

## **Sustainable Development and Regeneration in Rural Areas at the Metropolitan Fringe: the District of Şile, İstanbul**

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### **Introduction**

The principal problem of planning today is the rapid changes and transformations experienced in urban and rural areas, and the risks that accompany them. It is in this context that the projects proposed for the re-organisation of areas of urban settlement, and the new settlements being built in rural areas at the metropolitan fringes face serious criticism regarding issues of sustainability. Although the problems of rural areas have been on the agenda of planning for a number of years, the issue has mostly been around the problem of migration from rural areas into cities. While the acceleration of migration from rural areas into cities diminishes, problems related to the sustainability of the natural environment and the decline in the rural sectors of production come to the fore. In the 9<sup>th</sup> Five Year Development Plan "...an integrated regional development program including precautions that are differentiated according to the problems and potentials of each region..." is considered to be the main strategy regarding rural areas. Even though there are varying practices in different European countries, the directives of the EU programs clearly indicate a rise in the importance granted to rural areas that is evident in the increasing numbers of studies concerning rural development and sustainability. The fact that the issue is addressed through concepts like rural development, rural regeneration, and rural renaissance signify that it is the physical, economical and social sustainability of the rural areas that is being considered.

The strategies put forth in the 'National Rural Development Strategy (Url-1) document developed by the State Planning Organization, prepared to serve as a foundation to the 'National Rural Development Plan' and approved by the Supreme Planning Council in 2005 present a similar framework. The 1<sup>st</sup> Strategic Objective, defined under the heading of 'Development of Economy and Increasing Employment Opportunities', proposes the issues of 'Facilitating the Competitiveness of the Agriculture and Food Sectors' and 'Diversification of Rural Economy' to be of prime importance. Similarly, the 2<sup>nd</sup> Objective, 'Improvement of Human Resources, Levels of Organization and Local Development Capacity' summarises the major fields of work as the 'Improvement of Health and Education Services', 'Defying Poverty and Increasing the Employment of Disadvantageous Groups' and 'Reinforcement of the Local Development Capacity'. In the 3<sup>rd</sup> Strategic Objective, defined as the Development of Physical Infrastructure Services in Rural Areas and the Improvement of Quality of Life, issues concerning the 'Improvement of Rural Infrastructure' and 'Improvement and Preservation of Rural Settlements' come to the fore. In the final heading the 'Improvement and Preservation of Rural Environment' is presented as the 4<sup>th</sup> Strategic Objective. Three issues of principal concern are stressed in this capacity; 'Development of Environmentally Friendly Agricultural Practices', 'Preservation of Forest Ecosystems and Achieving Sustainable Use of Forest Resources' and 'Development and Management of Preservation Areas'. These strategies and priorities must be evaluated as clues for the physical, economical and social sustainability in rural areas.

The propositions of the National Rural Development Strategy have much in common with the programs employed in rural development in the EU countries, yet what is important here is the necessity to implement these strategies and priorities by adjusting them according to the specific problems and potentials of different regions. It is crucial therefore to remember that in Turkey the regional differences of development, affected by location, natural environment, accessibility, socio-economical structure and cultural characteristics, are much more severe among rural areas than among urban settlements. Rural areas can be classified (Url-2) as; 'rural areas

located at the fringe and under the pressure of a developed urban region, the sustainability of natural potentials of which are at risk', 'rural areas with a limited potential of growth and which are being vacated due to the investment and population attraction of their urban region', 'rural areas that are in economical decline and losing population alongside their urban region'. Achieving the sustainability of these regions with various different characters, problems and potentials seems to be possible only through mechanisms that would be generated in line with these differences.

### Conditions of Sustainability at the Metropolitan Fringe: Istanbul-Şile

This study focuses on the district of Şile as a case area located at the fringe of Istanbul, which falls into the first category according to the classification above. The findings of the research carried out during the making of the Istanbul Metropolitan Master Plan which started in 2005 and the Şile Master Plan<sup>1</sup> are evaluated in comparison to the themes of 'regeneration of rural areas' and 'development of rural areas according to principles of sustainability'. The district of Şile, which has the biggest surface area but the smallest population (the surface area is 79.080 Hectares, covering 15% of the province of Istanbul, and the total population in 2000 is approximately 37.000 which counts for 0,4% of the whole population of Istanbul) amongst the districts in Istanbul, has a land that is covered by 77% forest areas and 18% agriculture areas. In Şile, which has a very limited amount of land that is suitable for settlement, there are 57 villages with an average of 300 inhabitants, most of which are located in the forests (IMM-IMP, 2007). The three lane highway that connects Şile to Istanbul via Ümraniye, and the two lane roads that connect it to Kandıra via Ağva, and to Gebze make up the main transportation system of the district (Figure 1).



Figure 1- Physical and Socio-economical Potentials of Şile

Source: IBB-IMP - Culture Industries - Culture and Tourism Group, 2007, Şile 1:25.000 Scale Master Plan Analytical Examination and Synthesis Report.

The fact that Şile is located at the fringe of a metropolitan area with a population exceeding 10 million keeps the region at constant risk of becoming an area of development, while the vast forest areas and the region's proximity to the sea adds to its attractiveness and appeal. The settlements built due to these risks and appeals are mostly the vacation houses of the inhabitants of the metropolis, catering for the need of weekend houses<sup>2</sup>. Meanwhile, the lack of economic activities enough to keep the local inhabitants at their villages, alongside the decline in employment due to the growth in families causes a rapid population loss in villages, together with the migration to the metropolitan centres. Therefore, the region is going through an economical and social deterioration by losing its local inhabitants, and is under the threat of losing its natural potentials because of the building stock made by new landowners used only for a limited amount of time and that stay vacant for the rest of the year.

In this context, due to the region being a rural area at the fringe of an ever-growing metropolis, the area is facing problems created by the pressure of development caused by the demand for vacation houses and weekend houses;

- The traffic burden and the environmental destruction due to the mining potential of the area<sup>3</sup>
- The traffic load and the environmental problems caused by the waste collection centre for the eastern side of Istanbul located in the area
- The problems of the villages that had to be vacated and the development of which were restricted due to the dams<sup>4</sup> that are and will be providing water to Istanbul.

Due to Şile's geographical and socio-economical structure;

- The scarcity and inefficient use of agricultural land
- Its harsh topographical structure and north facing location which restricts the settlement to small and sheltered areas
- The erosion of the local population due to the two fundamental conditions mentioned above and especially the low proportion of the young population forces the district to continue its course of development with problems.

The main difficulty that is faced in producing decisions to solve these problems of Şile, with various opposing characters, is due to the risks involved in the process that could transform the approaches proposed for the regeneration of rural settlements, into the development demands of the metropolitan area. Therefore, in the plan decisions that will be developed for Şile; instruments for economical sustainability, as suggested in National Rural Development Strategy, for "improving the economy and increasing employment opportunities" must be proposed alongside precautions to limit the pressures of development mentioned earlier and to facilitate physical sustainability. It is therefore of crucial importance that the potential of the region in economies based on environmental assets, such as the sectors of agriculture, forestry, fishery, energy and tourism, is carefully examined and the investments jeopardising the preservation of the rural environment are restricted. For instance, the risks involved in the clay mines in the forests of Şile and risks underlying the projects proposed for dams in the area to be utilised as the future water resources of Istanbul should not be overlooked. The fact that some of the sectors mentioned earlier such as agriculture, forestry and mining which use the environment as their first degree resource, actually destruct the environment (namely mining), and that eco-tourism, another sector that seems to be highly suitable to the area, demands a high quality natural environment, presents the issue of conflicting sectors in the region.

### **Approaches for Sustainable Development and Regeneration at the Metropolitan Fringe**

The following questions on the issues around sustainable development and regeneration of Şile arise when the EU practices, and the documents concerning rural development strategies in Turkey are taken into consideration:

- Is it possible to revive the employment opportunities in Şile through new and innovative sectors in tune with the environment (like eco-agriculture, eco-tourism etc.), that preserve and improve the principles of sustainability?
- What are the conditions of creating a rural area in Şile, protected from the sectors that threaten sustainability, free from the pressures of development and that could develop (as a whole with its forests and agricultural lands as well as its villages) without losing its original character?
- Is it possible to create a rural area where life is not in decline due to economical contraction, where the young do not leave because of the lack of infrastructure, where life is not stagnant; but instead where the quality of life has been increased and enriched with fundamental infrastructures of health, education, culture etc., a rural area alive and vibrant, and what would be the carrying capacity of such an environment?

The stances on this issue should first of all be evaluated alongside the decisions made on the metropolitan scale and the definitions set forth in the ‘Synthesis of Spatial Sustainability for Istanbul’ document, under the heading of “Environmental and Spatial Sustainability”, the VII<sup>th</sup> Chapter (IMM 2006) of the Report of the 1:100.000 scale Istanbul Metropolitan Master Plan, which was approved and came into effect as of 22.08.2006<sup>5</sup>. In this conceptualisation the Metropolitan Area of Istanbul was classified under the headings of ‘Areas with Functions to be Preserved’, ‘Areas to be Developed with Special Precautions, According to the Principles of Sustainability’, ‘Areas to be Developed According to the Principles of Sustainability’, ‘Problem Areas in terms of Environmental Sustainability’, ‘Areas of Existing Settlement’ and ‘Natural Areas in need of Rehabilitation’. In this context, the ‘Anatolian Side Northern Sub-region’, a region which also includes the district of Şile was categorised under the heading of ‘Areas with Functions to be Preserved’. While the mines and the waste collection centre are categorised under ‘Natural Areas in need of Rehabilitation’, the villages located in the forests are classified as ‘Areas to be Developed with Special Precautions, According to the Principles of Sustainability’. The Plan Report emphasises the fact that there are forest areas in the north of the city that are significant on an international scale, that the area houses water sources indispensable to the city, that there are climatic differences between the north and the south of the city which reflect on the diversity of biological life and habitats; defining the geography of the Metropolis of Istanbul as a vulnerable structure. It is therefore the basic principle of the plan to prevent the development of the Metropolis towards the north and to facilitate growth in the east-west axis in a leaping pattern, to be able to maintain a sustainable development.

Among the principles developed alongside the strategy of ‘Guiding Spatial Development According to the Principles of a Sustainable Environment’ concerning the preservation of the northern regions of Istanbul the following issues must be stressed:

- Maintaining a spatial development that preserves existing forest areas, water basins and top class agriculture land,
- Planning the urban and rural areas as a whole, reinforcing the legal regulations protecting the forests, the water sources and the agricultural land from urban development,
- Utilising mechanisms based on dialogue and reconciliation, as well as discouraging methods against enterprises for building settlements into the mentioned preservation areas,
- Reinforcing the legal and administrative tools that will facilitate the implementation of the land use decisions,
- Revitalising the natural ecosystem character of the water basins.

The following are more specific strategies devised for the mines and the problems of solid waste collection centre located in the forests of Şile and concerning the development of the agricultural land in the region.

- Revising the solutions for solid waste management to meet EU standards,

- Initiating rehabilitation processes for the mines that have lost their function as an enterprise,
- Forestation of bare land that acts as part of the forests,
- Making long-term plans for vineyards, fruit orchards, greenhouses and recreation areas, regarding microclimatic effects of and the effects of irrigation,
- Protecting forest areas in the form of shrubs and bushes which prevent erosion as well as being the primary source supporting biological diversity,
- Implementing organic farming planning in suitable areas according to Regulations of Organic Agriculture,
- Increasing the growth and harvesting of marine products,
- Classifying the stone quarries, mines and energy raw material sources around the city as 'Reserves to be Preserved' and 'Insignificant Reserves' and managing these areas accordingly.

### **Sustainable Development and Strategies for Regeneration and the Şile Example**

In the 1:25.000 scale Istanbul Master Plan prepared in accordance with the main strategies of the Istanbul Metropolitan Master Plan a vision of development was proposed for the 'Anatolian Side Northern Sub-region', containing the districts of Şile and Beykoz; that would focus on maintaining the sustainability of the natural, historical, cultural assets and potentials of the region and on utilising an economical development model in which primarily the local workforce will be employed. The principal strategies developed within the framework of this vision are as follows:

- It is suggested that the preparation of ecologically sustainable 'Agriculture and Tourism Action Plans' that would serve the development of the sectors of agriculture and tourism, established as the rudiments of rural development, should be considered as the main strategy. It is envisaged that in the tourism plan establishing pensions where the traditional settlement patterns are preserved, ecological farming and the integration of nature and culture tourism should be regarded as the prime axis. In this context, administrative, spatial and financial tools should be developed to guide local investors and to educate the young population for this sector. It is suggested that reviving the traditional cultural products as well as organising festivals and sports events should be perceived as tools for improving the local economy. The central axis for the agriculture plan consists of encouraging products that have high competitive potential and that are suitable to the ecology of the region, and enabling the local population to be active at every stage of the process from production to marketing. Providing education to the local population appears to be the most important tool in the implementation of this plan.
- It is suggested that plans should be prepared with programs and budgets to increase the quality of life in rural and urban areas. Starting from transportation and sewage systems, the inadequacy of health and education services were established and should be brought up to the necessary standards. Unless these inadequacies in infrastructure are addressed and dealt with, it would not be possible to encourage the young generation to continue living in the region, nor would the investments in the sectors of agriculture and tourism reach their goal. It is envisaged that these investments should be initially focused on the central villages of the sub-regions (clusters) and that the services should be spread out to the area from these villages.
- The issue that forest areas and drinking water basins should be protected from the pressures of development is a problem that has to be dealt with on a general scale in Istanbul. Various provisions of the 1:100.000 scale plan on the matter have been mentioned before. Strategies developed for the mines located inside forest areas, a principal problem of the Şile region, will be presented under the heading of mine areas. The villages that are located within the water collection basins that would be vacated and moved elsewhere are

the villages with the highest potential for ecological farming and tourism. However, due to plans on supplying drinking water to Istanbul the future of these villages have been decided upon before the Metropolitan Master Plan process started and they have been placed in expropriation programs, therefore the position of the villages were given for the Şile Plan.

- Establishing planning and control mechanisms effective at every scale of the development process constitutes the main axis of the strategies for the 'preservation of historical, cultural, natural assets and prevention of developments disturbing the rural structure'. In Şile, which has been included in the management territory of Istanbul Metropolitan Municipality since 2004 according to the Greater City Law numbered 5216, there are villages without any sort of plan, as well as seaside villages that have been planned and opened to development without control due to pressures of development. Persuasive control mechanisms are necessary to preserve the existing rural settlement patterns and the natural environment during the spatial planning processes that will take place at every village. Including the local population within these control mechanisms is perceived as an indispensable tool of strategic planning. Therefore, the clusters and cluster centres proposed in the plan are not only the regulators of the economical structure but also the guides of the development in spatial organisation.
- To be able to minimize the damages that the mining enterprises cause to the natural assets and the settlement areas, an administrative plan limiting the distances of mines to settlements, water basins and forests (only for mines producing high economical value), rehabilitating the mines which are no longer active to revive nature, and preparing short, medium and long-term plans on mining transportation is needed. This plan must be realised in conjunction with the collaboration of local inhabitants, concerning public institutions and non-governmental organisations alongside the enterprise owners and the implementation of the plan must be controlled.
- Cooperation between institutions is considered to be the primary strategy to be able to prevent the effects of the Istanbul eastern side solid waste collection centre, mainly the liquidation of the waste and the traffic burden, on the natural assets of the region and the settlement areas. The environmental effects of the centre should be controlled at certain intervals with an action plan and program that should be prepared with the cooperation of Istanbul Metropolitan Municipality and the Ministry of Environment and Forestry.

To facilitate the healthy implementation of the strategies of the Şile Master Plan, outlined earlier, in an area of 79.080 hectares and with 57 village settlements and two city centres of Şile and Ağva sub-regions defined in the form of 'clusters' are proposed. These sub-regions are clusters containing villages with similar geographical, functional and socio-economical structures (Figure 2).

There are villages acting as centres for every cluster, assuming functions outlined earlier. The tools that would be utilised in the implementation process of the plan are classified into four categories of "legal and institutional tools", "technical and physical tools", "economical tools" and "tools for capacity building and social capital creation". Amongst these tools the last one has a special strategic importance. Unless capacity building programs on ecological agriculture and tourism for the local inhabitants are implemented, the possibility of achieving the other plan decisions would be jeopardised. For each and every one of these tools, different education, incentive, implementation, control and precaution phases are being designed.

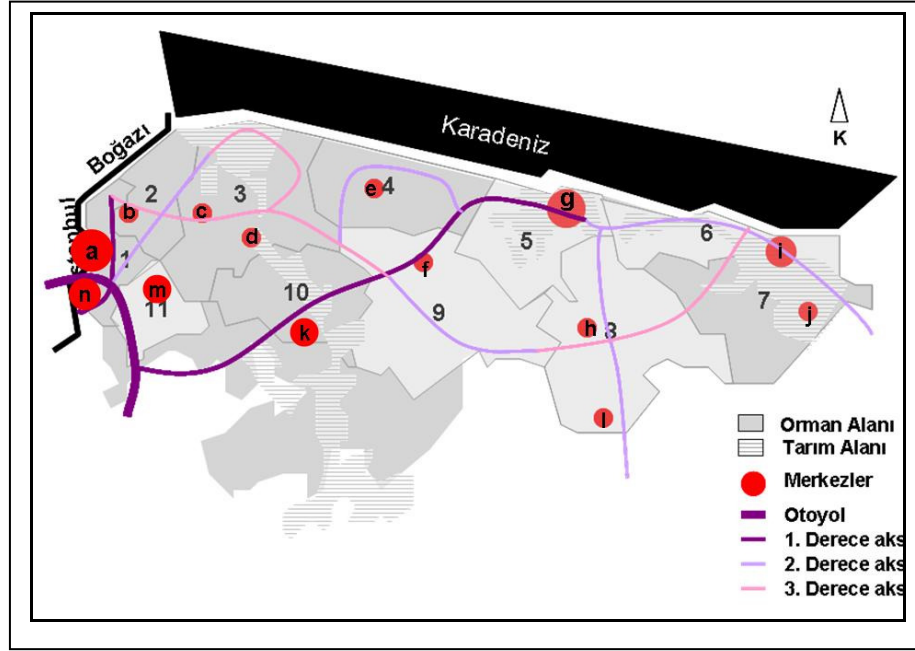


Figure 2-Istanbul East Side Northern Section Clusters and Cluster Centres  
Source: IBB-IMP - Culture Industries - Culture and Tourism Group, 2007, Şile 1/25.000 Master Plan Analytical Examination and Synthesis Report.

## Final Propositions

This case study is based on the themes of 'regeneration of rural areas' and 'development of rural areas in line with the principles of sustainability'. However, one should bear in mind that:

- Unless policies and regulations have an inner consistency, cohesion between strategies can not be achieved and investments would be wasted.
- Unless functional units defined as clusters and a system of centre villages are established, the dispersion of rural development, the aimed increase in urban quality of life and the management of natural environment can not be achieved. This in turn points at the necessity of an administrative reformation.
- Achieving a spatial development in rural settlements that is environmentally friendly and in tune with the traditional patterns is only possible through a participatory administrative model in which the centre villages take on responsibilities.
- The preservation of forest areas and water basins, and regulation of the mining enterprises is possible only through establishing an institutional and integrated administrative model.
- The cooperation between public and private sectors, as well as universities and non-governmental organisations must be realised through projects that are consistent, that have been designed thoroughly and that will have a continuity; to ensure the success of implementation.

Finally, although the strategies set forth in the National Rural Development Strategy should be taken seriously for they consist of contemporary notions and have outcomes matching European standards it is not an easy task to implement these propositions and put these priorities into practice. Being able to maintain physical, economical and social sustainability together, and to be able to achieve this in a rural area surviving under the pressures of the Metropolis of Istanbul requires a long-term and vastly participatory process.

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<sup>1</sup> The master plan for the districts of Sile and Beykoz were realised at IBB-IMP by the Culture Industries - Culture and Tourism Group. The Group, consists of Evrim Özkan, Senem Kozaman, Zeynep Özdemir, Evren Oral, Serkan Sınmaz, Can Okman and Derya Özkan under the consultancy of the authors.

<sup>2</sup> In its entirety, the Sile city centre, villages and vacation houses cover a total of 2.111 Hectares of settlement areas in the district. Due to the extensive size of the district the mere 2,7% of settlement is almost similar to the settlement areas of the districts of Pendik or Bahçelievler.

<sup>3</sup> There are 457 people working at 28 mines in the districts of Şile, producing 3.250.000 tons yearly. This value is 4,2% of the Istanbul total.

<sup>4</sup> The Yeşilçay Project developed to meet the water need of Istanbul in the medium-term, proposes redirecting the water of Göksu and Çanak streams in Ağva to Ömerli. The water source of the Melen Project on the other hand, is the Melen Stream 180 kilometres to the east of Istanbul.

<sup>5</sup> The same plan was approved once more on 17.07.2009 by the Istanbul Metropolitan Municipality after minor revisions.