Chapter 16
The Case Study in Sfântu Gheorghe Commune, Romania

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ABSTRACT

School children in the 541 km² Commune of Sfântu Gheorghe, part of a Biosphere Reserve in the Danube Delta, mapped vegetation areas containing two wild plants. The plants were potential natural resources for raising income from tourists, to offset declining access to wild resources in the strongly protected area.

INTRODUCTION

The investigation aimed to discover local knowledge for biodiversity conservation through sustainable use, and the willingness of Sfântu Gheorghe local community to be involved in the decision making process regarding sustainable use of natural resources. Sfântu Gheorghe is located in the south-east of Romania, on the left bank of the Sfântu Gheorghe Branch, on the Black Sea coastline. The village is in a remote area of a natural paradise, the Danube Delta Biosphere Reserve, which is the eastmost rural community in Romania (See Figure 1).

Sfântu Gheorghe is a fishing community, based mainly on anadromous migratory fish, including Pontic shad (Alosa immaculata) and sturgeon (Acipenseridae), as well as coastal fishing for small species such as sprat, (Sprattus sprattus) and anchovy (Engraulis encrasicolus). Due to the collapse of fish stocks in April 2006, Romania banned sturgeon fishing for ten years (Navodaru

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et al. 2008), and coastal fishing with giant trap nets was abandoned. This affected community livelihoods. The fishermen are still fishing other species, but the ban on sturgeon and loss of coastal fishing have affected their income. The alternative to this negative impact is their involvement in tourism by providing tourists services like boat trips, guiding, accommodation or local cuisine and products.

The 541 km² Commune of Sfântu Gheorghe had 860 inhabitants (on 1 July 2008) according to the Tulcea County Department of Statistics. Most of the inhabitants are fishermen, although local people are also involved in reed harvesting and cattle breeding. But the main trend of the local development is tourism, with provision of tourism services (traditional food, accommodation, trips) through local households.

THE SOCIO–ECONOMIC PROJECT

The goals of this case study were to help local people to: a) Identify exploitable natural resources within their area and to develop local products for visiting tourists or other markets; b) Develop a digital map of Common Sea-buckthorn (*Hippophae rhamnoides*) and Sand Morning Glory (*Convolvulus persicus*) in Sfântu Gheorghe.

The fruit and juice of Sea-buckthorn berries has potential applications in foods, beverages, health and traditional medicine. The Sand Morning Glory grows on sand dunes habitats along the Black Sea beach between Sf. Gheorghe commune and Sulina town, and is listed as endangered in The Red List of plant and animal species from The Danube Delta Biosphere Reserve, Romania (Dihoru & Negrean 2009) (See Figure 2).

An objective of the project was to bring together local community, stakeholders with interests within the region, and experts, with the aim of creating new community-based socio-environmental activity in the Danube delta, using the White sea-buckthorn to provide the local community with sustainable alternatives to sturgeon...