Integrating climate in the health agenda

Climate and Health Workshop

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Is there a concern!

- Changes in weather and climate exert a major influence on human health
  - direct effects …….of extreme events such as heat waves, floods and storms
  - indirect influences …..on the distribution and transmission intensity of infectious diseases
- IPCC projects with high probability increase in human morbidity and mortality, associated with changes in temperature and precipitation patterns as well as with expected rise in the frequency and intensity of extreme events
- Tropics uniquely placed with high temperatures and its exposure to extremes….

Multiple challenges exist.....

- Huge challenges – population growth, standard of living, access to clean water & sanitation, improvements in health care, disease prevention and control programmes etc. further determine the magnitude of these climate-related health outcomes
- Who are the vulnerable?
  - **Populations at the margins** of the current distribution of diseases are predicted to be particularly affected
  - Health awareness and health seeking behavior of people is skewed, particularly in the **rural regions and especially among the socially backward sections of the society**
  - **Poverty and other forms of social disadvantage** translate into poorer health status of the **urban poor, slum dwellers, [illegible] tribal communities** .

Changes in climate parameters increase the risk of exposure to vector, water-food borne diseases or lead to mortality and morbidity associated with changes in intensity and/or frequency of extreme events.

Huge social & economic implications

Need for **targeted interventions** considering 'climate concerns and its influence on health…..'

The first and foremost requirement ….

- Undertaking assessments
  - Various methods adopted - **scenario based assessments, empirical disease models based on the current geographical distribution of climate-sensitive diseases, statistical assessments, and more recently integrated assessments.**
- Whereas,
  - spatial analysis can provide **insights into changing disease distribution**
  - temporal analysis estimates **change in disease rates, or in the probability of disease occurrence, for each unit change in the climate variable**

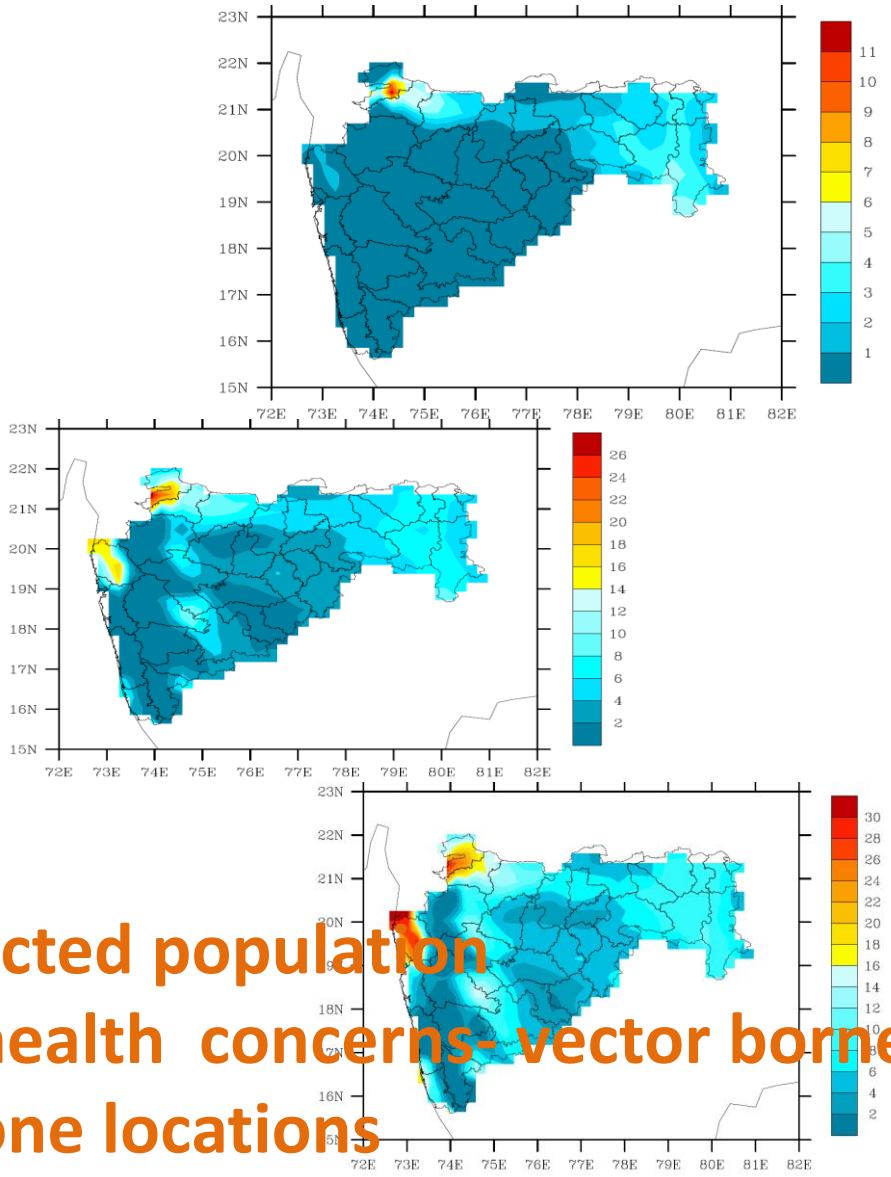
For instance, in case of malaria

Malaria transmission (via *P. falciparum*) in period between May to October for 3 time periods: Baseline (1971-2000); 2030s (2021-2040) and 2050s (2041-2060):

Average relative humidity varies between 55-80%

Three temperature (mean) classes with the following ranges:

- **Transmission Window Class I: 20-25 °C**
- **Transmission Window Class II: 25-30 °C**
- **Transmission Window Class III: 30-35 °C**



Identify priority areas and affected population for Interventions and related health concerns- vector borne diseases, heat stress, flood prone locations

Integration into the Climate Agenda (1)

- **Creating the right "Institutional Environment"**
- International – Restore international consensus on the issue, form alliances with international organisations and build a scientific case
- National
  - Bridging Science-Policy Gaps…..for informed decision making
  - Create a [Network/ Climate Advisory] Group comprising key institutions which periodically update the Government
  - Need for a Climate and Health Mission outlining/ prioritising areas of action
  - A committee has been constituted by the MoH&FW in early 2015 for assisting in the drafting of the Mission

Planned interventions undoubtedly critical to reduce risks associated with anticipated/ unanticipated changes in climatic conditions

Integration into the Climate Agenda (2)

- **Alignment** with **National/ State programs** on water and sanitation, such as the Total Sanitation Campaign, the Accelerated Rural Water Supply Programme, the Accelerated Urban Water Supply Program, the National Rural Water Quality Monitoring and Surveillance Program etc. can play central roles
- Expansion and improvements in water, sanitation and most importantly health care facilities, must be prioritized in regions with currently high rates of incidence of climate sensitive diseases or those with deficiencies in health care delivery
- Several actions identified under the SAPCC can be identified to be part of existing initiatives but requiring for example, an enhancement of scope, a change in direction or a renewed time plan for effective implementation.
- **Introduce** Region specific - **New Initiatives/ Programs** n

Integration into the Climate Agenda (3)

Recommended Actions

- *Strengthen monitoring and surveillance for climate-sensitive diseases*
  - Strengthen systems of disease surveillance & monitoring, health data collection……Improvements can take advantage of existing initiatives such as the IDSP wherein infrastructure/ institutional set up can be utilized
  - Lack of good quality and high resolution data makes it difficult to generate precise knowledge on current/ changing disease patterns……A good example is the need to improve the quality of epidemiological data in terms of the periodicity of collection and extent of coverage

Integration into the Climate Agenda (4)

- *Initiate focused research on "climate change and human health"*
  - *for identification and prioritization of vulnerable regions/ population groups to aid in informed planning and effective implementation of interventions*
- *Build capacity* through sustained measures
  - for capacity building, awareness creation and practical training *of health sector staff to increase awareness on and response capacity to potential impacts on human health*

Thank you.

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