Climate-Resilient Tourism Education: Developing a Competency Framework and Educational Model for Future Tourism Professionals

Assoc. Prof. Dr. Meltem Altınay Özdemir

Muğla Sıtkı Koçman University, Faculty of Tourism, Department of Tourist Guiding

Abstract

Climate change poses increasing risks to the tourism sector, affecting the use of natural resources, destination management, visitor mobility, and service delivery. These changes require tourism professionals not only to possess knowledge of sustainability but also to assess climate-related uncertainties and develop effective adaptation strategies.

This study aims to identify the competencies needed to strengthen the climate resilience of future tourism professionals and develop a practical educational model for integrating these competencies into higher education programmes in tourism.

The *Climate-Resilient Tourism Education Model* (CRTEM), developed through a literature-based approach, integrates the dimensions of knowledge, skills, mindsets, and values related to climate resilience within a holistic educational framework. The model incorporates problem-based and project-based learning, scenario and simulation exercises, fieldwork, data-driven learning, community-based approaches, and AI-assisted teaching methods.

In the empirical phase of the research, semi-structured interviews with tourism academics are planned to evaluate the core competencies and sub-competencies defined within the model. Based on the findings, a pilot course or training module will be developed and implemented with 30–40 third- and fourth-year undergraduate students enrolled in tourism programmes.

Pre- and post-intervention assessments will be conducted to evaluate changes in students' climate resilience competencies and the effectiveness of the educational module.

The main expected outputs of the study include a climate resilience competency framework, a practical educational model, a sample course module, and an assessment and evaluation approach. The model is intended to be adaptable to different higher education programmes in tourism and further developed in subsequent stages through contributions from industry representatives and international educational networks.

Keywords: Climate-resilient tourism, tourism education, climate competencies, higher education, CRTEM.

MİDUG Thematic Area: WP4 – Sustainable Tourism and Local Development.