

Kont, A., Jaagus, J., Orviku, K., Palginõmm, V., Ratas, U., Ravis, R., Suursaar, Ü., Tõnisson, H. (2011): Natural Development and Human Activities on Saaremaa Island (Estonia) in the Context of Climate Change and Integrated Coastal Zone Management. In: Schernewski, G., Hofstede, J., Neumann, T. (eds): Global Change and Baltic Coastal Zones, Coastal Research Library-Series, Springer, Dordrecht, Vol. 1, pp 117-134

Global Change and Baltic Coastal Zones

Chapter 8: Natural Development and Human Activities on Saaremaa Island (Estonia) in the Context of Climate Change and Integrated Coastal Zone Management

Kont, A.¹, Jaagus, J.², Orviku, K.¹, Palginõmm, V.⁴, Ratas, U.¹, Ravis, R.¹, Suursaar, Ü.³, Tõnisson, H.¹

(1) Institute of Ecology, Tallinn University

(2) Institute of Ecology and Earth Sciences, University of Tartu

(3) Estonian Marine Institute, University of Tartu

(4) Estonian Ministry of the Environment

Abstract

The coastal zone is a crucial environment that is experiencing pressure from a wide variety of different agents and interests. Many sandy beaches high in recreation value are suffering from increasing erosion, and the shoreline is receding in these areas despite of tectonic land uplift. Sediment deficit is evident in many places. One key problem in recent decades has been a rapid increase in the number of holiday houses built as close as possible to the seashore. Unlike in the Nordic countries, where major coastal settlement expansion took place after WWII, almost the entire coast of Estonia was, until 1991, proclaimed a Soviet border zone in which activities were strongly restricted. A revival in coastal land use and a rapid increase in coastal settlement have occurred over the last 15–20 years. This paper focuses on Climate Change impacts, natural and artificial changes on the coast of Saaremaa Island associated with increasing pressure and conflicting interests. We also examine the advantages and disadvantages of existing legislation regulating land use within the Estonian coastal zone in the context of integrated coastal zone management. The paper ends with an outlook.