BioVernacular - Research Project Fact Sheet

Title of Project	**Innovative Methods for Protection and Conservation of Sustainable Design Elements of Vernacular Architecture in the Historic Centre of Nicosia - completed**
Project Acronym	BioVernacular
Funding Program	Project Technological Development and Innovation Δέσμη 2009-2010, Research Promotion Foundation, Cyprus
Project Identifier	ΑΝΘΡΩΠΙΣΤΙΚΕΣ/ΑΝΘΡΩ/0609/ΒΙΕ
Total Budget	100000 €
Starting – Ending Date	06/2012-08/2014
Consortium	1. Municipality of Nicosia, Coordinator (CY) 2. University of Cyprus (CY) 3. ICOMOS (CY) 4. Frederick Research Centre (CY)
Project Objectives	1. This research project explored innovative methods for the conservation and restoration of traditional buildings, giving emphasis on the preservation of the elements of their bioclimatic design, by identifying factors that contribute to a pleasant environment and thermal comfort. 2. A large number of traditional buildings within the historic centre of Nicosia were studied, with focus on the areas of Kaimakli and Chrysaliniotissa. The organic and typological structure of these buildings (orientation, ventilation, shading and lighting) and the choice of building materials were investigated. 3. Temperature and humidity measurements were recorded during the different seasons of the year in order to establish data tables for further analysis. Through these qualitative and quantitative recordings, the study aimed at identifying bioclimatic design principles and elements which have been applied, over time, in traditional structures. 4. Modelling and simulation of data led to the identification of various parameters which improve the energy efficiency of buildings. 5. The overall goal of the program was to highlight the environmental aspects of vernacular architecture and to design a set of guidelines and proposals for the proper restoration of traditional buildings, with emphasis on the maintenance/enhancement of bioclimatic characteristics and environmentally friendly approaches.
Work Packages	WP1: Project Management WP2: Project Dissemination and Exploitation of Results WP3: Database of bioclimatic parameters of vernacular buildings in the historic centre of Nicosia WP4: Recordings of temperature and humidity, benchmarking of recorded data, laboratory measurements to determine the main characteristics of the principle traditional materials. WP5: Modelling and Simulation of data WP6: Suggestions and Rehabilitation Proposals. Conclusions.
External References	http://www.biovernacular.ac.cy https://doi.org/10.1007/s41024-016-0021-6