



# ABSTRACTS

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## Heat Assisted Machining of Metals and Alloys Using Induction Heating Method

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### Keywords:

Climate change,  
Coastal community,  
Community resilience,  
Settlement pattern,  
Vulnerability

**Abstract:** Settlements in low elevation coastal zone (LECZ) of Bangladesh are exposed to the risk of sea born hazards at present and anticipated sea level rise (SLR) resulting from climate change. This will have serious impact on life and livelihood of coastal community including loss of habitable land. To arrest mass exodus of population, vulnerable community and groups need to be accommodated in places through local level adaptive measure. The present study is, therefore, an attempt to identify key vulnerabilities of coastal community in selected areas with an aim to set criteria for settlement planning and design responsive to climate change in general. Two village communities of Dhulasar union at Kalapara Upazila are selected for socio-spatial analysis of settlement vulnerability. Primary data about socio-spatial profile of the area including settlement pattern and built form, different aspects of vulnerability and present adaptive measures to cope with the risk have been collected from field survey. The study reveals that, the level of vulnerability within same geo-physical exposure is not alike and depends on the degree of community resilience i.e. the capacity of settlement component or community or groups to recover. In addition to the geo-climatic risk, the existing physical and socio economic condition of the dwellers including dispersed settlement pattern, transient nature of houses and poor access to services and shelter makes the coastal community most vulnerable. The study suggests that the vulnerability can be reduced by improving the community or group resilience through planned densification of settlement pattern and management of geomorphology and hydrological process of the context (allow natural siltation, afforestation, improve water drainage, rainwater harvesting etc).