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**HUMAN RISK DUE TO CYCLONE HAZARDS IN ORISSA:
A DISTRICT LEVEL ANALYSIS**

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ABSTRACT

Background: Orissa is a one of the eastern coastal state of Orissa affected by many natural hazards; cyclone is a one of the most devastating events among them. Although state have no major events happened after super cyclone 1999, but it past history told that cyclone hazards is most responsible events for human casualty as well as its property loss (1).

Objective: To assess the human risk of the cyclone at district level using multivariate linear regression analysis.

Materials & Methods: A multivariate linear regression analysis has been done to estimate the human casualty of the districts of the Orissa. For this purpose we have taken 12 explanatory variables while human casualty has been as a response variable. Secondary data from the government of Orissa, Census and UNDP have been used for this purpose.

Results: The observed data shown that the districts from the coastal regions contributes high human casualty and population exposure comparisons to others parts of the state. Model predicted human casualty shown a nonlinear relationship with recorded human deaths.

Conclusions: Results concludes that cyclone is an extreme event of the nature which impacts can't be predicted with 100% accuracy.

Key words – Cyclone, human risk, physical exposure hazards, disaster