

AMASYA'S URBANIZATION PROBLEMS

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Abstract: Human settlement in Amasya is known to date back to ancient times. Historical sources and archaeological excavations reveal a history of 7,500 to 10,000 years. Various tribes, states or humans have settled in this region in known history. Amasya was first chosen as a place of settlement for protection purposes, and then for its importance in protecting a trade route. It developed with the cultures of the communities that ruled the region until the Ottoman period. During the Ottoman period, Amasya was called the City of Princes. These characteristics have been reflected on its residents, its culture, its social life and on the physical structure of the city with its monumental structures and civil architecture examples. Technological developments and urbanization increased after the Ottoman period, despite its being a restricted settlement area. However, the linear urban settlement that has existed in the city until today has generated a problem with its structure and population. Balanced living environments should be created using today's technology as a requirement of urbanization. If the urban area remains stable while the population continues to increase, this indicates a problem of urbanization. This article is intended to solve this problem of urbanization. The solution to the urbanization problems of Amasya, which degrade its historical urban characteristics and constitute the source of an unhealthy living environment, enables the protection of its historical and touristic characteristics. To solve these problems, healthy urbanization standards should immediately be established for the restricted settlement area of the city, and the city should be decentralized with an urbanization model after getting the population to the appropriate size for its capacity.

Keywords: Urbanization, Planning Problems, Urban Development, Vertical Promotion, Urban Space

AMASYA'NIN KENTLEŞME PROBLEMLERİ

Özet: Amasya ilinin insan yerleşmelerine yönelik başlangıcının çok eski olduğu bilinmektedir, ancak tarihi kaynaklar ve arkeolojik kazılarla elde edilen bilgiler ışığında 7500-10000 yıl gibi bir geçmişten söz edilebilmektedir. Bilinen tarihi süreç içinde birçok kavim, devlet veya insan yerleşmelerinin bu ildeki coğrafyada yer aldığı bilinmektedir. Başlangıçtan günümüze gelirken bir korunma amaçlı yerleşim olarak seçilmiş olan Amasya, daha sonra ticari amaçlı güzergâhın korunmasındaki önemi dolayısıyla hükümlerlik sürdüren toplumların kültürleriyle Osmanlı dönemine kadar bir gelişme süreci yaşamıştır. Daha sonra korunma amaçlı bir konumu olan Amasya Osmanlı döneminde Şehzadeler şehri olarak yerini almıştır. Bu özellikler insan yapısı, kültürü, sosyal yaşamı vb. özelliklerine yansıdığı gibi fiziki mekâna da, gerek anıtsal yapılarıyla ve gerekse sivil mimari örnekleriyle yansımıştır. Bu yansıma Osmanlı dönemi sonrasında, teknoloji gelişimi ve kentleşme kısıtlı bir yerleşim alanına rağmen artmış olup lineer bir kent yerleşimi bu güne kadar mevcut alanda yapı ve insan stoku ile sorun yaratılmıştır. Günümüz teknolojiyle kentleşmenin gereği dengeli yaşam alanlarının oluşturulması gerekmektedir. Kentsel alan sabit kalıp nüfus artışı devam ediyorsa bu kentleşmede sorun var demektir. Bu makalede kentleşme ile birlikte oluşan sorunların çözümü amaçlanmıştır. Yukarıda özetlenen Amasya'nın kentleşme sorunundaki bu yaşanan oluşum, sürecin tarihi kent özelliğini yok eden ve İnsanın yaşamındaki sağlıksız ortamın kaynağını teşkil eden sorunların çözümlenmesi Amasya'nın tarihi turistik özelliklerinin de korunması anlamını içermektedir. Bunun için acilen kentin sınırlı yerleşim alanındaki sağlıklı kentleşme standartlarının oluşturulması ve nüfusun kapasiteye uygun hale getirilip bir kentleşme modeli ile kent desantrilize edilmelidir.

Anahtar Kelimeler: Kentleşme, Planlama Sorunları, Kentsel gelişme, Dikey Yükselme, Kentsel Gelişme

Introduction

The history of Amasya started about 7,500 years ago. The first settlement dates back to 5,500 to 3,000 BCE (AMASYA VALİLİĞİ, 2007). The city has the traces of fifteen civilizations, including: the Hittite Empire, the Phrygian Kingdom, the Cimmerian Empire, the Scythian Kingdom, Lydia, the Persian Empire, the Hellenistic Civilization, Pontus Empire, the Roman Empire, the Byzantine Empire, the Danishmends, the Seljuk Empire, the Ilkhanid Empire, the Ottoman Empire and today, the Republic of Turkey. Its old name was Harşena (YANIK, 2014). Archaeological excavations have revealed that the history of Amasya dates back to 5,500 BCE. In 1402, Timur's victory in the Battle of Ankara disrupted the unity of the Ottoman Empire and turned the turmoil in the Empire into a struggle between princes. Çelebi Mehmet, the Governor of Amasya, brought the situation under control and ensured the unity of Ottoman Empire for the second time. Amasya made a name for itself as the City of Princes due to the interest of Ottoman sultans and princes in it (Anonymous, 2013). Amasya also had an important place in the establishment of the Republic of Turkey, and establishment of the Faculty of Architecture in Amasya is of great importance due to its historical background

This distinguished Anatolian city met the selection criteria for settlement due to its geographical characteristics and climatic conditions, which made the city and its immediate environment a laboratory for the Faculty of Architecture. Lying in the Yeşilirmak Valley, Amasya sets an example for linear urban settlement models. Amasya is known to be a cradle of civilizations and to have important buildings and architecturally significant urban structures that remained from them.

Material and Method

The problem of analysis consists of over capacity of structuring, population density and border of

geographical structure of urban settlement of Amasya city. The direction of the aims of this work, it tried to determine negative effect over capacity of structuring and population growth on the infrastructure in the framework of historical development process of Amasya.

Because of the geographical structure of Amasya urban area, it occurs thresholds with Yeşilirmak and rock on the both sides formed. According to these constraints, sample of a linear settlement draws a framework of Amasya's urbanization model. The relationship between population and residential and agricultural areas for the Amasya urban area has been determined. In the framework of this context, it tried to determine the infrastructure ratios and the negative effects of population growth on the infrastructure. The solution framework of these problems included the findings of the urban planning development and problems.

First of all, this article gives place to field and problem relation. The problems and findings within planning process are explained on development of restricted area. Finally, findings were evaluated with conclusion and discussion section.

Population Structure in The Urbanization Process

The population of Amasya was determined to be 323,079 according to the address-based census in 2011 (TÜİK, ADNSK,2011). The relationships between the central district and Amasya Municipality due to the administration of this population requires the municipality to plan for urbanization and provide services.

The urban area of Amasya is 90,665 km² (TÜİK, ADNSK,2011). The population of Amasya's central district was 74,393 in 2000 and about 80,000 in 2008-2009. Taking into consideration that the population increase has been mainly natural and the service sector has increased today, the population has increased by 20,000 in ten years. Considering the role of the

university, a part of the service sector that has existed in the city with a limited number of students until today, it is thought-provoking that the problems of the city have come to the point that they cannot be resolved.

The university became a part of the city in 2012 with a limited number of departments and students in three faculties. There are plans for the 9 departments of the university (6 departments in the Faculty of Science and Literature, 2 departments in the Faculty of Technology, and 1 department in the Faculty of Architecture) to increase to 16 departments, bringing the university to its full capacity. This will lead to a new problem due to an estimated 15,000 students without any development in the university: 30 new students admitted to each of the 16 departments per year, yielding approximately 500 students per year and 2,000 students at the end of four years, which can increase to approximately 3,000 with the delayed graduations of some students. With the 500 academic and administrative personnel and at least 150 additional people, this number will increase by approximately 650 people, which indicates a future intervention in the social and technical infrastructure as well as the functions of the city. According to the address-based census, the population of the central district of Amasya increased by 91,874 people in 2012 (5), by 96,220 people in 2013 and by 98,935 people in 2014 (ANONYMOUS, 2016b). When the town municipalities were included in the borders of the city or district municipalities since their population was under the legal population as per the new legislative regulation after the local administration elections conducted on March 30, 2014), the population of the central district of Amasya increased to 105,673 (ANONYMOUS, 2016a). However, this population is estimated to increase to 150,000 or higher after 4 years even if no investment and development occurs in Amasya. This population was found to be 12,824 in the general census in 1927. It decreased to 11,981 in

the general census in 1935. It increased to 13,635 in the general census in 1940, then decreased again to 13,344 in the general census of 1945, and then increased again to 14,470 in the general census in 1950. The urbanization process started after the 1950s in Turkey. The total population of Amasya (with its districts and villages) was 163,669 in the 1950s (AMASYA VALİLİĞİ, 2016), and since this population was living in both rural and urban areas, Amasya's agricultural and settlement areas showed the characteristics of rural areas. The population of the central district was 36,646 in 1970 increased to 57,288 in 1990. The population growth was affected by government investments in education, industrial facilities established by the private sector, developments in road transportation and government promotion of the tourism sector. The historical structure of the city center was put under protection in this period. New settlements were needed to meet the requirements of the increasing population, and the agricultural areas around the city were zoned for construction with the development plan prepared in 1981 (Figure 1). Thus, Ahır Önü, Kirazlıdere Bağları, Bahçeleriçi Bağları, Filingir/Frenkler Bağları and İltekin Bağları, all covered with fruit trees, became settlements. About two square kilometers of "Agricultural Land of Prime Importance" were missused (EREN, 2014). Then, with the 2010 Zoning Plan Revision, the vineyards in the region from the Ankara-Sivas Highway, which provides a connection between Taşova and Suluova, to the quarry that constitutes the border of the Helvacı Neighborhood were completely zoned for construction, and this created an area of dense housing.

All land use within the borders of the central district of Amasya was planned, and building density in this area exceeded its capacity. The total area within the administrative borders, covering the area between the thresholds of quarry and the Ankara-Sivas highway as well as the area out of these thresholds, was 5,701

km² before 2014 (AMASYA BELEDİYESİ, 2010-2014). Due to this planning and the characteristics of its urban settlement, Amasya has a linear city structure. The river bed and its immediate environment started to be used to meet the requirements of the increasing population with a new sense of urbanization after 1980. Today, the building density has increased by 60%, while the area has not increased. This means that urbanization theories are misused. The increasing population and building density in the central district of Amasya causes infrastructure problems since the area has not increased. This brings urban climate

change due to insufficient green areas and the destruction of open areas, insufficient social infrastructure due to insufficient space and a deficient technical infrastructure due to increases in population and buildings.

Amasya is located in a restricted area due to its location in the Yeşilirmak Valley (Figure 1). The population and building density is over 60% in the area where settlement can be found within the thresholds. This problem should be solved using the satellite city model.

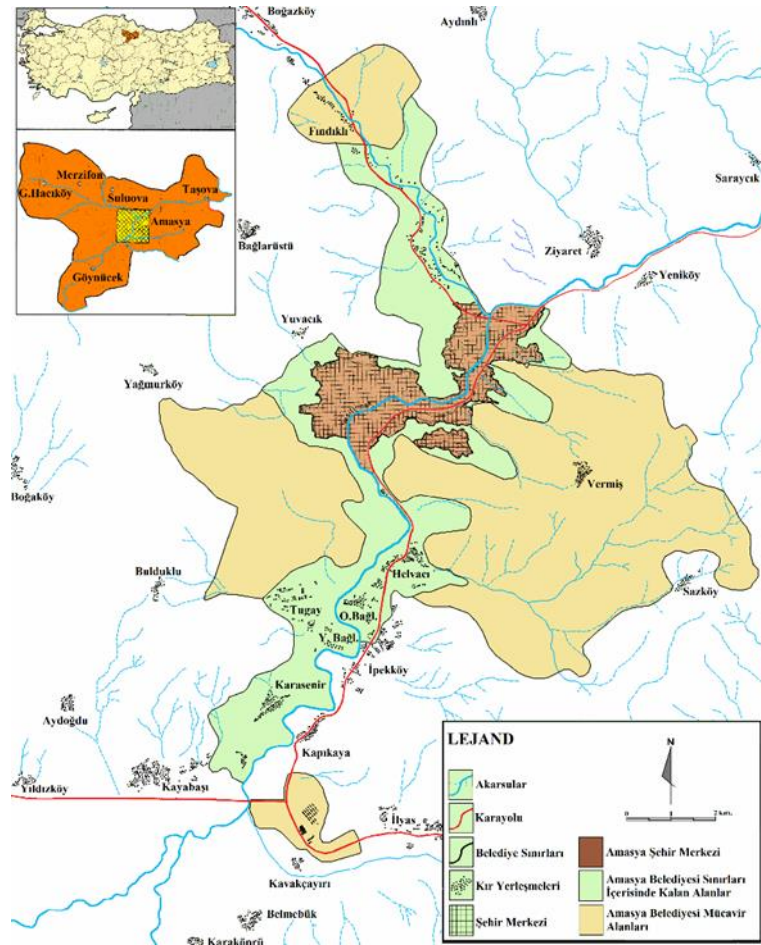


Figure 1. Amasya Central Location Map, Source: Eren, 2014

Planning Based on Urban Development and Its Problems

Two historical mistakes were made in the development of Amasya's urban settlement. The central settlement of Amasya has developed linearly along the Yeşilirmak and has thresholds due to the

rocks on both sides. The settlement should be formed considering the natural balance of the physical environment; however, this requirement has been neglected. The other mistake is that the city has lost many of its characteristics due to technical and social infrastructure problems caused by planning for

housing for a population over the capacity despite the settlement area being restricted and stable (Figure 2).

Amasya has been selected for settlement due to its natural characteristics since ancient times. The Yeşilirmak River has provided two advantages:

1- The first settlement was in the protected region where the Yalıboyu Houses and Tombs of the kings of Pontus are located.

2- With Yeşilirmak and the Amasya settlement located at an altitude of 400 meters and the rocks on both sides at an altitude of 1,200 meters, the Yeşilirmak Valley provides a healthy living space covered with green areas.

These characteristics may be why Amasya was selected for settlement and for training princes during the Ottoman period. These two characteristics were protected from the beginning of urbanization in Turkey until the 1980s; however, they were lost due to rapid urbanization and faulty planning after 1980.

Today, natural protection is not required for the physical area. However, a healthy living area is needed, and zoning planning is a tool developed for the public weal in order to create healthy living areas. However, the requirement of bringing limitations to the planning standards for a healthy living area due to the fixed land thresholds in Amasya's city center was neglected during urban planning. As we know, the two most important data in zoning plans are population and settlement area, which should be used in a balanced manner during planning. This requirement can be clearly seen from the following standards for the percentages of functional area use in settlement planning:

- housing zone, 40%
- transportation and parking areas, 20% to 25%
- areas for trade, 4% to 6%
- green and sports areas, 10%

- areas for education, 5%
- areas for health, 2%
- industrial and crafts areas, 10%
- unnecessary area loss, 2%

When the Amasya Zoning Plan is analyzed according to these values, it can be clearly seen that a planning and development has been predicted disregarding these rates. Ergen also found in 2016 that green areas are insufficient or absent in some neighborhoods of Amasya (ERGEN, 2016). Considering the very low rate of transportation and parking areas and almost no green areas planned in Amasya urban settlement area, it is accurate to conclude that healthy life is not being ensured in the city.

Since Amasya has urbanization problems due to its population and building density and has lost its historical settlement characteristics, the population and building density should immediately be addressed and balanced in this area restricted by thresholds using a zoning plan revision. This should be carried out scientifically. The historical identity of the city should be revealed while it is rearranged in line with the standards.

This work should be designed with urban transformation and urban design projects, and the aim should be the solution of these urbanization problems. The linear development of Amasya should start from the highway that provides access to Suluova and Taşova continue towards the exit from Amasya to Tokat.

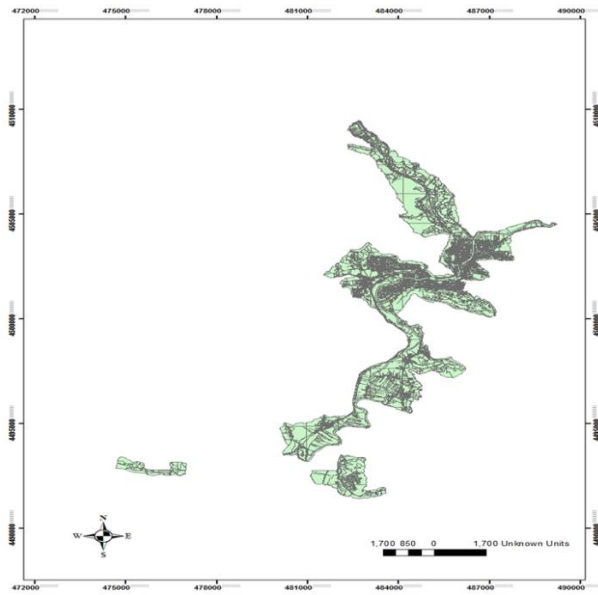


Figure 2. Amasya Zoning Plan (2012), Source: Amasya Municipality

Problems and Discussion

According to this explanation, Amasya has a threshold-based urbanization. Inability to generate the social and technique infrastructure required for the healthy life of the population that is included in the area-population relationship, the main theory of planning, poses a problem because of the limitations that land cannot be created, the population cannot be spread to the settlement due to the rocks on both sides of the river, and vertical uprising in terms of construction cannot meet the requirements of social and technical infrastructure. If this situation is neglected, the city becomes unusable for the population, stress emerges in the field of health, and more importantly, microclimate environments arise in the city and damage human health.

Its most significant effect will be the density of vehicular traffic and the insufficient capacity of roads. The problems that have been and will be created by the housing and functional area use of the population, and especially the fact that university is spread out in the city instead of being located on a campus, are:

a) the negative effects of building density on the

microclimate of the city due to excessively tall buildings,

b) insufficiency misuse of urban areas,

c) inability to widen the roads according to the vehicle capacities,

d) inability to meet the need for parking in the city, and

e) danger for the historic and touristic areas of Amasya, which are being degraded.

These are the most urgent problems. They indicate the need to review the city's master plan and transportation master plan and to solve the problems in the long-term.

Conclusion

In conclusion, giving priority to reducing building density by a zoning plan revision in Amasya urban settlement;

The standard of 10 m² green area per person should immediately be increased.

The expressway that passes through the city should be connected with a tunnel starting from the Intercity Terminal in Boğazköy and ending at the Mecitözü-Tokat Highway intersection.

The use of the Merzifon-Amasya-Turhal connection of rail system should be encouraged with an improved rail line.

The development of the city should immediately be planned and put into practice using a planning system appropriate for the satellite city model.

The transportation and parking problems should be solved by developing a master plan for transportation in the city.

The city should be planned based on **tourism** and urban renewal practices should be immediately implemented.

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