

MISUSE OF URBAN REGENERATION PROJECTS AS A DISINTEGRATIVE TOOL: TWO CASE STUDIES FROM ANKARA.

I. Introduction

Issues related to ecologically oriented urban development and management are an increasing concern in urban planning. Urban ecology implies that environmental problems be solved within the built environment to a degree where the products and energy systems of built environmental processes are passed on to the larger environment as benefits, not as hazards to nature. When working within the concept of **urban ecology** the responsibility of planners and designers is to work as ecologically sensible as possible within the given economical, social and cultural conditions.

Ecological conditions in Turkish cities are worsening and require better protection of the environmental ingredients. This requirement implies a coordinated approach dealing with all urban activities and their socio-economical and ecological consequences in an urban context. Local governments, with their planning powers have the opportunity to coordinate the planning and development efforts towards ecologically sound urban restructuring through urban regeneration projects.

Urban regeneration projects are fairly a new urban developmental tool in the hands of Turkish local governments. Ankara Greater Municipality is one of such local governments with several regeneration projects. Changing cities towards sustainability, in a more ecological direction requires more than focusing on rehabilitation and/or redevelopment. To this end, integrating ecological elements in urban regeneration projects should be considered as a vital component of these projects. Hence, a successful regeneration process based on ecological principles would therefore involve both new forms of technology such as eco-tech, new forms of public regulation as well as new forms of organizing urban management to bring together all stakeholders, from local government to non-governmental organizations. Meanwhile, urban regeneration projects are primarily seen by the majority of local governments as tools of economic development, to the extent to **'redevelop'** or **'gentrify'** a given urban land.

In Ankara, Dikmen Valley Residential and Environmental Development Project and Portakal Cicegi Valley Urban Regeneration Project are the first pioneering two projects of this kind. In this paper the socio-economic and ecological impacts of these projects are evaluated by a two-tiered evaluation method and some recommendations are derived for urban planners and local governments, to use in the preparation of sustainability oriented urban strategies.

Due to its settled areas' geomorphologic and topographical conditions, Ankara can now be considered as a city overflowing its natural, hence ecological, thresholds. In other words, the growth of Ankara resembles growth of a lowland or flatland city despite of its geomorphologic and topographical thresholds. The valleys are ecological thresholds to be conserved as mostly green areas due to climatologically and urban quality benefits they bring to a city living in terms of **'healthy city'**. In fact, the aforementioned city 'bowl' geomorphologically has numerous valleys, some with creeks directly joining to Ankara River. From the point of ecological sustainability, these valleys should be preserved and handled as green wedges, adjoining to the green belt and bringing the 'nature' into the densely populated inner city areas. However, the recent urban development in Ankara do not consider this point of view as a major development policy, and so called 'regeneration projects' are formulated and planned **against** the City's ecological potentials.

II. ADVANTAGES AND DISADVANTAGES OF SUSTAINABLE URBAN DEVELOPMENT FOR LOCAL AUTHORITIES

II.1. Definitions of "Sustainable Urban Development"

We live in a time in which increased population growth, high levels of consumption and the desire to feed growing economies have created escalating demands on our resources – natural, human and social – on a local, regional and global scale.

These demands negatively impact the natural environment, our communities and the quality of our lives. In the face of these challenges, people worldwide have developed a growing concern for the environment and a desire to live in sustainably.

The most widely known definition of sustainable development comes from the Brundtland Commission, which defined sustainable development as **"development that meets the needs of the present without compromising the ability of future generations to meet their own needs."**

During the preparatory meetings for the URBAN21 Conference (Berlin, July 2000) the following definition was developed to define sustainable urban development:

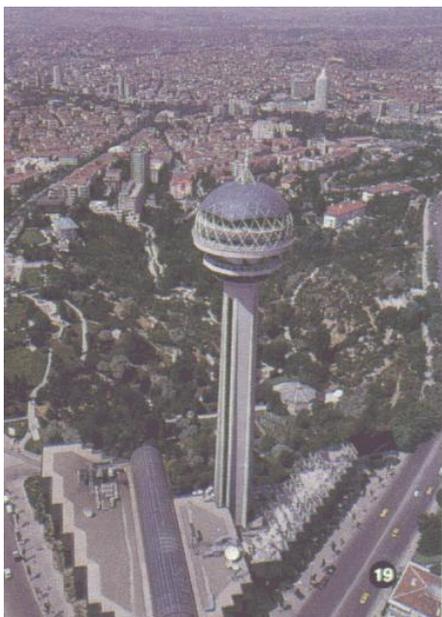
"Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden on the future generations. A burden which is the result of a reduced natural capital and an excessive local debt. Our aim is that the flow principle, that is based on an equilibrium of material and energy and also financial input/output, plays a crucial role in all future decisions upon the development of urban areas."

(<http://www.rec.org/REC/Programs/SustainableCities/What.html>)

"A sustainable community is one in which improvement in the quality of human life is achieved in harmony with improving and maintaining the health of ecological systems; and where a healthy economy's industrial base supports the quality of both human and ecological systems."

Indigo development: <http://www.indigodev.com/Sustain.html>

"A community that believes today's growth must not be achieved at tomorrow's expense." Governor's Commission for a Sustainable South Florida, initial report, October 1995)



II.2. Green Area Ratios :

Parks, green lands, open areas and playgrounds play an important role for the city environment. Green spaces symbolize peace, minimal stress and a cleaner environment for many people. Percentage of parks, green spaces, open areas and playgrounds in a built-up area are important in "Sustainability" and "livability". Green spaces in urban areas are important for recreational purposes and for generally enhancing the quality of life of people who live in urban areas.

PHOTO...ONE OF THE EARLIER GREEN VALLEY : BOTANICAL GARDEN AND ATAKULE

One of the main advantages of the "Rehabilitation of Valleys and Other Natural Assets" is to upgrade the "Green Area Ratio" of the urban areas. Green area

ratio is 11 m² / person in cities, according to the Law of Development and Resettlement (3194) (İmar Kanunu) in Turkey. This is not sufficient for the “Green cities”, especially in the North and South –west of Turkey, many cities and towns have green areas (forests, natural woods etc) which is more than this ratio. But, there is less than that ratio, in the central part (Konya, Ankara also) and east – South-eastern part of Turkey (Urfa, Mardin, Diyarbakır, Elazığ, Erzurum etc) in many cities and towns. The tool of rehabilitation and restoration of valleys and ecologically sensitive areas such as lakes, rivers, fertile agricultural lands, could be used as a tool of upgrading the green area ratios in those cities and towns which lack greenery.

ii.3. Green Fragmentation:

One of the most fundamental principles of conservation is that there should be a system of natural (or ‘green’) corridors across the landscape, interspersed with large core natural areas (i.e. ecological ‘nodes’).

These green core and corridor areas provide an important home for natural habitats. In turn, natural core and corridor habitats are essential to the long-term survival and sustainability of biological diversity and are critical in helping to maintain the healthy, natural functions of ecosystems. Regardless of whether one considers a network of protected areas within an area with commercial logging, or the maintenance of healthy ecosystems in an urban or agricultural area, nature needs a system of ecological corridors and natural core habitats. While the concept of cores and corridors is central to conservation and landscape ecology, it is a less well-known principle among the general public. Frequently, there is confusion about what exactly wildlife corridors are, how large they should be to benefit wildlife and to support biodiversity, and where they should be protected and restored. Similarly, the importance of core natural areas and how they fit within a system of corridors is not well defined, although an increasing amount of attention is now being paid to this topic by ecologists, naturalists, planners and the public. (<http://www.ontarionature.org/pdf/cores.pdf>)

The rehabilitation and restoration of green areas, water basins and valleys has much importance in regaining the ecological balance and ecologic routes for the urbanised areas. Rehabilitation of flora, rehabilitation of fauna life and planning for sustainable open and green spaces is essential for human being as well. It is important not to “fragment” the green axes, green belts, valleys while planning. Dikmen Valley like areas are vital life areas for the future generations. The continuation of green areas, forests, water basins, valleys has also much importance for the agriculture and forestry.

ii.4. City Lungs :

“Frederick Olmsted, the man who built New York’s Central Park, called it “the lungs of the city. It helps keep the air pure, keeps us healthy. Trees do all kinds of positive things in the city. He points to national studies that show urban trees helping reduce soil erosion, water and noise pollution, and even correlating trees with a reduction in crime. “We need to care for them the same way we do city streets and buildings”

Forests, Valleys and green areas in a city function as the city’s lungs. They can also serve as centers of research, education, recreation, plant and animal preserving.

The forests, green areas, axes, water basins, valleys are “LUNGS of the CITY” . this means most all of our vital oxygen, fresh air, fresh water comes from those areas. The main advantage of rehabilitation and restoration of those areas is to have a “Livable City” or we can say “Sustainable City”.

III. Misuse of Urban Regeneration Projects: Dikmen Valley and Portakal Cicegi Valley Case Study.

III.1. An Interpretation of Ankara Plans With Their Ecological Principles.

After the declaration of Ankara as the capital of the Republic of Turkey, a planning competition was held in 1927. Herman Jansen's proposal was awarded the first prize, and the plan, prepared by him was put into implementation in 1932. This 2000 Ha., 300,000 design year population plan emphasised in the formation and conservation of green areas, such as parks and other recreation areas in and around the planned Ankara. Jansen's plan, in this manner preserved the valleys as green areas with all their morphological properties.

The next plan, approved in 1957, was prepared by N. Yücel and R. Uybadin, following their winning of the first prize in the competition held in 1954. Their plan covers approximately 5720 hectares for 750,000 design year population. In the jury report of the competition it was stressed that their proposal emphasise the conservation of present, and development of new green areas to separate building zones from another is one of the superiorities of the proposal. This plan followed the Jansen's look at the valleys.

"1990 Ankara Master Plan", so called, was prepared by the Ankara Metropolitan Area Master Plan Office, established in 1969 by the Ministry of Public Works and Housing for 14,440 hectares and for 3.6 million population. The valleys within the plan boundaries were not opened into building development, and were totally protected as green areas.

"2015 Ankara Master Plan" is the fourth plan in this manner. Its macroform proposal largely accepted and adjusted the principles and policies of the 1990 plan, however due to changing socio-economic circumstances and becoming more aware of the city's environmental problems, primarily its air quality, the plan urged an accelerated decentralisation. The macroform proposals included in widening of the green belt and preservation of the valleys as green spaces.

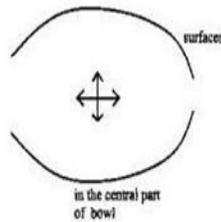
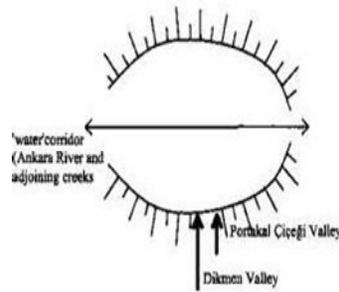
"2025 Ankara Urban Area Master Plan", prepared by the Ankara Greater Municipality, largely follows the planning principles and policies, proposed by the 2015 plan, and ties them to such prime principles as 'conservation-use balance' and 'sustainability'.

However, both, 2015 and 2025 plans were not approved, hence, aforementioned environmental quality and ecology related policies are 'left' in these plan-making efforts, whereas planning practice by the Ankara Greater Municipality obscured and skewed the plans' such principles and policies by its implemented development plans, such as plans related to Dikmen Valley and Portakal Cicegi Valley. The last mentioned planning and urban design works, followed these plans are examples of how 'regeneration projects' can become largely a kind of gentrification projects refuting urban ecology and disclaiming citizen rights for accessible public space provision and living in a healthy city.

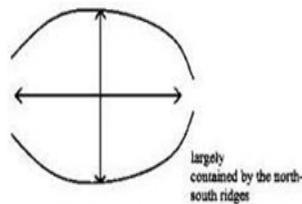
Figure 1 attempts to a topological interpretation of Ankara plans, to date.

A Topological Scetch Interpretation of Ankara Plans

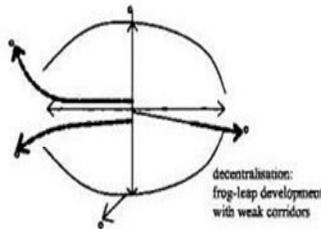
Ankara 'Bowl' Topologically Shown



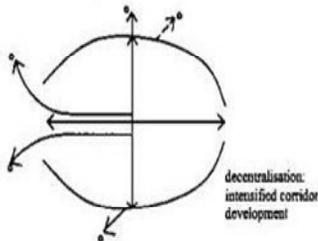
Jansen Plan : approval date(AD):1932
 Planned area(PA):2000 Ha.
 Design year population(DP): 300000
 Plan notion - real development process(PN-RDP):
 High sloped valleys,rivers,drainage surfaces,crest lines
 are conserved;soft slopes are opened to settlement-
 Planning and city politics in accordance.



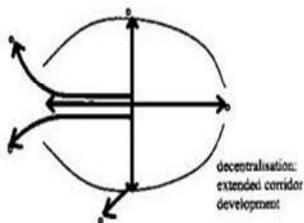
Yucel-Uybadin Plan: AD:1957
 PA: 5720 Ha. DP: 750000
 Valleys are retained asopen space/green areas;due to
 Deficient population precectionillegal-squatter- invasion
 Of steeped slopes and crest lines:topographical
 thresholds are exceeded
 - city politics have started to determine the planning
 changes:invasion of the valleys started.



1990 Ankara Master Plan:
 PA: 14400 Ha. DP: 3.6 million
 Decentralisation: leap-frog development with weak
 corridor development ;valleys are retained as city's open
 spaces despite their 'de facto' invasion.
 - Flexible planning is misused by legalising process put
 into operation by laws and by-laws



2015 Ankara Master Plan:
 Largely follows the 1990 planning policies;
 Extends and strenghts development on the proposed
 corridors
 - the proposed plan is unapproved.



2025 Ankara Urban Area Master Plan:
 Largely built on to the reformulated 2015 planning
 principles;' conservation-use balance' and 'sustainability'
 Are declared as important principles.
 - the proposed plan is still anapproved.

Figure 1:A topological Interpretation of Ankara Plans With Their Ecological Notion.

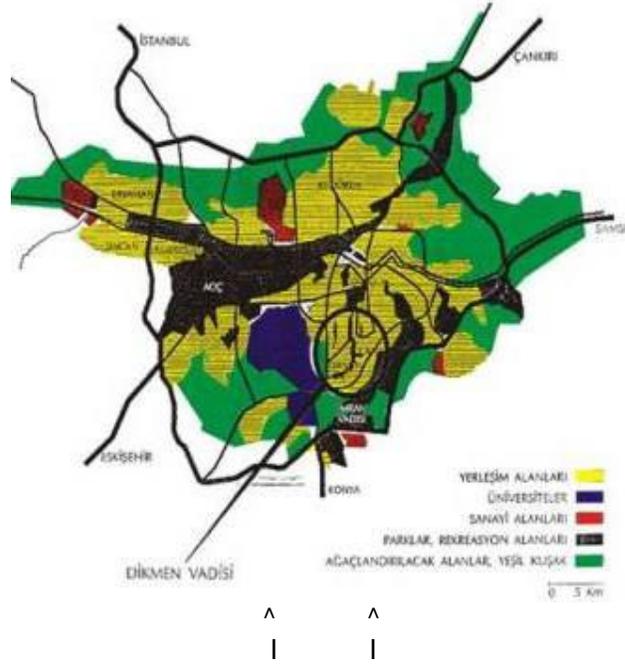
III.2. Regeneration Projects vs. Urban Ecology.

Dikmen Valley is a South-North flowing valley, geographically adjoining Mogan-Eymir--İncesu water basin at its South, to the city centre at its North. Its natural flow to the city centre as a potential green wedge is largely cut by government buildings at its northern section and this part is completely separated from the rest of the valley by the construction of Cetin Emec Boulevard on fill, in early 90's. This boulevard is constructed on a landfill, intersecting the valley east-west, hence completely separating the city centre bound section from the rest of the valley. Although the Dikmen Valley regeneration Project, literally "Dikmen Valley Housing and Environmental Improvement Project" has a continuous open space as its green spine, called "Culture Park", this open space is designed as a city park with a large proportion of 'hard landscape' and impacted by blocks of buildings, surrounding it. The two tower blocks, each 30 storey height, linked to each other by a bridge situated over the valley basin, runs nearly parallel to the mentioned boulevard, hence the valley is disrupted on its another cross-section by this bridge called "Culture Bridge". Just to mention, the total height of the tower+bridge from the valley base is approximately 120 meters. Therefore, there is a disproportionate relation between the valleys width and the bulk of this structure.

Table: Dikmen Valley Regeneration Project Land Use.

Land use	sq meter	% of total area
Residential	222,960	14.50
Culture park	1,029,050	66.93
Municipal Services	81,160	5.29
Education	34,620	2.25
Health	9,040	0.59
Roads	160,498	10.44
Total	1,537,528	100.00

Portakal Cicegi (Orange Blossom) Valley urban regeneration Project literally "Portakal Cicegi Valley Urban Development Project" is implemented on a respectively quite smaller valley (around 12 Ha.) The surrounding urban area had already developed residential area with medium-to-high rise buildings, before the Project implemented. This 'regeneration project' brought in an additional population with a 500 person/Ha. Density. From a sustainable urban development point of view, then the valley could have been retained as an urban park as it was proposed, prior to the so called 'regeneration' Project and could be valued as a green 'island' conventionally, or, could be assembled "Dikmen Creek Green Area Project" approved in 1986, prior to the Dikmen Valley 'regeneration' Project. However, in 1991 Ankara Greater Municipality put this regeneration Project into action with a FAR=1.70, in this contained valley. According to this Project, 330 flats with 150 to 200 sq meters, with the other buildings including a shopping centre, totals to 188,700 sq meters floor area on a 11.1 Ha. Project site. Considered the previous plan's FAR=0.05, to be used as green area supporting/recreational facilities, Ankara has lost one of its valuable open spaces situated in a densely built-up residential area.



Dikmen Valley Portakal Çiçeği Valley

Figure 2: The place of Dikmen and Portakal Çiçeği Valleys in Ankara Urban Area.
Source:Ankara Greater Municipality-Metropol İmar AŞ(From Ş.Sahin)

IV. CONCLUSION

Ecological thresholds, and amongst them valleys should be seen as not disintegrating but integrating natural reserves of an urban area. However, so called 'generation projects', recently took place in Ankara's urban development, have plans and urban design projects towards disintegrating the city from their valleys. These projects pay little attention to ecological conditions of the city, to geomorphological and topographical aspects of the valleys planned and designed, and in the end, do not consider 'healthy city' concept, properly. These all might bring real ecological burden onto the city and its citizens.

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