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Knowledge, beliefs and perceptions of wildlife risks in rural Sri Lankan communities

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Sri Lanka is a densely-populated island in the Indian Ocean. The designated protected areas for wildlife conservation comprise 12% of the land area and contain a rich diversity of wild animal species of high ecological, economic and social value. The rural communities living around these areas rely predominantly on crops and livestock for their livelihoods, and have close interactions with wild animals. This study was conducted to identify the knowledge, beliefs and perceptions of such communities about risks to health and livelihoods from wildlife, such as zoonotic diseases and crop damage, to give affected communities a voice in setting research priorities at the beginning of a four-year research and capacity development program. Four National Parks (NPs) located in the low-country dry zone region were purposively selected, and at least two villages adjacent to each NP were identified for study. Workshops based on the principles of participatory rural appraisal were conducted with key informants in six villages, individual interviews using a semi-structured questionnaire were done with representatives in four villages, and focus group discussions were done with livestock/crop farmers in two villages and indigenous communities in two villages. The species of wild animals most associated with crop and property damage included elephant (*Elephas maximus*), giant squirrel (*Ratufa macroura*), wild boar (*Sus scrofa*), toque monkey (*Macaca sinica*), peafowl (*Pavo cristatus*), jungle fowl (*Gallus lafayettii*) and fruit bats (*Pteropus* and *Cynopterus spp*.). Zoonotic diseases of importance identified by participants, and the animal species implicated by them for transmission, included rabies from dogs, cattle and jackals (*Canis aureus*); leptospirosis from rats, cattle and buffalo; Japanese encephalitis from wild boar; and skin diseases (including Leishmaniasis) from dogs and jackals. Further studies are planned with communities in the up-country wet zone region and to explore the implications of community perceptions and misperceptions of disease transmission.

Keywords: Wildlife, Zoonotic diseases, Rural communities, Health and livelihoods, Risks