#### Chapter 1

# Exacerbating Health Risks in India due to Climate Change:

# Rethinking Approach to Health Service Provision

Joyashree Roy

Jadavpur University, India

**Duke Ghosh** 

Global Change Research, India

Kuheli Mukhopadhyay

Jadavpur University, India and West Bengal State University, India

**Anupa Ghosh** 

The Bhawanipur Education Society College, India

#### **ABSTRACT**

While climate change is expected to exacerbate human health risks, it also provides an excellent opportunity for defining and implementing preventive actions. Developing nations like India, with low infrastructure facilities, limited resources, varied development priorities and, often with large population, are particularly vulnerable to health impacts - more so under the climate change regime. The greatest challenge facing the current Indian health service provisioning system is that it has to cater to the health service needs of its large population within a short time and with sustainable impact. Limited health 'cure infrastructure' (low per capita availability of doctor, hospital beds, etc.), lack of qualified health practitioners, absence of a strong monitoring system in disease surveillance and rising cost of 'cure infrastructure' are some of the major drawbacks of the existing system in India. There is therefore, a need for mainstreaming more preventive measures which will enhance human health resilience and make the population less exposed and more resilient to the predicted impacts of climate change. To provide preventive care to the Indian population, a paradigm shift in strategy is required. The new regime needs to emphasize on an integration of 'traditional preventive health care systems' with modern cure targeted pharmaceuticals and non-health sector interventions. Such a system is expected to reduce the long term demand for cure infrastructure and will provide a more holistic inclusive solution to the Indian problems.

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#### INTRODUCTION

Human health status determines individual and societal wellbeing. Climate change induced health impacts are expected to put additional stress on human wellbeing and equity through intra-generational and inter-generational health outcomes. Understanding the climate change-human health interaction is imperative for following a pathway of sustainable development. In India, there is paucity of evidence, assessment, research based knowledge and communication on climate change induced health risks, and intervention need assessments. Simultaneously, there is a fair degree of inadequacy in the infrastructure for provisioning healthcare services. In our view the gap will become critical in the face of emerging climate induced health risks in India.

Past research shows that the most important threat to India's sustainable development is poor performance in the health related indicator (Roy, Chatterjee, & Basak, 2008) (Roy, Bhowmick, & Dolui, 2014). Climate change will make it additionally worse due to the lack of preventive approach in the health sector (Roy & Netinder, 2010). In this perspective, we argue that, to ensure sustainable development in India and address the emerging health risks in a cost effective way, and for integration and strengthening of traditional scientific practices, there is a major need for development of a National Preventive Health Care Mission (NPHCM1) under the umbrella of NAPCC (National Action Plan on Climate Change). This mission mode can facilitate the sustainable development process in the country through targeted preventive actions that can reduce impacts on health and, to a large extent, reduce the accelerating pressure on the health infrastructure delivering cure-based solutions. The goal of this article is to develop the concept and arguments towards the development of NPHCM based on multi-disciplinary, multi-sectoral and multiple health systems approach. A holistic social welfare based system that combines the best approaches in

both traditional preventive and modern cure health systems and is governed by the socio-economic realities, is suggested.

#### **Research Strategy and Rationale**

This article is based on primary information gathered through expert consultations and data collected from secondary sources. The expert consultations are, by nature, unstructured and exploratory interviews. Experts with national and international experiences in the healthcare provisioning, healthcare policies, climate sciences, economic development, etc. have been consulted during the research process. Further, experts from both public and private sector, together with those from the bilateral and multilateral financing agencies have been interviewed.

We propose institutionalization of climate change induced disease category-wise multidisciplinary action research groups (ARGs). These ARG scan lead, plan and execute a holistic and preventive health care system. This will address climate change induced health risks in the country. With a goal towards sustainable development, the 2009 NAPCC and the Indian Network for Climate Change Assessment (INCCA) of the Government of India are providing a platform for multiple stakeholders to address climate change related problems in the country. However, there is no separate action plan to target reduction of health impacts in the NAPCC. We propose that given the dearth of strategy and the immediacy of the problem, addressing the issues related to health impacts in mission mode would have the advantage of expediting the action through planned steps and targets while, simultaneously, generating ample scope for large scale mobilization of finance from public and private sources as well as global adaptation fund to enhance resilience.

Climate data shows, unambiguously, a rising trend in the mean surface temperature of the earth. Recent projections under different representative concentration pathways (RCP) scenarios predict

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