

# IMPACT OF CLIMATE CHANGE ON PERINATAL HEALTH IN SUNDARBANS, INDIA

**Introduction:** Climate change is a major public health threat, projected by WHO to precipitate a global surge of 250,000 additional annual deaths between 2030 and 2050. Evidence indicates that South Asia, particularly climate-sensitive regions such as Sundarbans in India, will experience some of the greatest impacts in seasonal variations mainly affecting already vulnerable populations (children and pregnant and lactating women) and increasing the burden of vector-borne and water-borne diseases.

Purpose of this research, conducted in collaboration with South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATeRs), was to assess impact of climate change on maternal, newborn, and child health (MNCH) in Sundarbans in India, while also evaluating current institutional capacity to handle climate-sensitive health challenges

**Methodology:** A combination of primary and secondary data was analyzed. Primary data was collected through a structured questionnaire across 410 households in 20 villages in Sundarbans, supplemented by in-depth interviews with key stakeholders (doctors, health workers, and community members) in 2022.

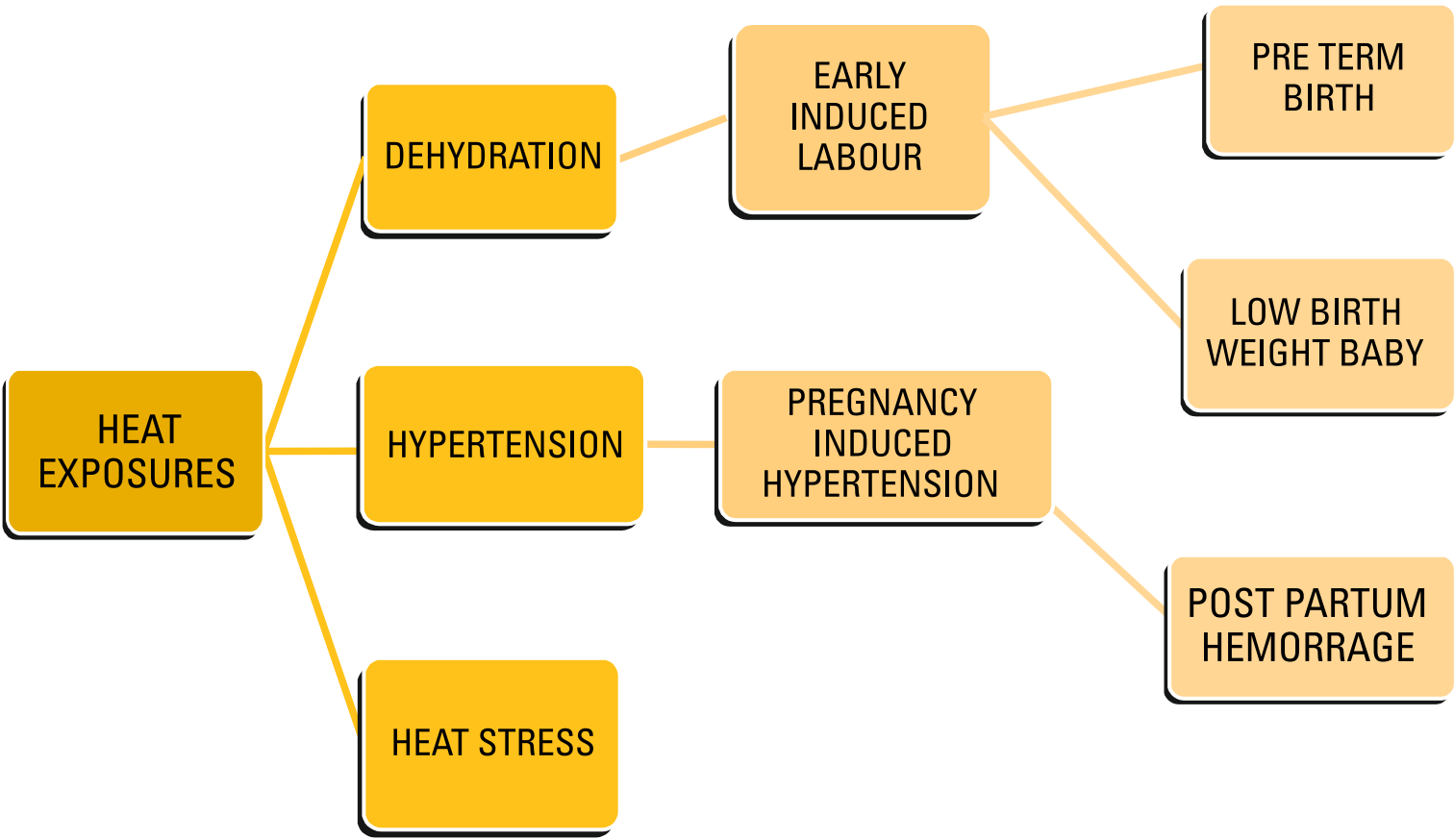
**Discussions:** Study findings indicate that health problems among newborns are more prevalent in areas with high exposure to extreme climatic events.

- The rates of infectious diseases as well as prevalence of malnutrition are significantly higher among children in more exposed regions. Along with children, pregnant women are at high risk of health-related complications during and after extreme weather events.
- Almost 36% of mothers experienced cyclones and floods during pregnancy. Of these, 95% reported difficulties to access healthcare during this period. Increased physiological and psychological stress, lack of access to health centres, interruption of prenatal care, lack of nutritious food with resulting high incidence of anaemia, and lack of access to water, sanitation, and hygiene (WASH) facilities are some of the challenges identified.
- Regarding adolescent girls, around 97% reported lack of privacy and access to menstruation care during climate induced crises. Difficulty in accessing effective sanitation and WASH facilities lead to increased risk of dermatitis, Urinary Tract Infections (UTI's) among others.
- Climate change was also found to indirectly affect maternal and child health through water insecurity (poor WASH practices, lack of clean drinking water) and food insecurity (increased soil salinization of ground water due to floods and low food productivity).



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## Key Recommendations are -

The quantification of climate change effects will help the health system to better prepare for their future impact.

Communities should be empowered and able to lead decision processes building resilience and taking care of their health needs during and after natural catastrophes.

Greater investment in research to demonstrate the link between climate change and health is required to support advocacy and health policy making.

Finally, it is imperative to develop decentralized person-centric strategies by engaging with local communities, to create sustainable mitigation-adaptation approaches to converge effectively between policies and action plans for the local Sundarbans population.

## Conclusion:

It is expected that climate change impact will get more severe and devastating in the future, especially for local populations living under vulnerable conditions. In such a case, rapid response is required to combat this major public health challenge. Greater evidence is also needed to strengthen the link between MNCH and climate change.

Poster Prepared and Presented by

- Mr Tanmoy Das: tanmoy.das@tdh.org
- Dr Bhishmaraj Srivastava: bhishmaraj.srivastava@tdh.org
- Dr Sreenita Mondal: sreenitamondal@gmail.com
- Ms. Shreya Chakraborty: shreya.ckr@gmail.com



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