

## “UNSUSTAINABLE RESIDENTIAL DEVELOPMENTS ON AGRICULTURAL RURAL LAND: THE POVERTY OF THE MIDDLE CLASS”

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**Abstract:** In the last years one witnessed a real estate development burst, that concluded in one of the largest financial crisis in history. One important down side of this frenetic real estate development was the improper urban planning implemented on all levels of urban and suburban communities. Both public and private investors aimed the biggest profit, leaving the public space and the environment to chance. At present time, even if the phenomenon appeared only in the last few years, we can see and feel the repercussions of this misplaced strategy, the poverty of rich neighborhoods without proper infrastructure, parks or schools, lack of public transport, increased energy and fuel consumption.

**Keywords:** rural land, agriculture, development

### 1. INTRODUCTION

Urban planning is defined as a technical and political process that involves controlling the design and use of land of the urban environment. This process includes transportation networks, settlement developments in an orderly fashion, strategic plans, comprehensive plans, historic preservation etc.

Almost none of the necessary actions have been properly taken in the last years.

Romania has 19.042.936 inhabitants [1] recorded on the 20<sup>th</sup> of October 2011, dropping from 22.810.035 in 1992 to 21.680.974 in 2002[2] resulting in a 3.767.099 drop in the last 20 years.

This decrease in population is reflected nationwide. The Timis county decreased from 700.033 inhabitants in 1992 to 677.926 inhabitants in 2002 [3] and to 650.544 inhabitants in 2011[4] resulting a 49.489 loss in population in the last 20 years.

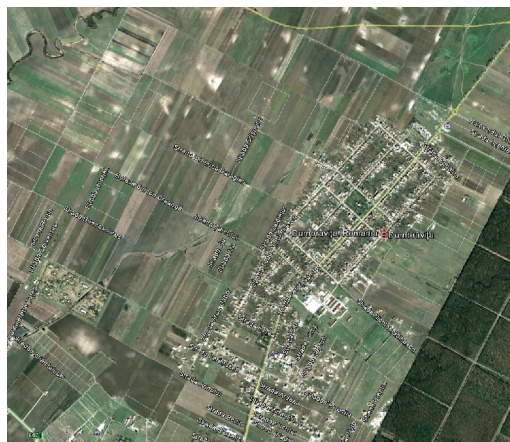
The city of Timisoara with a population of 317.660 inhabitants in 2002 [5] dropped to 304.467 in 2011 [6], meaning a loss of 13.193 inhabitants.

In 1992 Timisoara city had 22.182 buildings, with a growth of 4,7%; in 2002 the city had 23.233 buildings. The housing facilities were 121.260 units in 1992 growing to 126.564 in 2002 [7].

In 2011 the city of Timisoara had 131.279 [8] housing units, 8,26% more units than in 1992, while the population decreased with 4,15% in the last ten years.

These data show that, while the population was diminishing, the number of housing units grew. Questions concerning the path urban planning took are naturally rising.

The most desired dwellings were family houses with garden. Many of the inhabitants of Timisoara, if having more or less substantial earnings, managed to buy a plot on agricultural land, in order to build their dream house. All of these persons became, unknowingly, victims of real estate developers. One of the most important developments can be seen in and around the neighbouring Village of Dumbrăvița.



**Figure 1 – Satellite view of Dumbrăvița and the area between the city of Timisoara and the village of Dumbrăvița. The East area, between the forest called Padurea Verde and the road- a densely built area and the West part of Dumbrăvița- not such a densely built area.**

Pursuing financial gain, land owners sold their agricultural land to companies or individuals which were able to support both financially and politically the process of real estate dwelling development, thus starting the improper urban sprawl seen today around every major city in Romania.

When planning a new development the main goal of each developer was to sell as many plots as possible on a given land. The agricultural land was divided in plots with surfaces between 500 and 1000 square meters, the streets were designed as narrow as possible, their width being as low as six meters, with

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no pedestrian pathways or bicycle tracks. Green areas where neglected in most of the plans.

Following these proceedings, the area having changed destination and having been authorized for construction in the village of Dumbravita tripled at the prejudice of agricultural land, as one can see in the "P.U.Z. Director Dumbravita" project number 275/04 - Regulations.

By 2012 not all the new housing plots were built. Some were purchased as investments. Others remained un-built as a consequence of the financial crisis. The result was the sporadic construction pattern, with houses built here and there, without sewage system, water supply or paved roads and putting the administration in a difficult position, with no motive to equip an area with only a few houses and no money to do so. This situation can be clearly seen on Google Earth. It has an archive of the satellite pictures taken. In the case of Dumbravita, the oldest satellite photo taken on May the 1<sup>st</sup> 2003 and the newest on the 24<sup>th</sup> of June 2011. One can easily see that the village is a compact structure, with a reasonable density allowing the introduction of most of the facilities needed for a proper functioning of a 21-st century human community.

Between the city of Timisoara and the village of Dubravita, to the East, between the forest called Padurea Verde and road which is part of the national main system, the new development is fairly dense, with new houses and a supermarket. To the West and North West of the village, fewer houses built. One can find sporadic buildings with considerable distances from one another and from the access road. All the inhabitants of this area are obliged to use a car, since the no public transport can be offered when densities are so low. Most of the households have 2 or 3 cars, depending on the number of family members, thus creating a considerable traffic flow going from the city to the village and back. This generates traffic jams at rush hours. New roads, linked to the urban street net, would deplete the traffic.



**Figure 2 – Satellite view of the area between the city of Timisoara and the village of Dumbravita, to the East, between the forest called Padurea Verde and the road- a densely built area.**



**Figure 3 – Satellite view of the area between the city of Timisoara and the village of Dumbravita, to the West part-not a very dense area.**

This being said it is important to underline that this situation can be found in most of the villages surrounding Timisoara, such as: Giroc, Șag, Remetea Mare, Săcălaz. The analysis applies to all of them with more or less the same results.

Developments and suburbs are sensed to offer a better quality of live to its inhabitants, non polluted air, lower crime level, better schools, less stress etc. This paper aims an analysis of the situation of the spontaneously developed housing areas around Romanian cities, with the special case of the new building erected on plots to the north of the city of Timisoara, towards the village of Dumbravita.

## 2. APPLYING MERCER'S QUALITY OF LIVING CRITERIA TO TIMISOARA CITY AND THE SURROUNDINGS.

Mercer Surveys classifies every year the most important cities of the world by Quality of Living criteria. It is easy to understand that Timisoara is difficult to compare to any of Mercer's cities, but the criteria can be a starting point for the evaluation of the quality of living in the new developments around it, considered as districts of the main centre (which in fact they are). Naturally no quantitative assessment will be performed.

The major categories of criteria are: political and social environment, economic environment, socio-cultural environment, medical and health considerations, schools and education, natural environment, public services and transport, recreation, consumer goods and housing.

The Mercer criteria, when applied to this analysis, can be classified in three categories: those dependent of the national conditions (not relevant for this study); facilities normally depending on the main city, which will be discussed for the city of Timișoara (like airport for instance); facilities that should be found in the neighbourhood, the level of which will be relevant for this study.

The criteria of the first category, meaning: relationship with other countries, internal stability,

law enforcement, ease of entry and exit etc. depend on the general political and social national environment. Romania has no special problems with infectious disease and troublesome and destructive animals and insects. The natural environment, climate and record of natural disasters criteria pose no special problems in the studied area.

Timisoara has good relations with cities from other countries (Austria, France, Italy, Germany, Hungary, Serbia etc.) [9]. These relations help the city to move up the ladder in this analysis.

Timisoara has a low crime rate judging after Timis County's smallest crime rate in the country, less than 150 convicted villains per 100.000 inhabitants. [10] Needless to say that low enforcement has a decisive response when the occasion rises. The isolated houses in the low density newly built areas are prone to *higher level of criminality*.

Economic environment criteria is referring to currency exchange and banking services both of which are suitably represented in the town itself. Most of the City's districts have two or more bank offices. Dumbravita on the other hand offers to the inhabitants little to *none bank services*. Even less facilities exist in the new developments.

Medical and health score very low in Romania in general. The medical system is one of the most flawed in the European Union [11]. Hospitals lack the proper funding from the government and other sources, enabling them to offer even medium quality services. Private hospitals may be considered as a solution by some inhabitants, but for the moment they are few, and thus not a viable alternative. In this context Timisoara is better provided, as university medical centre, than many other cities of Romania. Even compared to this low national level of medical care, the new developments of Dumbravita have *no additional health facilities* added to the poor medical services, and no plans to not ensure a better situation in the future.

*Medical supplies*, like chemist shop, exists in the centre of the village, but are accessible from the new developments only by car.

Water is supplied in Timisoara by local water company and it's been deemed potable. The city has a sewage system in almost all the neighbourhoods.

In the new developments of Dumbravita *water pipes* were built on the expense of the new owners, as was the *sewage system and they are precarious*. Even the *electricity supply* needed to be realised by private initiative of the local new inhabitants.

Waste removal is well managed both in the city and the village by the same company.

*Air pollution* level is varied: houses built on farming land benefit from relatively good air quality; those near the main roads, often preferred as beneficiary of easier access, are suffering from heavy pollution due to traffic, especially in the rush hours.

The new inhabitants prefer to send the children to schools and *educational institutions* in town, where they are of a higher quality.

Voice and data service are found in most of the homes.

For *recreation* Dumbravita has two restaurants in its centre, accessible by car from the new developments, which lack facilities. For more variety, the new inhabitants prefer to go to the city. Anyway, the two local restaurants are insufficient for the overdeveloped village.

There are no theatrical and musical performances, for cinema, the local inhabitants depend on the offer of Timisoara.

The *sport and leisure* activities are conducted individually by inhabitants in their home or garden. There is only one park in Dumbravita, the old one in the village centre. Many inhabitants take advantage of the nearby forest for walks or bicycle trips. No additional green areas or sport facilities were proposed for the inhabitants of the new developments.

*Consumer goods* such as meat and fish can be obtained in the new hypermarket built between the village and the city; the new developments have no such facilities, and thus must use the car for any purchase. The same can be said for the fruits and vegetables, daily consumption items and alcoholic beverages. There is a precarious access to local supply.

*Public Transport is non-existent* in the new developments. Access to the city by car is dependent on the main penetration roads, causing traffic congestion; no alternative bicycle track exist. Flight travel goes through the Timisoara airport.

The main problems associated with increasing urban traffic and congestion are: equity, economic efficiency, loss of urban "living space", air pollution, accidents, visual intrusion, noise and vibration, energy consumption, severance, competitiveness. [12]

Motorized transport infrastructure, such as roads and car parking for the inhabitants of the new developments, take up highly valuable city centre land, and spoils and threatens existing open space. Diminished quality of the urban environment caused by parked cars and other infrastructure cloud the beautiful architecture and urban space.

Effects like global warming, health problems and building decay come with the pollution.

Pollution and accidents result in significant direct and indirect costs, and are thus a main concern in the European Union. The total cost per year across the European Union member States due to pollution and accidents is estimated at EUR 502 billion. Referring to accidents, the Department of Health in the United Kingdom for instance estimates the health costs of particulates in urban areas of Britain rise up to 500 million Pounds per year. Over 40 000 deaths on the roads of Europe per year are recorded. Four times more fatalities occur in urban areas.

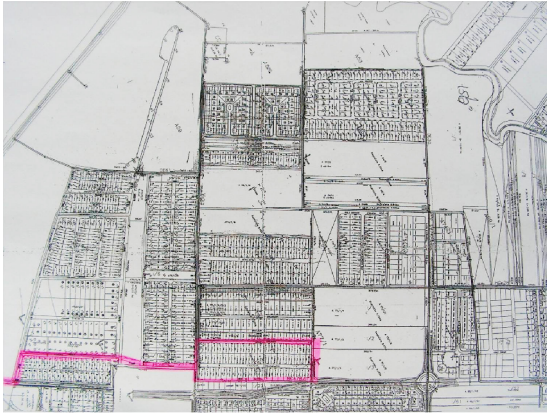
Transport is one of the main sources of noise pollution and vibration. It affects the building structure of the houses closer to the road, especially when heavy trucks use the some motorways as cars.

Transport consumes 4 % more energy every year which represents a doubling of energy used every 20 years.

The lack of efficient public transport, the complete dependence upon personal cars for basic needs, the low level and deficiencies of the road



infrastructure and the congested traffic are narrowly linked to the lack of planning of the new residential developments. The direct effects are pollution, lack of comfort and high fuel consumption.



**Figure4 - Typical subdivision of agricultural land in plots for individual houses. Areas for housing alternate with other having remained destined to agriculture. None of the necessary utilities are foreseen. The roads are traced at random, following the former agricultural pattern.**

Although the need for lodgings is real, many plots remain un-built and many houses and flats unoccupied. Analyzing the situation around Timisoara in the new residential developments, one has to acknowledge the "must" of a responsible urban planning.

### 3. CONCLUSIONS

The new developments created areas where middle class owners, pursuing a better life, made important sacrifices and, when touching their goal, in fact became part of a community with low quality of living. Material wealth brought them houses without the needed basic facilities, bringing to comparatively wealthy families poverty in their way of life.

On the other hand, the new developments with very low density became great consumers of agricultural land.

The low density made impossible any efficient public transport system. The exclusive use of private

cars brought traffic congestion, pollution, parking difficulties in the city etc.

In conclusion Dumbravita village along with the other settlements surrounding Timisoara stand out as bad examples of urban planning, cumulating all the downsides of an inapt system and urban policy. The policy one had nowadays most certainly compromises future generations way of life, thus excluding the possibility of sustainability.

Starting with 2010, strict laws were adopted regarding urban planning under the pressure of the civil society organized in foundations, professional associations and NGOs (Non Governmental Organisations).

One may yet find a way to undo the wrongs made in the past few years.

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