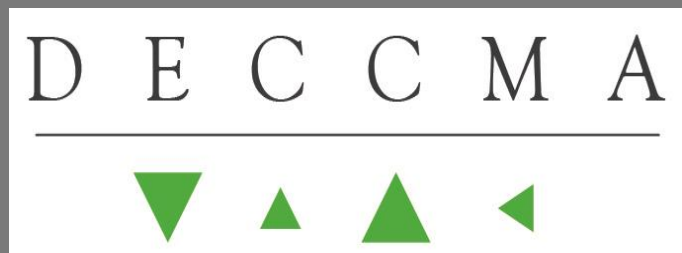




The Implication of Applying IPCC AR4 & AR5 Framework for Vulnerability and Risk Assessment in relation to Climate Change in the Indian Bengal Delta, India

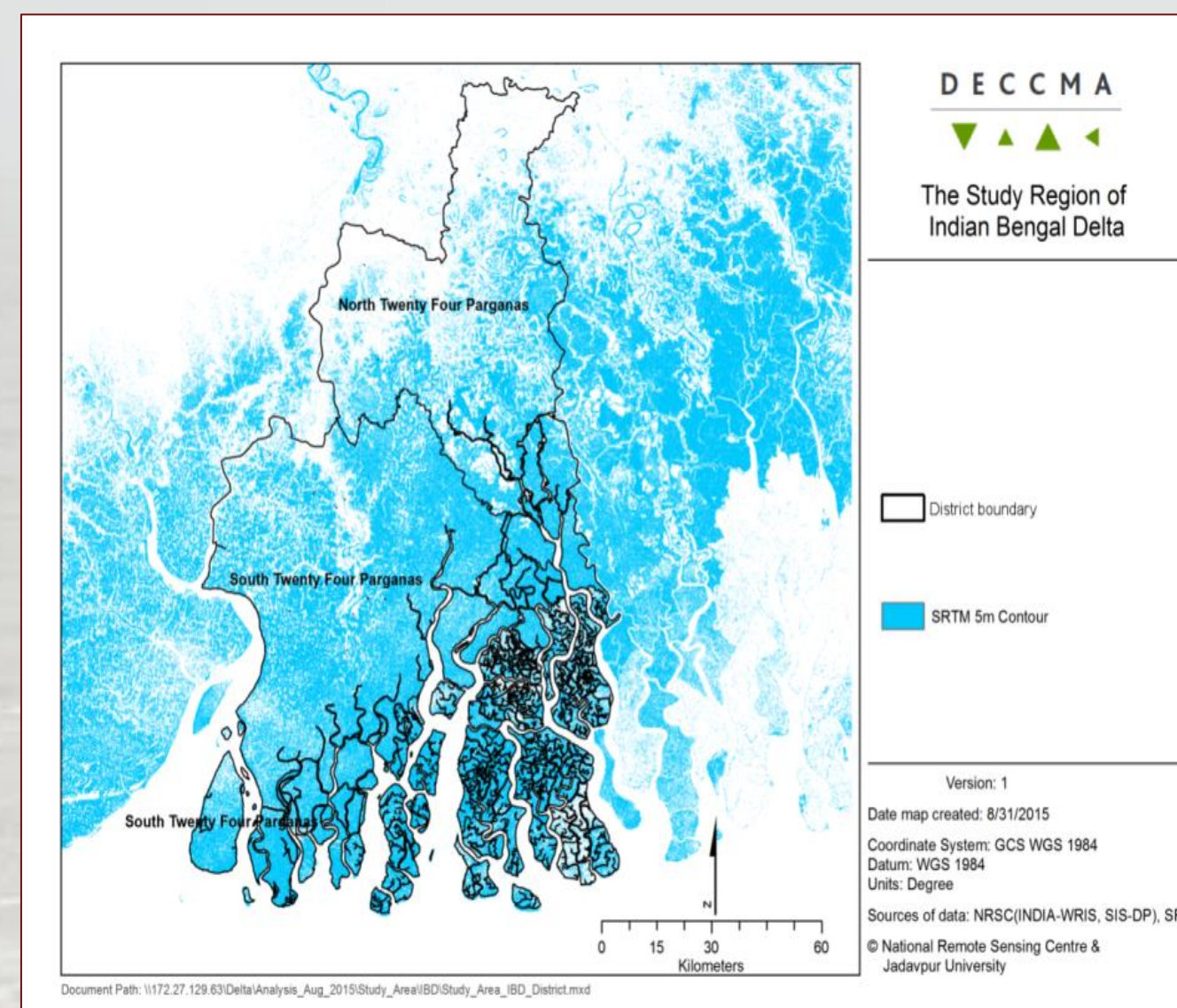
Shouvik Das** and Amit Ghosh (**Presenting Author)
School of Oceanographic Studies, Jadavpur University, India
DECCMA 4th Consortium Meeting, 2016



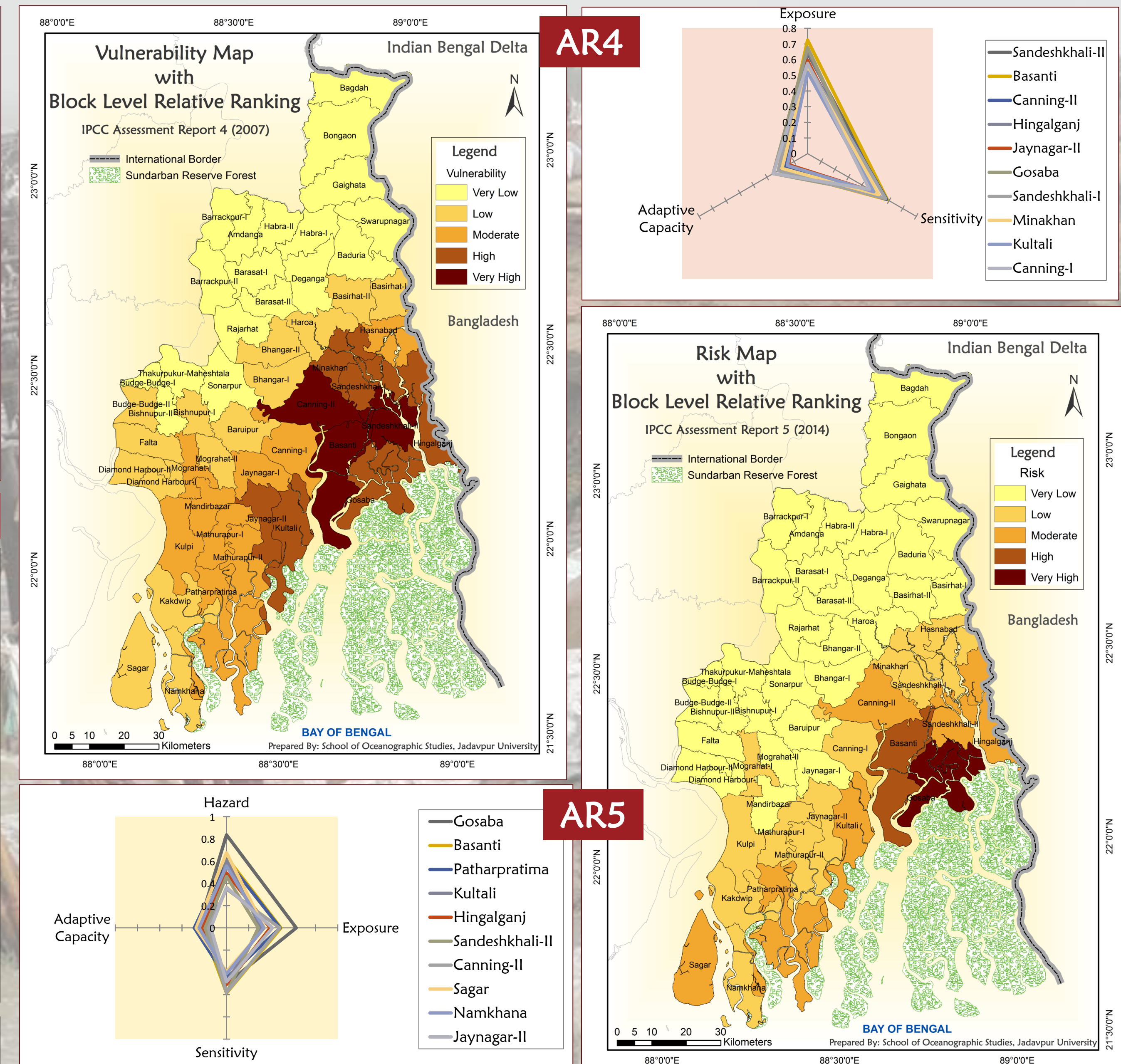
Introduction

- The term 'Vulnerability' is used by the disaster risk reduction (DRR) community.
- This is closer to the IPCC AR4's conceptual framework of vulnerability to climate change.
- The AR5 introduces a new approach and terminology which moves closer to the disaster risk concept.
- Therefore differs from the current understanding of vulnerability as expressed in the IPCC AR4.
- In this study **51 Community Development Blocks** of Indian Bengal Delta have been selected to make a comparison between these two frameworks.
- Different indicators have been selected according to the AR4 and AR5 frameworks to assess vulnerability (AR4) and risk (AR5).

Study Area



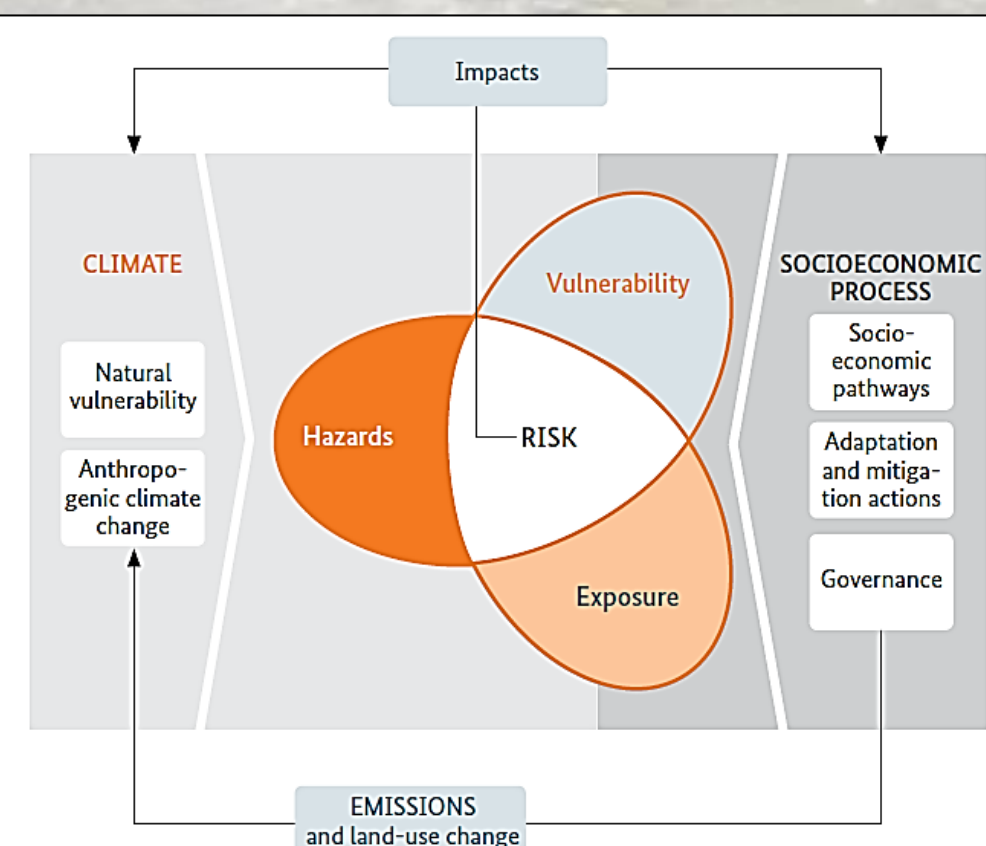
Results & Discussion



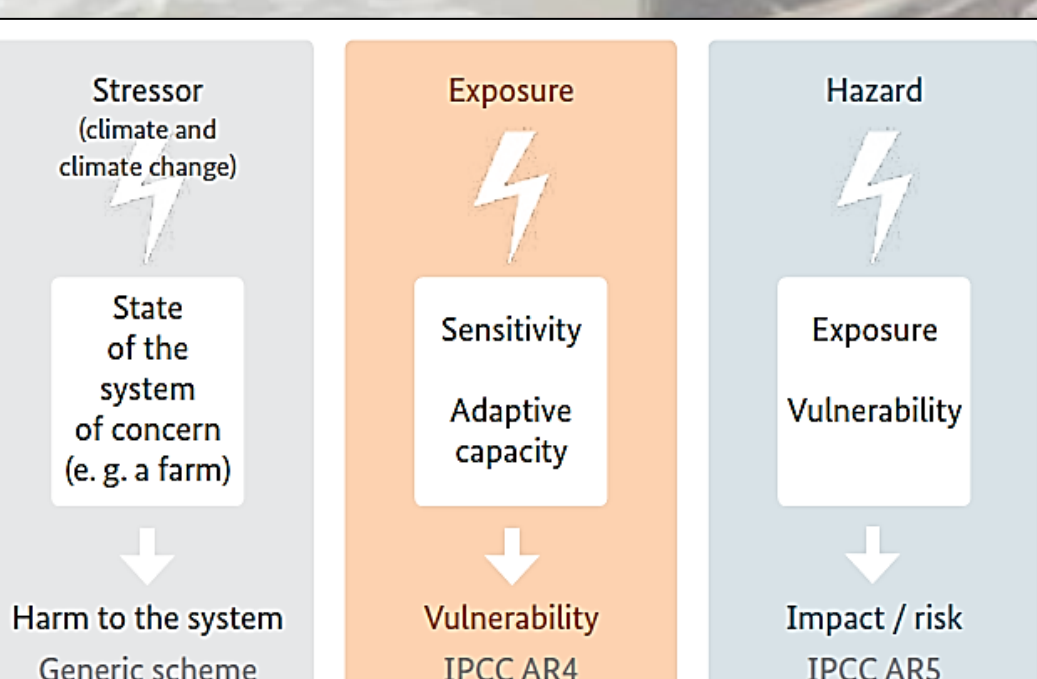
Methodology

Vulnerability = $f(E, S, AC)$
[AR4, 2007]

Risk or Impact = $f(H, E, V)$
or, $f(H, E, S, AC)$ [AR5, 2014]

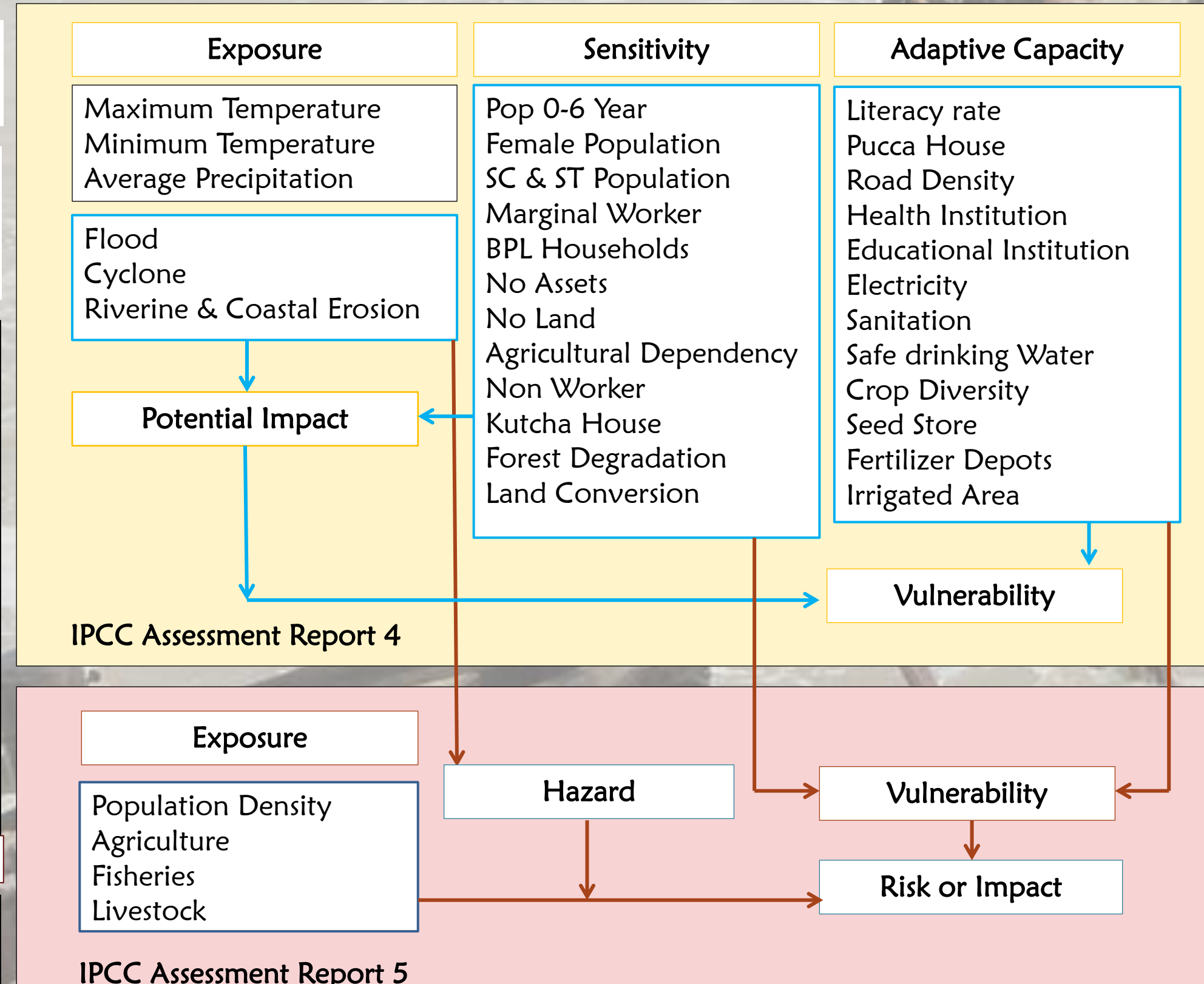


Source: IPCC AR5



Source: adelphi/EURAC 2014

Linking Concepts : AR4 & AR5



Conclusion

The efficacy of AR5 framework in assessing hazard specific risk zone is found to be more suitable to correlate with impacts such as human migration or in designing appropriate hazard specific adaptation options.

References

- Population & Housing Census, 2011, Census of India.
- The Vulnerability Sourcebook, EURAC 2014.
- 4th (2007) & 5th (2014) Assessment Report, Intergovernmental Panel on Climate Change, WGII



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