

INTEGRATED COASTAL AREA AND RIVER BASIN MANAGEMENT (ICARM): THE CETINA RIVER (CROATIA) CASE

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Coastal areas and river basins contain important natural environments that are used intensively by population. Modification of river drainage basins by human activity has led to dramatic changes in the flow of water and nutrients they bring to the sea. Marine eco-systems are harmed by careless land practices hundreds or thousands of kilometres upstream. While economic activities in downstream areas benefit from upland resources, the coastal areas often provide space for settlement and industrial developments that have a positive benefit for the wider basin area. These are some of the reasons why a scaled-up, integrated approach to coastal area and river basin management (ICARM) is needed. UNEP, in association with PAP/RAC, has produced such guidelines in 1999. Some of the basic principles of ICARM are: respect for the integrity of river basin and coastal ecosystems accepting limits on the use of resources; ensuring the strategic importance of renewable resources for socio-economic development; allowing for the multiple use of resources integrating complementary activities and regulating/separating conflicting ones; ensuring multi-sectoral and multi-level integration in decision-making while linking broad scale management to local level interventions; and allowing for participation of all actors particularly local population in the planning process to assure effective management.

A pilot project for the Cetina River in Croatia has been undertaken in 2000. Cetina is a relatively small river but it has all-important characteristics of a complex transboundary, socio-economic and environmental situation. It is located in the karstic area, with a watershed being spread over Croatia (1,200 km²) and Bosnia and Herzegovina (2,440 km²). The river is only 105 km long, but it is abundant with water: used for agriculture, energy production, and water supply (extending over to Dalmatian islands). Major environmental concerns include: pollution; pressure on water resources resulting in water shortages and water quality degradation; threats to river and marine living resources; degradation in the river basin resulting in changes in the river flow regime and changes to river banks, river pollution, landscape degradation, erosion and sedimentation; coastal degradation resulting in erosion, pollution, and loss of open space; modification of natural habitats; and other concerns such as problems associated with the energy production and mineral resources exploitation. After the presentation of project's major conclusions, an outline of the future activities will be given.