

13th Esri India User Conference 2012



A Study On Pressure Areas In Indian Continent After Sea Level Rise Due To Global Warming

Sindhu swarna, P.Krishna Nihar & Hemant Angarkar

NIIT UNIVERSITY Neemrana Email: sindhu.swarna@st.niituniversity.in

Abstract

Global warming is the outcome of greenhouse effect and its consequences are world renowned. However one of the outcomes of Global warming is Sea level rise. Rate of sea level rise depends on factors like Glacier melt down and Thermal expansion. However, rate of these two variables is accelerated by anthropogenic activities. Based on projections made using these two variables until year 2100 AD, areas which will be pressurized due to shift of population to suitable location in Indian continent are studied. Migration of affected population was calculated on the variables like Urbanization rate, Effected Areas, Migration Rate. Also Loss of property estimation will be calculated. From SRTM data of Indian coast and Water tool of ERDAS software, area of submergence (Rise is calculated from figures of Glacier meltdown and Thermal Expansion) due to sea level rise was visualized. Most affected areas will be taken into consideration. A buffer will be put around affected areas and distance of buffer will be calculated using variables like Urbanization rate, Effected Areas, Migration Rate. It will further be used for prediction of pressure areas due to migration and population shift. Expected outcome of this study will be a map showing pressure areas where expected migrations will happen. Also estimated loss of property in coastal areas will be calculated.