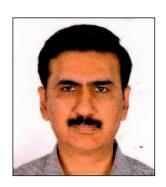
## **Perspective**

## "One-Health" from Ministry of Tribal Affairs (MoTA)



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India is among the top geographical hotspots where zoonotic diseases are a major public health issue causing high burden of morbidity and mortality specially in forest areas where mostly the Tribals resides. Zoonoses comprise a large percentage of all newly identified infectious diseases as well as existing infectious diseases. Some important challenges to advancing control of zoonotic diseases and their emergence from wild animals in India include the presence and dependence of large human populations in forests and on forest land, encroachment of stray animals such as dogs and cattle on wildlife habitat, overlapping and shared habitats of humans, livestock and wildlife, and the general lack of appreciation regarding occurrence and dynamics of zoonotic pathogens.

Factors such as climate change, deforestation, expanding human population and agricultural activities, and livestock revolution have led to an increase in interactions at the wildlife—human/livestock interface. This has resulted in an increased risk of emergence and re-emergence of wildlife related zoonotic pathogens in India in the last few decades, such as KFD, Nipah, Influenza, Plague and Leptospirosis. There is a lack of information on zoonotic pathogens present in wildlife and migratory bird populations except when they affect the human or animal populations in the country. Preventing the entry of wildlife related zoonotic pathogens into human and livestock populations is an important challenge for India.

Small-holder and tribal communities face a plethora of challenges including exposure to zoonotic disease risks that significantly constrain their livelihood opportunities and general wellbeing. Within this purview, there is a growing consensus in the 'One Health' literature that reducing vulnerability to endemic and emerging zoonotic diseases is heavily predicated on reducing poverty and existing socio-economic inequalities that impede the individual and collective agency of vulnerable groups.

In tribal areas majority of households do not express worry about contracting zoonotic diseases per se but echoes an underlying sentiment of helplessness in the face of adversity perturbed by the potential impact on their livelihoods and welfare, including loss of income, loved ones, caring for ailing relatives and limited access to medical care. Time is to focus on disease information as a potential determinant at the local level using evidence. This requires adequate and tailored policy and institutional support at the local level. Cross-sector collaboration in terms of wider information dissemination and support networks) are critical for bolstering adaptation for vulnerable groups in the face of emerging disease risks. This invariably requires more empirical evidence to explore the short and long-term impacts of adaptive practices by local stakeholders to better understand the scope and extent of vulnerability within and across groups, especially in forest communities highly dependent on forest-based resources for their livelihoods.

Surveillance using traditional as well as molecular approaches can help to better understand prevalent and emerging wildlife related zoonoses in the country. Close co-ordination among the Ministries will help in gaining the momentum for One Health. As these diseases are much higher in tribal population this One Health will serve and prove to be a blessing for the tribal people.

## **Perspective**

Though in the Indian context, the OH approach is strategically gaining importance from all stakeholders such as public health professionals, veterinarians, health-care providers, policymakers, and researchers. While animal-to-human transmission is a major threat in the country with several diseases such as avian flu, rabies, a major growing threat is from bovine tuberculosis which is on the increase. In addition, emerging zoonotic diseases are acquired through wild animals, and the OH approach should look into the wild zoonotic diseases also. The successful implementation of the OH model involves integration and collaboration between multiple sectors of agriculture, animal health, and human health. It is important that Coordination between physicians, veterinarians, and epidemiologists should be strengthened. Technology should be used effectively. Each district and state in the country needs to be linked through satellite to the designated national headquarters for collecting real-time data on the activity of pathogens and diseases.

Time is to work in close collaboration to carry out expansive research in the field to prevent and manage the threats of such pandemics. Health approach emerges as a beacon of hope, offering a holistic framework to address emerging infectious diseases and zoonotic threats is essential.

As we are heading towards a new era in public health, the NCDC's initiative to launch the E-Journal of "ONE HEALTH" represents a significant step towards fostering collaboration, disseminating knowledge, and advancing the collective understanding of this transformative paradigm. The importance of a One Health perspective cannot be overstated, especially in the context of our contemporary challenges.

The launch of the E-Journal of "ONE HEALTH" is a commendable stride and we congratulate NCDC, MoHFW for creating a dynamic platform for dialogue and knowledge exchange.