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**Risks , Vulnerabilities and Adaptations of livestock rearing communities living on the edge of forests of Southern India**

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**Abstract:**

**Background/Objective:** Livestock rearing communities living on the edge of forests are under risk from several zoonotic diseases especially vector borne. This paper looks at risks and vulnerabilities faced by pastoralist communities ( Dhangars ) in South India living in the heavily forested Western Ghats and examines adaptation strategies including seasonal migration.

**Methods**. Leptospirosis, Kyasanur forest disease( KFD) and Scrub Typhus are neglected zoonotic diseases prevalent in the forested areas of the Western ghats which go undiagnosed and unreported. Rapid land use changes, new cropping patterns and livelihoods are affecting how these diseases circulate. This study attempts to map disease prevalence and access to health care against a background of land use, livelihood and infrastructure changes. Methods of data collection include Participatory Rural Appraisal (PRA) , detailed household surveys, focused group discussions and photo-elicitation. Additionally, water samples and urine samples from livestock have been collected for detecting leptospirosis.

**Results** Initial findings have shown that loss of forests and other land use changes including emergence of cashew and areca plantations have led to the spread of KFD. There have been shifts in livestock species too. Communities have reported an increase in the prevalence of ticks much more than noticed before. Both mobile and sedentary pastoralists groups are equally vulnerable and have poor access to formal health care. Disease preventives such as vaccinations and diagnostic facilities are extremely limited and traditional knowledge systems are inadequate to deal with severe outbreaks.

**Conclusion:**

A one health approach calling for better understanding of disease risk to livestock owners from vectors , wildlife and domestic animals is important in suggesting disease prevention and management strategies which can be refined and developed by health providers. We expect our research and the findings to feed into guidelines for governments, local health providers and communities on disease risk and health-care access and into future surveillance regimes.

**Keywords:** neglected zoonoses, one health, zoonotic , leptospirosis, KFD, scrub typhus

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