ALTERNATIVE URBAN REGENERATION POLICIES OF BROWN FIELDS LIKE OLD MILITARY CAMPS FOR THE CITY OF ALEXANDROUPOLIS

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ABSTRACT

It is generally accepted that the lack of free public spaces in Greek cities, is one of the most severe urban planning problems, not only in the central urban areas but also in the peripheral neighbourhoods. Furthermore, it is a fact that through the land use legal framework there have been efforts towards the implementation of a number of planning tools, regulations, thresholds, methods etc in order to obtain and secure an appropriate level of acceptable urban public space mainly for parks, playgrounds and squares, which would ensure at least a minimal level of essential (sustainable) free urban public space. The reality has shown that this effort has not been successful until today. The provision, the quality and the spatial distribution of public space in Greek cities, cannot correspond to the continuously increasing needs and wishes of citizens. This is probably the most serious weakness of the Greek urban planning system, because it cannot achieve the objectives of urban sustainability. In this manner and specifically for some cities, military camps that exist and occupy vital space in the urban tissue, present a new challenge for “liberating” this space and providing new quality to the urban environment. The present paper presents a case study in which, proposals are formulated for the transformation of “brown” space occupied by military camps, to urban free space, useful for the adjacent neighbourhoods, as well as for the city of Alexandroupolis in general. The importance of the proposal also lies in the fact that this transformation will take in account the present rigid and complex legal and institutional framework, having, thus, the elements of a pilot intervention. The basic approach is based on the principle that military camps are public land, and can be used in the formulation of a regeneration policy. Critical elements of the approach are the assessment of benefit that the transformation of this space will bring to the city, the allocation of the benefits to the neighbourhoods, the effectiveness of spatial integration of the new space in the existing urban structure, and the absolute protection of green free public space in the whole city.

Key-Words: Brown fields, Greek urban planning, sustainable planning framework, legal aspects.
1. Introduction
The natural elements (characteristics) of cities such as the open green spaces, the materials of urban equipment, the trees etc. comprise the open (public) space\(^1\). The aforementioned are of great significance since they positively effect the climatic and environmental conditions in general (they improve the micro-clime etc.) and at the same time they create the faculties for territorially expanded social activities and needs for open space (i.e. sports, culture, nature contact etc.) (Tjallingi, 1995; Dimoudi and Nikolopoulou, 2003 etc.). In Greek cities though, the rate of open green space does not supersede the 5 sqm/resident, when in other cities this rate is about super-double (i.e. Vienna 20 sqm, Hage 27,7 sqm, Amsterdam 27 sqm)\(^2\). Another characteristic is that the 2/3 of the residents of the modern Greek city, are living in urban areas that the specific open (public) space covers only 2% of total surface (Lalenis and Kaliakoudas, 2004), when the ideal, let’s say, size of the open spaces may be about 10 sqm/resident (EEA, 1998)\(^3\). This specific element is one of the most significant negative side effects of the indigenous urban planning\(^4\) and it has caused an important aggravation of the environmental conditions of urban space, in such a degree that it may be characterized as an “enemy” against the citizens.

Besides the quantitative raise of the open public spaces, it must also be given priority to their qualitative improvement with the proper planning, as well as their operational allocation (dispersion) that shall cover the total of the urban areas. In the light of all the aforementioned, it is crucial for the sustainable planning approach of the Greek cities, the preservation of all the unstructured public spaces, small or larger ones (Moughtin and Shirley, 2005; Lionatou and Tsakalidi, 2009 etc.)

\(^1\) The streets, the pedestrian paths, the pavements etc. may also be included in the public open spaces. The specific analysis though, focuses on a special sub-groups such as parks, squares, play grounds etc. The segregation that is being made is mainly functional, since there are included all the spaces that are affiliated in the system of natural space (town planning operation). The fact that their management most of the times is special and independent from the rest of the open spaces network also helps.
\(^2\) For further information visit http://www.asda.gr/elxoro/ntouros.htm
\(^3\) According to Greek legislation, the desirable extent of public open spaces per resident is 8 sqm (see GG 285D/5.3.2004). This includes traffic islands, squares, playgrounds, parks.
\(^4\) The lack of open public spaces in Greek cities is mainly due to factors such as the lack of complete planning, the wrong affiliation in the direct and wider urban pole etc. For more information see Aravantinos (1997) etc.
2. Military Camps as “brown fields”

According to the above mentioned, the protection and the attribution of the latest unstructured (open) brown areas, such as military camps, play a significant part on the regeneration process and the planning of Greek cities. Often their appearance in the interior of the cities causes problems to the urban pole, since even the neighboring areas are totally cut off. Given the suffocating condition of the lack of open spaces, the detachment of active or non active military camps from the urban space and the yield of the land that they take to the city for the creation of green areas, come as an outlet of a matter that can be hardly be resolved.

For that reason their special importance has to do with no doubt with the fact that this is about extended fields (areas) with extraordinary attribute due to their use (they contain areas with lots of green areas, while their structure is limited, with independent buildings etc.). The new “development”, as brown areas for regeneration, is a challenge and an expectation, meaning in what extend their affiliation in the city’s life may be disengaged from their affiliation in the vicious circle of building exploitation.

The Greek legislative framework, trying to run the specific matter (see L.2745/1999), provides the relinquishment of at least 50% of the military camps land that are released to the Local Authority for the creation of open and public use. More specifically, in article 4 of the Law, the procedure of planning of the military camps is described and it is defined that:

“at these spaces it is allowed the land use irrespective of the standing or provided uses and structure terms of the area (General Development Plans, Zones of Urban Development Control etc.) aiming at the development of the military camps by the Armed Forces, the improvement of quality life and the structural improvement of the areas”.

This is a significantly high rate of exploitation of public land by the State. Paragraph 3 of the same article of the law prescribes that “the rate of the structured land which shall be given to the Ministry of National Defense may exist in the camp itself or other or even in a piece of land of the State”. In that way it is given the possibility of securing and prominence of the camps as urban parks with utilization of the historical buildings based on the basic principles on the least possible structure, the environmental reinforcement and zoning of smooth programs of new uses.
3. Alexandroupolis City as Case Study

3.1 General – Planning Principles
Concerning the city of Alexandroupolis, there are many military camps all around the urban fabric. Most of them were built at the borders of the city and with their constant expanding they were embodied, often at nodal spots for the smooth and urban operation of the city. In lots of cases they engage a significant area in the center of the city, as far as their size and position is concerned. The number one question is whether the application of L.2745/1999 may affect positively the citizens, aiming at the development of the urban environment and the increase of open public space (parks-squares) and the avoidance of disintegration effects and “building plotting” of the military camps land.

Based on the specific reason, the purification of one non active and two active military camps is studied (see table 1), of total extend of 39 Ha, that are situated at the north part of the city and within its tenacious pole, according to the principles of sustainable development, that is the recovering of the natural element (sufficiency), the remedy of the environment (quality) and its operational affiliation in the territorial reality of the city in such a way that the results are diffused in its total and not only locally. Namely, normalization of discontinuity and contrast both in social and spatial level is attempted, through an operational and at the same time creative affiliation of specific spaces in the existing urban reality.\(^6\)

3.2 Analysis of the existing status
The city of Alexandroupolis is probably a characteristic example of intermediate Greek city concerning the sufficiency of open spaces, as described at Table 1 below. Their total availability of open space (parks-squares), does not supersede the 5,0 sqm/resident, a rate that in the future may go down to 3,9 sqm/resident, if the raise of the population at non replete tenacious parts of the city is taken into consideration. It is now obvious that the lack of open spaces is of crucial importance, since the rate is lower than the Greek specifications, that is 8 sqm/resident (see GG 285D/5.3.2004) and also the international acceptable rate of 10 sqm/resident.

\(^6\) There is a wide literature which describes, analyses etc. the specific matter. For more information see Moughtin and Shirley, 2005; Tjallingi, 1995; Dimoudi and Nikolopoulou, 2003; Jim and Chen, 2003; Pifko, 1998; Carys etc., 2003; Heidt – Neef, 2005; Pauleit etc., 2005; Li etc., 2004 etc.
Table 1: Proportion for Open space in Alexandroupolis

<table>
<thead>
<tr>
<th>Population (res.)</th>
<th>Urban Area (sqm)</th>
<th>Proportion of open space (sqm/res.)</th>
<th>Saturation Factor</th>
<th>Population Capacity (total)</th>
<th>Proportion of open space on Capacity (sqm/res.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.892</td>
<td>208.300</td>
<td>5.0</td>
<td>0.8</td>
<td>53.464</td>
<td>3.9</td>
</tr>
</tbody>
</table>

**Source:** National Statistics Department of Greece, 2001 – Personal elaboration

Their spatial and operational distribution (see Figure 1) is generally unequal weighted. The central area is mainly found at the coastal zone through a unique park and a square (lighthouse). The remaining areas, even the remote ones (regional), have generally small areas of green and open space, mostly traffic islands and small playgrounds. The only exception within the tenacious part of the city is a large park at the west side, next to the sports center of the city, of total extends of 6 Ha and of high aesthetics and environmental value (with pine trees). Another smaller park, which is also filled with pine trees, is located at the north part of the center, in extend of 0,6 sqm.

### 3.3 Suggestion for urban regeneration of brown fields

Every attempt for improvement of the overall availability of public open spaces at the specific city should include all the existing unstructured lands that are in this case the military camps. As described above, the total of their ground is of 39 Ha. Their overall space management though, as far as the coverage of the needs of the city is concerned, would lead to the improvement of public open spaces index of the city’s total, in absolutely acceptable and sustainable amplitudes.

Table 2 represented below describes the redistribution of the open spaces in various urban planning areas (neighborhoods) which have been identified. An attempt is made in order, for the land of the military camps, to be distributed in every analysis area according to the deficit they present, so the desirable index public open spaces of 8 sqm/resident accrues (according to Greek specifications). The surplus land,

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7 The recognition of urban planning modules (areas of interest) does not follow this of the approved General Development Plan (1999) of the city, but a new allocation according to the inventorial zones of National Statistics Department of Greece, adjusted in bigger areas that cover populations from 4,000 to 6,000 residents and may be recognized spatially with common characteristics of neighborhood. The center of the city is excluded and it is described as a united analysis area and contains population of about 12,000 residents.
according to the philosophy of the specific approach, may be used for other aims such as public benefit uses, structural exploitation etc.

Table 2: Needs for Urban Open Spaces

<table>
<thead>
<tr>
<th>Analysis Area</th>
<th>Population Capacity (total)</th>
<th>Popul. (res.)</th>
<th>Urban Area (sqm)</th>
<th>Proportion of open space (sqm/res)</th>
<th>Proportion of open space on Capacity (sqm/res)</th>
<th>Area Needed (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>11.849</td>
<td>10.664</td>
<td>39.000</td>
<td>3.7</td>
<td>3.3</td>
<td>55.791</td>
</tr>
<tr>
<td>A1</td>
<td>6.279</td>
<td>5.023</td>
<td>2.650</td>
<td>0.5</td>
<td>0.4</td>
<td>47.580</td>
</tr>
<tr>
<td>A2</td>
<td>7.608</td>
<td>6.086</td>
<td>13.000</td>
<td>2.1</td>
<td>1.7</td>
<td>47.860</td>
</tr>
<tr>
<td>A3</td>
<td>7.089</td>
<td>5.671</td>
<td>62.000</td>
<td>10.9</td>
<td>8.7</td>
<td>-</td>
</tr>
<tr>
<td>B1</td>
<td>5.927</td>
<td>4.149</td>
<td>40.650</td>
<td>9.8</td>
<td>6.9</td>
<td>6.767</td>
</tr>
<tr>
<td>B2</td>
<td>6.834</td>
<td>4.784</td>
<td>24.150</td>
<td>5.0</td>
<td>3.5</td>
<td>30.524</td>
</tr>
<tr>
<td>B3</td>
<td>7.879</td>
<td>5.515</td>
<td>26.850</td>
<td>4.9</td>
<td>3.4</td>
<td>36.179</td>
</tr>
<tr>
<td>Total</td>
<td>53.464</td>
<td>41.892</td>
<td>208.300</td>
<td>5.0</td>
<td>3.9</td>
<td>219.411</td>
</tr>
</tbody>
</table>

From the above analysis one can conclude that the need for public open spaces of an extent of 220 Ha, which may be covered at its total by the regeneration of the specific military camps. The remaining ground of about 170 Ha, may be used for other public benefit uses and needs of the city. It is remarkable the fact that from the aforementioned analysis it accrues that an urban area (A3) presents quantitative sufficiency due to its neighboring with the largest park of the city (of 6 Ha surface), but not significantly satisfactory operational allocation (distribution).

Figure 1: The analysis area of Alexandroupolis

From the above analysis it can be obviously be concluded that the existing institutional legal framework of the military camps regeneration for urban uses and the rest policies for the city’s benefit is not adequate. The anticipations that it includes, meaning the use of the space for at least 50% for open and public spaces, are considered as being arbitrary, excursive and mainly it is against the principles for overall approach of urban elements of the city, according to Greek Constitution and more specifically, in article 24. The fact that military camps, when they loose their special aim for which they were created, must be treated as public open spaces with no conditions and procedures which affiliate them in the system of production of the structured space and in no case as a property which shall be residentially exploited, also advocates.

Also, the analysis brought out the entirety and the complexity that the area of the military camp must be treated as a conditional open space for the city, not only with quantity terms but at the same time and cooperatively as quality and operational. That is it must be treated like a public land bank for multiple aims, which may cover the deficits that the non effective and profitable planning creates. For that reason the specific problematic may be of blank context if it is not realized according to a strategic planning, such as the General Development Plan (see L.2508/97). This conclusion is in collision with the existing legislation for one more time (see L.2745/1999) and the specific areas are excluded from the framework of appointment of the urban land uses.

Finally, the effective (sustainable) management of an open and public space such as this of the camps for the city’s benefit at its total, demands a flexible procedure of exploitation of the existing and new implements, such as the exchange and the negotiation, jointly with the commonly used misappropriation. It mainly demands the review of the existing legislative framework so it becomes consistent with the law and in accordance with the principles of sustainability as these have been described and rendered jurisprudentially, under an overall and rational perspective.
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