HUMAN-CROCODILE CONFLICT IN SRI LANKA: WITH SPECIAL REFERENCE TO THE NILWALA RIVER AREA IN MATARA DISTRICT

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ABSTRACT

This study intended to explore the human-crocodile conflict in Sri Lanka. The Study was mainly based on primary and secondary sources. Primary data was collected from semi-structured interviews. Sample size was consisted of thirty five respondents including District Secretary, seven Divisional Secretary belonging to the Kotapola, Pitabeddara, Akuressa, Athuruliya, Kamburupitiya, Malimbada and Thihagoda Divisional Secretariats, eight Gama Niladari, two officials from Disaster Management Coordination Unit, ten households to get their insights about the traditional methods used by people and two civil society leaders. Collected data from different sources, as mentioned above was analyzed using qualitative methods. The study found that sand mining, population rise, using the river for daily needs such as drinking, bathing, washing clothes and fishing, unauthorized buildings in the river bank, scrub jungles, slow flowing of river are the major causes of the human-crocodile conflict in Nilwala river area. The study further found that Piladuwa, Fort and Thihagod are the most vulnerable areas for human-crocodile conflict. "Kimbulkotuwa" or Crocodile Excluding Enclosure (CEEs) is a main method used to mitigate the human-crocodile conflict in this area.

Keywords: Human, Crocodile, Conflict, Mitigation, Nilwala River, Poverty

INTRODUCTION

Human and crocodile have been coexisting for many years in Sri Lanka, particularly close to the Nilwala river area in Matara District, but fatalities were rarely reported. However, during the last decade the threats from crocodiles to humans have enhanced in the Nilwala river area, mainly during the years of 2005, 2008, 2009, 2012 and 2013. Some 23 attacks, killing 17 humans by saltwater crocodiles were recorded since 2000 in this area (Nizam 2013 and Samarasinghe 2013). In retaliation to these attacks, people in this area killed several crocodiles, and recorded the salt water crocodile under the threatened category in Sri Lanka (De Silva 2008 and Whitaker & Whitaker 1979). Therefore, it is a worth to form a dialogue in the Sri Lanka to mitigate human-crocodile conflict in the Nilwala river area.

OBJECTIVES OF THE STUDY

An overall objective of this study is to explore the human-crocodile conflict in Sri Lanka. In line with this, following are the specific objectives; to analysis the major causes of the human-crocodile conflict in Nilwala river area, to identify the most vulnerable areas for human-crocodile conflict, and to identify the traditional and modern methods used to mitigate human-crocodile conflict in Nilwala river area.

METHODOLOGY

The Study was mainly based on primary and secondary data. Primary data was collected through semi-structured interviews. Sample size was consisted of 35 respondents including District Secretary, 7 Divisional Secretary belonging to the Kotapola, Pitabeddara, Akuressa, Athuruliya, Kamburupitiya, Malimbada and Thihagoda Divisional Secretariats, 8 Gama Niladari, 2 officials from Disaster

Management Coordination Unit,10 households to get their insights about the traditional methods used by people and 2 civil society leaders. Beside that content analysis was employed to gather secondary data such as published books, research reports, symposia proceedings, journal and newspaper articles and internet. Collected data from different sources, as mentioned above were analyzed using qualitative methods. Geographic Information Systems (GIS) technology was used to indicate the spatial distribution of human-crocodile conflict in this area, and it was presented using maps, texts, tables and figures.

RESULTS AND DISCUSSION

The study found that sand mining, population rise, using the river for daily needs such as drinking, bathing, washing clothes and fishing, unauthorized buildings in the river bank, scrub jungles, slow flowing of river are the major causes of the human-crocodile conflict in Nilwala river area. The study further found that Piladuwa, Fort and Thihagodare the most vulnerable areas for human-crocodile conflict. "Kimbulkotuwa" or Crocodile Excluding Enclosure (CEEs) is a main method used to mitigate the human-crocodile conflict in this area. The CEEs is categorized into 3 main types such as traditional CEE, secure CEE and metal and wire CEE.

CONCLUSION AND RECOMMENDATIONS

This study was a qualitative study on the human-crocodile conflict in the Nilwala river area in Matara District. This study was considered major causes of human-crocodile conflict, most vulnerable areas for human-crocodile conflict and main methods used to mitigate the human-crocodile conflict in this area. The study revealed that sand mining, population rise, using the river for daily needs such as drinking, bathing, washing clothes and fishing, unauthorized buildings in the river bank, scrub jungles, slow flowing of river are the major causes of the human-crocodile conflict in Nilwala river area. The study further revealed that Piladuwa, Fort and Thihagodare the most vulnerable areas for human-crocodile conflict, "Kimbulkotuwa" or Crocodile Excluding Enclosure (CEEs) is a main method used to mitigate the human-crocodile conflict in this area. To mitigate this conflict, the study recommended that introduce alternative water sources like government water supply to households, bathing tanks, introduce poverty alleviation and community development programmes, conduct awareness programes targeting public, schools and tourists (local and international), formulate and implement national mitigation plan for address this conflict and conservation crocodiles in Sri Lanka.

REFERENCES

- De Silva, Anslem. (2008). The Status of the Saltwater Crocodile (*Crocodylus Porosus*) Inhabiting the Nilwala River, Matara District and Its Impact on the Community. [Online] Available from: http://www.iucncsg.org/365_docs/attachments/protarea/cp_sc6223ecb.pdf. [accessed on 13th November 2014]
- Nizam, Ifham. (2013) Containing the Human-Crocodile Conflict. In the Island. [Online] Available from: http://www.island.lk/index.php?page_cat=article-details&page=article-details&code title=93486. [accessed on 9th November 2014]
- PoreR, J. D. (1999) Crocodile Survey and Public Relations Program. Crocodile Specialist Group Newsletter. Pp. 9-10.
- Samarasinghe, D. J. S. (2013) The Human-Crocodile Conflict in Nilwala River: A Social Science Perspective. In Crocodiles. Proceedings of the 22nd Working Meeting of the IUCN-SSC Crocodile Specialist Group. Gland, Switzerland.
- Santiapillal, C. & De Silva, M. (2001) Status, Distribution and Conservation of Crocodiles in Sri Lanka. Biological Conservation. Pp. 305-318.
- Thorbjarnarson, J. (1992) Crocodiles: An Action Plan for Their Conservation. Switzerland: IUCN, Gland. Pp. 136.
- Whitaker, R. & Whitaker, Z. (1979) Preliminary Crocodile Survey in Sri Lanka. In Journal of the Bombay Natural History Society. Bombay: Natural History Society. Pp. 66-85.