Limestone as the common denominator of natural and cultural heritage along the karstified part of the Adriatic coast

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The RoofRock Project is being implemented under the Adriatic IPA CBC Programme 2007, joining 10 partners from 4 countries: Slovenia, Italy, Croatia and Bosnia and Herzegovina. It focuses on interdisciplinary research of appearance, use and preservation of platy limestone as the linking element of the Adriatic karstic coastal region where it has been used for centuries as roof tiling, for construction of dry walls, shepherd cottages (kadum) and similar objects of cultural heritage.

The RoofRock intention is to establish joint platform for platy limestone sustainable use, preservation and promotion, to create the relevant guidelines and to upgrade both individual and joint capacities in preserving such common natural and cultural heritage along the karstic coast of the Adriatic Sea.

STUDY OF NATURAL STONE SOURCE AREAS

The basis for the detailed geological characterization of platy limestone over the entire project area between Trieste and Dubrovnik is the overview of all most important types of limestone used in architecture, list of the most important limestone quarries and cross-border harmonized overview geological map of building limestone at a scale of 1:250,000.

The most important geological activity is the detailed geological mapping of platy limestones. The result is a map of occurrence of platy limestones at a scale of 1:50,000 and definition and classification of platy limestones according to their sedimentary, stratigraphic and palaeontological characteristics. Estimation of their quality, quantity and exploitation potential was prepared as well. 25 selected showcase objects were studied in the project area. For each a detailed geological census of all types of limestones used for various architectural elements was made. Emphasis was put onplaty limestones, for which source areas were studied.

PLATY LIMESTONE

Findings indicate that along the Adriatic karstic coast highly diverse platy limestone types were used as roof tiles and other architectural elements. They differ in genetic, lithological characteristics and appearance in different stratigraphic horizons as well as in quality and possibility for extraction of limestone plates of different sizes and thicknesses.

CULTURAL AND NATURAL HERITAGE

Geological research as well as selection of showcase objects is being carried out in close cooperation with the project team dealing with cultural heritage conservation and architecture. Besides being an important element of cultural heritage, platy limestones are also important as natural heritage, with often diverse fauna and in particular rare, but well-preserved vertebrate fossils. All of these aspects are the basis for development of common legal and technical guidelines for preservation, sustainable use and re-use of platy limestones as a building material.

RESULTS

The results of research on showcase objects will be presented on a web application and mobile app, where it will be possible to acquire on site detailed data on limestone types in different architectural elements, occurrence of these limestones in nature, reserves and exploitation possibilities.