducing the problems that arise in public transformation projects, especially in determining the legislation, and by choosing the appropriate model for comprehensive transformation.

2. MATERIALS AND METHODS (MATERİYAL VE METOD)

The population of the research is Elazığ province, and the sample is Karşıyaka, Cumhuriyet, Abdullahpaşa, Mustafapaşa, Rüstempaşa, Sürsürü, Kızılay and Sivrice Country Gölbaşı Neighborhood (Figure 1). The study is qualitative research in the form of a field study in terms of revealing the results of urban transformation implementation at the sample points. In this context, a general examination of the urban transformation studies implemented in risky areas in Elazığ province was made with a descriptive approach. In the descriptive analysis, observation technique, interview technique, and documentary scanning technique were used. General physical-structural characteristics of buildings in the observation technique; Opinions of 100 building rights holders and users regarding the buildings through interview technique; In the documentary scanning technique, the practical reflections of literature information are interpreted as a whole. In comparing the literature information, project technical documents obtained from the Ministry of Environment, Urbanization and Climate Change and Elazığ Municipality were used.

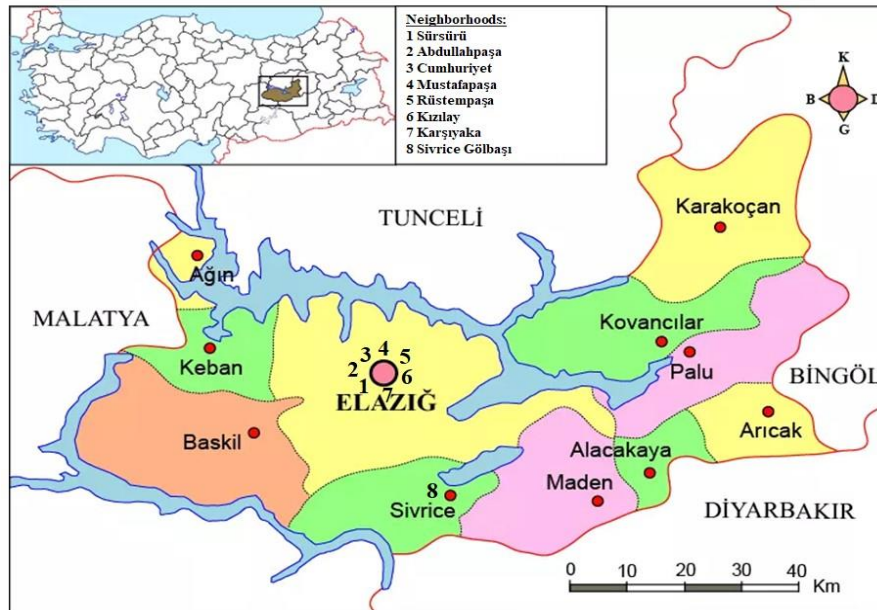


Figure 1. Distribution of Sampling Points of Implementation Projects on the Elazığ Map (Elazığ Haritası Üzerinde Uygulama Projelerinin Örneklem Noktalarının Dağılımı)

3. RESULTS (BULGULAR)

The 6.8 Mw Sivrice earthquake that occurred in Elazığ on January 24, 2020, caused severe damage to buildings built before 2006. Both unplanned construction and urbanization and the earthquake accelerated the urban transformation process

throughout Elazığ province. Urban transformation practices implemented in Elazığ have been an effective solution, especially in reducing the number of earthquake-resistant buildings and increasing the earthquake-resistant building stock. This result is confirmed by applications at 67 different points throughout the province. According to the damage assessment studies carried out after

the earthquake, it was observed that out of approximately 52000 buildings in the city center, 37400 were undamaged or slightly damaged, 1600 were moderately damaged, 6800 were heavily damaged and 6200 were not damaged [18]. In the field research, the project area distribution information of the neighborhoods is given in Figure 1 and the application area distribution information is given in Figure 2. It is seen that the values of the area on a hectare basis and the application hectare areas where urban transformation projects are declared in Abdullahpaşa, Mustafapaşa,

Rüstempaşa, Sürsürü, and Sivrice Country Gölbaşı Neighborhood are the same. While the area of Karşıyaka neighborhood declared as an urban transformation project is 50.3 hectares, the implementation area is 6 hectares. The area declared in the urban transformation project in Kızılay neighborhood is 26.96 hectares and the application area is 7.05 hectares. While the urban transformation project declared the area of the Cumhuriyet neighborhood is 18.8 hectares, the implementation area is 2.84 hectares.

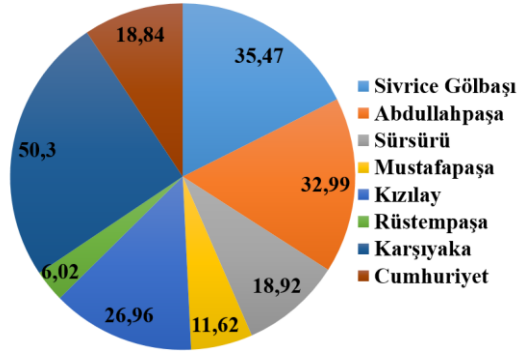


Figure 1. Project Area Distribution of Neighborhoods (ha) (Mahallelerin Proje Alan Dağılımı (ha))

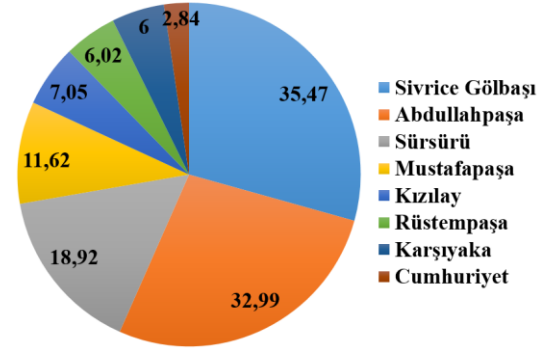


Figure 2. Distribution of Application Area of Neighborhoods (ha) (Mahallelerin Uygulama Alan Dağılımı (ha))

Satellite images of urban transformation projects implemented at the neighborhood scale are given in Figure 3. The master development plans of the urban transformation projects implemented at the neighborhood scale are presented in Figure 4.

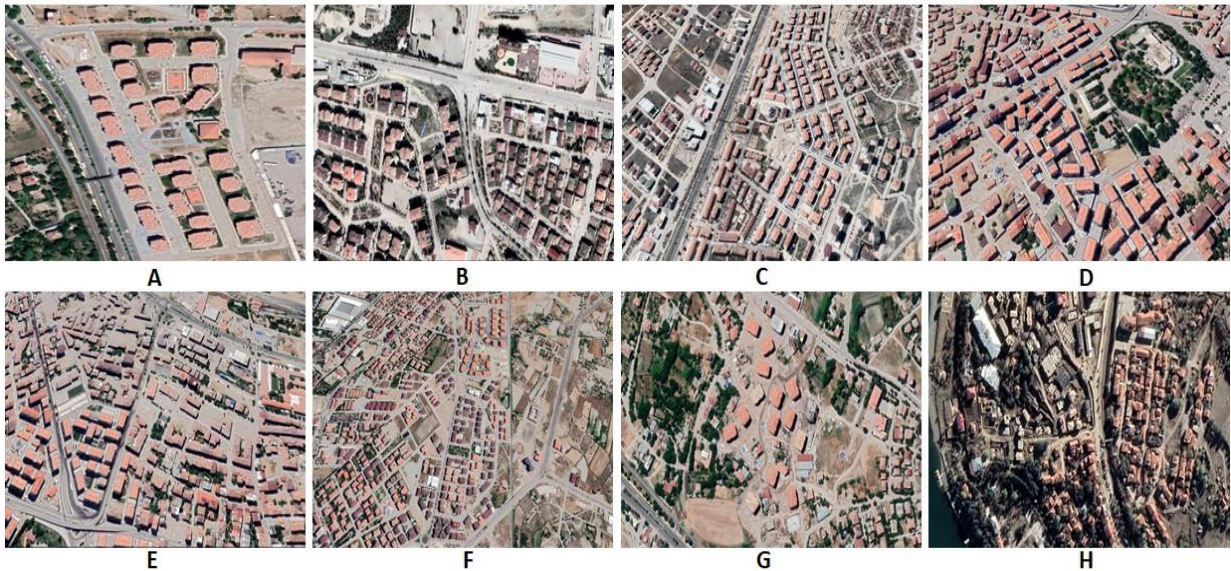


Figure 3. (A) Karşıyaka Neighborhood Satellite Image, (B) Cumhuriyet Neighborhood Satellite Image, (C) Abdullahpaşa Neighborhood Satellite Image, (D) Mustafapaşa Neighborhood Satellite Image, (E) Rüstempaşa Neighborhood Satellite Image, (F) Sürsürü Neighborhood Satellite Image, (G) Kızılay Neighborhood Satellite Image, (H) Sivrice Gölbaşı Neighborhood Satellite Image [19] ((A) Karşıyaka Mahallesi Uydu Görüntüsü, (B) Cumhuriyet Mahallesi Uydu Görüntüsü, (C) Abdullahpaşa Mahallesi Uydu Görüntüsü, (D) Mustafapaşa Mahallesi Uydu Görüntüsü, (E) Rüstempaşa Mahallesi Uydu Görüntüsü, (F) Sürsürü Mahallesi Uydu Görüntüsü, (G) Kızılay Mahallesi Uydu Görüntüsü, (H) Sivrice Gölbaşı Mahallesi Uydu Görüntüsü)

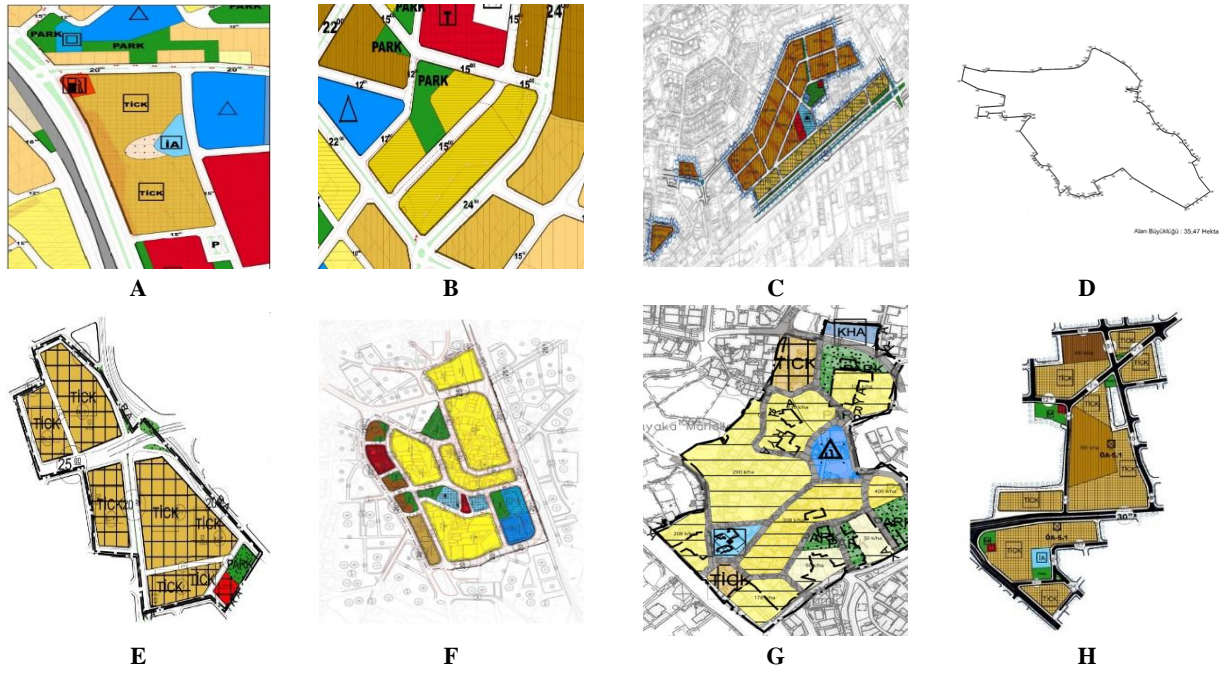


Figure 4. (A) Karşıyaka Neighborhood Master Development Plan, (B) Cumhuriyet Neighborhood Master Development Plan, (C) Abdullahpaşa Neighborhood Master Development Plan, (D) Sivrice Gölbaşı Neighborhood Boundary Sketch Plan, (E) Rüstempaşa Neighborhood Master Development Plan, (F) Sürsürü Neighborhood Master Development Plan, (G) Kızılay Neighborhood Master Development Plan, (H) Mustafapaşa Neighborhood Master Development Plan (Ministry of Environment, Urbanization and Climate Change, 2022; Elazığ Municipality, 2022) [20, 21] ((A) Karşıyaka Mahallesi Nazım İmar Planı, (B) Cumhuriyet Mahallesi Nazım İmar Planı, (C) Abdullahpaşa Mahallesi Nazım İmar Planı, (D) Sivrice Gölbaşı Mahallesi Sınır Krokisi Planı, (E) Rüstempaşa Mahallesi Nazım İmar Planı, (F) Sürsürü Mahallesi Nazım İmar Planı, (G) Kızılay Mahallesi Nazım İmar Planı, (H) Mustafapaşa Mahallesi Nazım İmar Planı (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, 2022; Elazığ Belediyesi, 2022))

The project implementation in Karşıyaka Neighborhood was carried out between 2014 and 2020. The legislations implemented in the field are Law No. 5393 and Law No. 6306. Models applied in the field; urban transformation and development project area model, reserve building area model, and TOKİ models. The project implementation in the Cumhuriyet Neighborhood was carried out between 2014 and 2020. The legislations implemented in the field are Law No. 5393 and Law No. 6306. Models applied in the field; urban transformation and development project area model, renewal area model, risky area model, reserve building area model, risky building model, and TOKİ model. The project implementation in the Abdullahpaşa Neighborhood was carried out between 2020 and 2022. The legislation implemented in the field is Law No. 7269 and Law No. 6306. Models applied in the field; risky area model, risky building model, and TOKİ model. The project implementation in the Mustafapaşa Neighborhood was carried out between 2020 and 2022. The legislation implemented in the field was Law No. 6306. Models applied in the field; risky area model, risky building model, TOKİ, and AFAD model.

The project implementation in the Rüstempaşa Neighborhood was carried out between 2020 and 2022. The legislation implemented in the field is Law No. 7269 and Law No. 6306. Models applied in the field; risky area model, risky building model, TOKİ, and AFAD model. The project implementation in the Sürsürü Neighborhood was carried out as Stage 1 and Stage 2 between 2020 and 2022. The legislation implemented in the field was Law No. 6306. Models applied in the field; risky area model, risky building model, and TOKİ model. The project implementation in the Kızılay Neighborhood was carried out between 2015 and 2022. The legislation implemented in the field is Law No. 5393 and Law No. 6306. Models applied in the field; urban transformation and development project area model, renewal area model, risky area model, reserve building area model, and risky building model. The project implementation in the Sivrice Country Gölbaşı Neighborhood was carried out between 2020 and 2022. The legislation implemented in the field was Law No. 6306. Models applied in the field; renewal area model, risky area model, risky building model, and TOKİ model (Table 1 and Table 2).

Table 1. Project Information [20, 21] (Peoje bilgileri)

Neighbourhoods	Project Implementation Date Range	Applied Laws	Project Area (ha)	Application Area (ha)	Applied Model
Karşıyaka	2014-2020	5393 and 6306	50.30	6.00	UTDPAM, RBAM, TOKİ
Cumhuriyet	2014-2020	5393 and 6306	18.84	2.84	UTDPAM, RAM, RBAM, RBM, TOKİ
Abdullahpaşa	2020-2022	6306	32.99	32.99	RAM, RBM, TOKİ
Mustafapaşa	2020-2022	6306 and 7269	11.62	11.62	RAM, RBM, TOKİ, AFAD
Rüstempaşa	2020-2022	6306 and 7269	6.02	6.02	RAM, RBM, TOKİ, AFAD
Sürsürü	2013-2022	6306	18.92	18.92	RAM, RBM, TOKİ
Kızılay	2015-2022	5393 and 6306	26.96	7.05	UTDPAM, RAM, RBAM, RBM, TOKİ
Sivrice Gölbaşı	2020-2022	6306	35.47	35.47	RAM, RBM, TOKİ
AFAD : AFAD Model TOKİ : TOKİ Model RAM : Risky Area Model RBAM : Reserve Building Area Model RBM : Risky Building Model UTDPAM : Urban Transformation and Development Project Area Model 5393 : Municipal Law [22] 6306 : Law on Transformation of Areas Under Disaster Risk [23] 7269 : Law on Measures to be Taken and Assistance to be Provided Due to Disasters Affecting Public Life [24]					

Table 2. Comparison of Application Models (Uygulama modellerinin karşılaştırılması)

Neighbourhoods	Urban Transformation and Development Project Area Model	Regeneration Area Model	Risky Area Model	Reserve Building Area Model	Risky Building Model	TOKİ Model	AFAD Model
Karşıyaka	+			+		+	
Cumhuriyet	+	+	+	+	+	+	
Abdullahpaşa			+		+	+	
Mustafapaşa			+		+	+	+
Rüstempaşa			+		+	+	+
Sürsürü			+		+	+	
Kızılay	+	+	+	+	+	+	
Sivrice Gölbaşı		+	+		+	+	

4. CONCLUSIONS (SONUÇLAR)

In Elazığ, the urban transformation process started with Sürsürü District in 2013, and the transformation works of Karşıyaka, Cumhuriyet, and Kızılay neighborhoods continued between 2014-2015, and after the Sivrice earthquake in 2020, it was observed that Abdullahpaşa, Rüstempaşa, Mustafapaşa, and Sivrice Country Gölbaşı neighborhood were also included in the transformation works. During this entire process, the 6.8 Mw earthquake that occurred in Sivrice in 2020 seriously brought urban transformation projects to the agenda and accelerated the projects. It has been observed that urban transformation

models progress slowly through the urban transformation and development project area model and risky area model, but after the earthquake, transformation works accelerate and the risky building model is also included in the process due to the earthquake. In addition, it was seen that the province was not ready for the earthquake and its consequences, and this situation also affected the choice of model in urban transformation applications. Some of the situations resulting from the reflections of these effects in the field are summarized below;

- Urban transformation and development project area model, risky building model, and TOKİ

model were implemented in the Karşıyaka Neighborhood with Municipality Law No. 5393.

- The Cumhuriyet Neighborhood was declared an urban transformation and development project area within the scope of Municipality Law No. 5393 in 2014, but after the earthquake in 2020, the area was also declared as a disaster risk area. In addition, the buildings in the area have been declared as risky buildings due to the structures damaged after the earthquake. It has been observed that the urban transformation and development project area model, renewal area model, risky area model, reserve building area model, risky building model, and TOKİ model are applied in the Cumhuriyet neighborhood. Since there was no on-site transformation in the reserve building area model, it appeared as a model that did not meet the definition of urban transformation.
- The Abdullahpaşa Neighborhood was declared a Risky Area by Law No. 6306. The risky area model, risky building model, and TOKİ model have been applied in the area. It was observed that 63 beneficiaries in Sivrice district were settled in buildings built in this area.
- The Mustafapaşa Neighborhood was declared a Risky Area by Law No. 6306. It was also implemented in the field under Law No. 7269. The risky area model, risky building model, TOKİ, and AFAD model have been applied in the area.
- The Rüstempaşa Neighborhood was declared a risky area by Law No. 6306. It was also implemented in the field under Law No. 7269. The risky area model, risky building model, TOKİ model, and AFAD model have been applied in the area.
- The 2nd Stage in the Sürsürü Neighborhood was declared a risky area in 2013 and the risky area model and TOKİ model were applied in the area, after the earthquake, it was seen that the risky building model was added to these two model applications. In the 1st stage, after the earthquake in 2020, the risky area, risky building model, and TOKİ model were applied. In addition, as can be seen from the 2nd Stage studies, the process of completing the risky area model, which started in 2013, in 2022, which is the maximum period of nine years and one month specified in Annex 7 of the strategy document, has almost been completed.

- Urban transformation and development project area model and risky area model were applied in the Kızılay Neighborhood in 2015. As a result of not being able to reach an agreement with some rights holders in the area, the reserve building area model, the risky building model after the earthquake, and the renovation area model were also included in the process due to the church dating back to the Roman period that came to light during the transformation works in the area.
- The Sivrice Country Gölbaşı Neighborhood has been declared a risky area within the scope of Law No. 6306. The risky area model, risky building model, and TOKİ model have been applied in the area. In addition, the area was declared a Natural Site - Sustainable protection and controlled use area in 2021.

As a result, the model to be chosen in the urban transformation process is an important parameter in the success of the application and reaching the desired goal. In choosing these parameters, choices should be made by examining each city individually. Because the places within the scope of transformation have their cultural characteristics, economic conditions, and natural disaster risk situations. For this reason, the model to be chosen should be selected and implemented by considering these features. In urban transformation projects, general principles can be determined at the upper scale, but it will be useful to determine a model specific to each region as sub-applications progress.

The relocation of the beneficiaries in the transformation areas to other places outside the area has caused households to experience adaptation problems, especially in new settlements. It can be said that most of the transformation application models are determined within the framework of existing legislation. The application of more than one legislation to transformation areas and the overlapping of models have led to the emergence of new problems. During the urban transformation process, the implementation of both the Law No. 6306 on the Transformation of Areas at Disaster Risk and the Law No. 7269 on Measures to be Taken and Assistance to be Provided Due to Disasters Affecting Public Life during the urban transformation process for houses that were demolished after a natural disaster, to be demolished immediately, heavily damaged and moderately damaged, and the decisions taken are reflected on the field. It negatively affected the conflict of legislation and the progress of the process. It can be said that this situation prevents a healthy

transformation from occurring. The fact that the risky building model application is only briefly defined in Law No. 6306, but the way the model is implemented is not clearly explained in the law, has caused a lot of confusion. It would be useful to specify the risky building model more clearly to avoid such problems in future urban transformation works. It will be useful to implement strategic social planning based on the concept of adoption in preventing problems in terms of the social dimension of urban transformation, such as incompatibility in new neighborhood relations of rights holders.

It would be useful to develop new solution proposals with serious and consistent approaches to draw clear boundaries of the legislation to be applied in urban transformation areas and to avoid conflict with other legislation. In addition, more careful preparation and implementation of application transformation models in areas with Natural Protected Areas such as the Sivrice Gölbaşı neighborhood, which become risky areas after a natural disaster, will be beneficial for both the protection of the natural habitat and the sustainability of the environmental ecosystem.

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DECLARATION OF ETHICAL STANDARDS (ETİK STANDARTLARIN BEYANI)

The author of this article declares that the materials and methods they use in their work do not require ethical committee approval and/or legal-specific permission.

AUTHORS' CONTRIBUTIONS (YAZARLARIN KATKILARI)

Belkis ELYİĞİT: She collected the data of the study, analyzed the results and wrote the article.

Cevdet Emin EKİNCİ: He analyzed the data of the study, interpreted the results and wrote the article.

CONFLICT OF INTEREST (ÇIKAR ÇATIŞMASI)

There is no conflict of interest in this study.

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