Panel: Climate Change and Health - How Can ICTs be Harnessed for Awareness and Prevention?

The effects of climate change have become quite visible in recent years. The German Watch Institute regularly ranks Pakistan as one of the most impacted countries due to its effects. This is evident from the changing weather patterns such as temporal and spatial shifts in monsoon rainfall, frequent flood events, heat waves and prolonged droughts. The impacts are devastating for the country as livelihoods of millions of people are coming under duress. Moreover, there is a direct correlation between the climate crisis and health with increased incidences of vector-borne diseases such as Dengue.

Research shows a strong association between climate change and the prevalence of Dengue virus. Rising day time and night temperatures, as well as an increase in humidity and vapour pressure, allows the Aedes Aegypti, the mosquito carrying the Dengue virus to fester (Patz et al. 1998). As such, climate change is gradually increasing the land area that is climatically suitable to the devastating transmission of Dengue Fever ultimately jeopardising the human population (Hales et al. 2002). History of Dengue Fever in Pakistan is not that deep-rooted as it emerged in 1994, and then in 2005 in Karachi, but these were not extreme cases of epidemic proportions as has been witnessed in recent decades in central and northern Punjab with Lahore and Rawalpindi districts being significantly affected.

The prevalence of Dengue virus in the country poses new challenges for policy and decision-makers. Its increasing spread as an epidemic can be reduced by effective prevention and awareness campaigns. In this regard, the first step is to prepare a high degree of credible information regarding climate and environmental factors favourable to its spread, prevention tools and healthcare facilities and symptoms. The second step relates to timely and effective dissemination of information. A study in Pakistan about knowledge and awareness of Dengue Fever showed that only 38% have enough information (Itrat et al. 2008). There is a huge gap in awareness and knowledge of risk factors and prevention measures. Resultantly, it is the children and the elderly who are at grave risk (Van Benthem 2002).

It is in this context that this panel will explore the current as well as potential engagement of ICTs tools for the effective campaigns for information dissemination and policy measures to combat the Dengue epidemic in the country. Pakistan currently has more than 55 million mobile phone users. Furthermore, there is greater connectivity to the Internet through mobile and other devices that can help monitor and control this epidemic. As such, the proposed panel will explore the following questions related to climate change and health in Pakistan:

- What is the current state of knowledge about the relationship of climate change and the spread of Dengue epidemic among different public and private institutions and civil society organisations?
- How can ICTs be utilised to increase sensitivity (including information of weather variability) and awareness among masses of the Dengue epidemic and ensure timeliness compared to traditional sources such as television, radio, and newspapers?
- How can techniques and technologies such as GIS and remote sensing help in terms of combating the threat of Dengue virus in Pakistan?
References


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