

# Chapter 4

## Application of a Participatory Ex Ante Assessment Model for Environmental Governance and Visualizing Sustainable Redevelopment in Gorj County, Romania

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### ABSTRACT

*This chapter presents an approach for the development of a decision-support process for sustainable development planning. The Indicator Scoring System (ISS) incorporates the ex ante assessment of environmental, infrastructure, economic, and social impacts of proposed projects, and links these assessments with a geospatial model of sustainable development potential. The overall process is designed to encourage public participation, provide unbiased quantitative and qualitative evaluation, integrate*

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*agency database compilation, and provide data analysis tools/techniques and viewing applications. The ultimate goal is to facilitate a process under which local authorities, governments, and international organizations, are able to visualize sustainable development initiatives as well as coordinate and evaluate their own independent activities. Sustainable development tools that are well integrated with decision-making processes and valued by decision-makers will contribute to the implementation of the objectives of sustainable development.*

## **INTRODUCTION**

A vision for sustainable development implies a long-term process, in which decisions focusing on the economic, environmental, and social/cultural assessments are based on the best available information and coordinated at the local, regional, and global levels. Sustainable development brings these three vital assessment categories into balance with each other and negotiates among the interest groups and stakeholders involved in the process (Campbell 1995). It requires the consideration of disparities in spatial and temporal scales, and an understanding of the intricate interdependence between the economic, environmental, and social/cultural factors. Therefore, a sustainable development strategy is a functional synthesis of economic development, environmental protection, and quality of life for the stakeholders and residents.

The economy and social structure of Gorj County, located in southwest Romania was heavily dependent upon mining prior to the early 1990's. During Romania's transition from communism to capitalism, the inefficient mining industry shut down many active mines, which resulted in large numbers of unemployed and environmentally unstable mine closures. As Gorj County integrates into a competitive market-based economy, the expressed vision for the county embraces both the natural geographic characteristics and the cultural resources of the region in an environmentally and economically sustainable manner. Operationalizing this vision requires a framework for organizing and evaluating potential and realized impacts for development projects.

The primary goal of the research described in this chapter was to develop decision-support tools to aid in holistic and sustainable project planning – not only from the standpoint of the environment and the economy, but also from social, cultural perspectives. This chapter develops a methodology to score proposed projects using an *ex ante* “Indicator Scoring System (ISS)”, specially adapted for Gorj County, Romania.

The two broad project themes were:

1. To integrate the principles of sustainable development smoothly into the region's on-going economic and environmental initiatives; and
2. To develop a knowledge-based and participatory method of evaluating and prioritizing sustainable development projects for Gorj County and its local communities.

These two themes are interrelated and reflect the current social, economic, and environmental situation in the county. The first theme relates to the sustainability of the future initiatives focused on developing a mixed market, multi-sector economy and represents a long-term goal that is fundamental to the mandate and mission set forth in Romania's accession into the European Union. Sustainable communities are defined here as those that are able to further social, economic and environmental objectives without creating problems for another group, community or generation. Oftentimes, not all stakeholders will choose to participate in and embrace sustainable development strategies. The second theme of integrating sustainable development principles into ongoing initiatives

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