Zoonotic Diseases Encountered by Field Officers in the Wildlife, Domestic Animal and Human Health Sectors in Sri Lanka, and Current Limitations in Inter-sectoral Communication

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INTRODUCTION

Previous studies conducted by us with rural communities living in the vicinity of four wildlife habitats, namely the National Parks (NPs) of Uda-walawe, Bundala, Wasgomuwa and Maduru-oya (Figure 1) in the low-country dry zone region of Sri Lanka, revealed that several zoonotic diseases, which are transmitted from wildlife pose risks to human health and livelihoods in such locations.

The objectives of the present study were to conduct participatory workshops with field-level officers in the state sectors dealing with village administration, wildlife, domestic animals and human health to: (a) obtain information on the zoonotic diseases encountered over the past two years and the suspected modes of transmission; (b) clarify the procedures currently in place for obtaining, reporting and sharing information about diseases in wildlife; (c) identify gaps in the current mechanisms; and (d) make recommendations for improving communication among stake-holders at the grass-roots level.

Figure 1: Map of Sri Lanka indicating the locations of four National Parks (NPs) selected for the initial studies
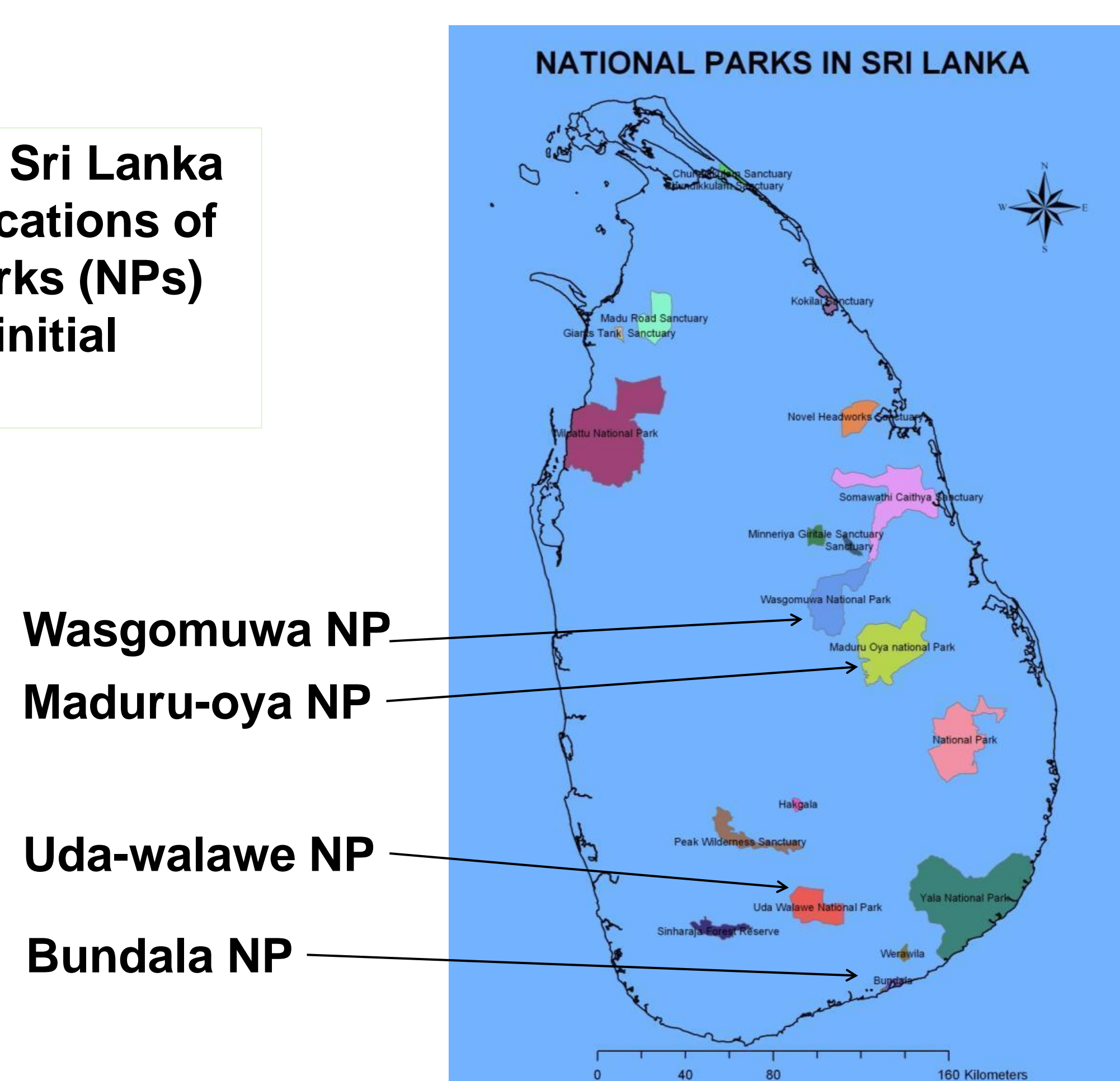
METHODS

Two participatory workshops were conducted with field officers in state institutions that provide regulatory and support services to rural communities in village administration, wildlife conservation, livestock development and human health. The first was conducted at Ratnapura (n= 41) for officers working in areas bordering the Uda-walawe NP, and the second was conducted at Mahiyangana (n=57) for officers working in areas bordering the Wasgamuwa and Maduru-oya NPs. The workshop activities (Figure 2) included presentations on the objectives of the workshop, moderated structured discussions to obtain information and opinions, completion of a questionnaire by each participant, and rafting of conclusions and recommendations.

RESULTS

- The main zoonotic diseases identified as being important in both regions were: Rabies, Leptospirosis, Japanese Encephalitis, Tuberculosis, Leishmaniasis, Typhus (Rickettsioses) and Brucellosis.

- The major limitations identified in the current procedures were: {a) reporting of diseases or deaths among wild animals, domestic animals or humans was done separately for each sector; (b) mechanisms for responding to a reported disease outbreak were also mostly sector-based; and (c) lack of a mechanism for inter-sectoral communication between those dealing with village administration, wildlife, domestic animals and human health.

- The recommendations from participants were:

  (a) to establish Divisional Zoonotic Disease Committees with representation from all sectors; (b) involve village communities in the reporting of diseases and deaths among wild and domestic animals; (c) introduce a modern electronic reporting and communication system (e.g. based on the internet and mobile phones); and (d) provide timely feed-back, with information shared among all stakeholders in "One Health".

CONCLUSIONS

- There is an urgent need to set up a network for communication on wild animal diseases and deaths, involving all stakeholders at the village level.

- The recently established Sri Lanka Wildlife Health Centre can play a key role in coordinating activities between these sectors for surveillance, diagnosis, reporting and responding to zoonotic diseases.

Figure 2: Presentations and discussions during the workshops