

**Proceedings of
Seminar on Human-wildlife Conflicts in S Bengal and Evaluation of the
Elephant Research Study
Aranya Bhawan, 15 June 2017**

Intent of the Seminar

The daylong seminar on Human-wildlife Conflicts in South Bengal and Evaluation of the Biodiversity Research Studies on ecology of Elephant in South Bengal was organized to disseminate the preliminary findings of the Research Studies and to make course corrections of the studies required, if any.

It was also an opportunity to understand the non-elephant wildlife species that come in conflicts with humans. There are a good number of species involved: Hyena, wolf, jackal, langurs, civet cat, fishing cat, wild boar, bear, snakes etc are the species involved.

List of Participants

The list of participants is enclosed as Annexure -1

Structure of the Seminar

There were three sessions –Inaugural Session and Technical Session-I and Technical Session-II. The Inaugural Sessions included the formal opening of the seminar. This was followed by Technical Sessions comprising Keynote address and Technical Presentations on five research topics, by the research organizations including interactions with the participants.

The Seminar proceedings started with an inaugural session, followed by two technical sessions.

INAUGURAL SESSION

Welcome Note by the Chief Project Director WBFBC Project

The Chief Project Director, WBFBCP welcomed the gathering and briefed on the scope of the seminar. He underlined the importance of the comments and feedback from the officers of the FD especially those from the field. Course corrections if any needed could be made by SACON. He also mentioned it was important to discuss the issues relating to other mammals in South Bengal.

Address by the PCCF, Wild life & CWLW, W.B.

The PCCF & CWLW mentioned that the SACON study is important especially since no serious long term research studies on the human elephant conflict issue in South Bengal have been done in the past. There was a proposal to declare a Protected Area in the region under the WLPA but that has been shelved. Other conservation programs will be continued in the region.

Inaugural Address by the Principal Secretary Forest Dept & Chairperson WBFBC Society

The Principal Secretary, Forest Department and Chairman of the Society, in his inaugural address, said that the research outputs will provide

valuable input to the management interventions in the field, rather than being a mere academic exercise. We need to know about the fodder needs of the Elephant, its behavior patterns etc. in order to have better management practices. He noted that the number of deaths caused by Elephants has significantly come down this year but even the 31 deaths reported so far are high and must have measures to address this effectively and he hoped that the research input would be important for this.

Address by the PCCF General

The PCCF General noted the past study conducted by Mr. Susanth Chaudhari and a few other technical reports on the subject. It is important to determine the exact food preference of Elephant, like whether or not and to the extent it feeds on Sal bark.

TECHNICAL SESSION-I

(To evaluate 1 year study of SACON on Ecology of Elephant in S.Bengal.)

In Chair : Shri R.K.Sinha, PCCF, W.L & CWLW, W.B.

Keynote address by the Project Director, Finance, WBFBCP

This session was started with an introduction by the Project Director, Finance of the PMU. This research was part of the six biodiversity research projects under the WBFBCP and the review of the one year research results of the elephant project is important. Copies of the past reports and the current one year report have been sent to the Monitoring and Evaluation Committee he sought the comments on the SACON work in order to be able to further improve the study.

Address by the Biodiversity Conservation Specialist PMC WBFBCP

The Biodiversity Conservation Specialist PMC WBFBCP briefed on the background and scope of the SACON study. He emphasized the circumscribed ecological condition of the area as an elephant habitat and the issues related to interstate elephant movements makes the elephant conflict far more complex in South Bengal than in other parts of the country and the SACON study therefore is crucial in eliciting scientifically robust management information.

Presenter : Dr. Honnavalli Kumara, SACON

Dr. Kumara, SACON, made his presentation on the one year of study, based on the first year report submitted to the PMU. The transect survey in Mayurjharna Elephant Reserve at 15 transects of 2 km length obtained no elephant sightings. He explained the methodology for dung decay analysis and dung pile count to estimate elephant population and it worked out to be 0.508, which is not a reliable estimate, and he explained that the problem was due to the habitat condition of South Bengal where the movement of elephants are not the result of a natural pattern as in other areas. He also explained the development of shape files with forest mapping for two Divisions that they have made and also mentioned the difficulty in obtaining

shape files from the FD. He requested to provide the shape files of all the five Divisions of South Bengal.

The analysis of 41 cases of elephant caused deaths was presented- the times of deaths and locations of deaths were discussed. 120 elephants were opportunistically counted, but not analysed. Proposed the need for capture-recapture method for population estimate. The migratory roots of elephants given in the draft report has been removed in the final report as suggested The Biodiversity Conservation Specialist PMC ,as the routes mentioned have to be systematically verified.

Viewpoints /Decisions/Suggestions

- (i) The presentation was followed by lively discussion. Some key points emerged:
- (ii) The Principal Secretary, FD and the PCCF, WL & CWLW confirmed that the shape files could be shared and asked the officers to share information with the research team, especially regarding elephant depredations as it is in the interest of the FD.
The Principal Secretary, FD, has suggested to add the locations of the incidents to the projection of the timing of occurrence of deaths. The OSD, FD, mentioned that the 9-12 am peak of attacks was unlikely and suggested to re-examine, also important to determine how the cases happening in the forests and outside forests.
- (iii) The PCCF, W.L & CWLW suggested the inclusion of all cases in the analysis rather than sample. DFO Midnapur mentioned that most cases of deaths happen due to attacks while on open defecation.
- (iv) The PCCF, W.L & CWLW suggested that the impact of the multiple mitigation measures being taken by the FD should be considered by the research team in formulating new mitigation measures.
- (v) The OSD, FD, mentioned that the season of elephants in Mayurjharna ER may be considered, the movement happen there mostly after the month of July. Besides, transects may be laid in other areas as well as the reserve is 400 km².
- (vi) The Director, SBR, suggested to determine the resident/non-resident status of elephants in each Division. It could also be possible to identify whether the elephants involved in depredations are domestic or migratory.
- (vii) The PCCF General asked the chairman of the Elephant Monitoring Network to add the phone numbers of the SACON researchers onto their network. Similarly they may be connected to the hula parties as well.
- (viii) The CCF/South West Circle suggested to consult a previous PhD study done in the area, there was another study by a geography scholar as well.
- (ix) The DFO Midnapur told of their experience of planting three undergrowth species preferred by Elephants in the Sal forests and this has helped reduce elephant depredations in the area. Similar planting may be undertaken within the WBFBCP.

- (x) The Biodiversity Conservation Specialist, PMC, WBFBCP, pointed out issues in the calculation of dung decay rate, and to methodologically approach the opportunistic sightings to estimate population.
- (xi) Most of the Committee member of the Biodiversity Monitoring Committee were present in the seminar. The mode of presentation had been designed to incorporate the comments made during the presentation as the comments of the evaluation committee. It would be appropriate to issue the proceedings as the deliberations of the committee itself.
- (xii) The PCCF, WL. & CWLW has suggested to incorporate the following points for the study of ecology of elephant in south Bengal.
 1. The study team should be given the .shp files of the study area right away. JICA PMU may coordinate with CF, WL (HQ) for the same.
 2. The study may indicate the routes and transit times of elephants in Mayujharna ER.
 3. Sample transects have not covered the whole of Mayujharna ER. Number of sampling transects may be increased.
 4. As the dung decay method is not suitable in this study area due to the elephants being driven to combat depredation, either the survey should be done in one day, or collect the census data of the forest dept.
 5. Estimation should be done in all seasons.
 6. The pattern of human deaths should also be analysed for forest / non forest area, type of activity the person was engaged in.
 7. Analyse the existing mitigation measures and their impact.
 8. Recognize and record the resident elephants.
 9. Comments of other committee members may also be sought at the earliest.
- (xiii) ***In conclusion, Dr. Kumara, SACON, offered to take on board the constructive suggestions.***

Technical Session II
Open Discussion on Wildlife Management Issues in S Bengal
In Chair : Dr. R.P.Saini, IFS, Director, SBR

The discussion was on the non-elephant wildlife species that come in conflicts with humans. There are a good number of species involved: Hyena, wolf, jackal, langurs, civet cat, fishing cat, wild boar, bear, snakes etc are the species involved. The chair mentioned that there are several species involved and the capacity for managing the conflicts are limited and this needs to be improved. The floor was opened for officers from the field.

Several officers mentioned the need for following the calendar of tribal traditional hunting to curb the illegal hunting.

- (i) The DFO, Purulia, mentioned that hyena is the main problem there, detection of hyena carcasses has confirmed the presence of

species in the Division. Bear is found in certain pockets in the Division and attack occasionally although these cases are not much publicized as the people have a tolerant view towards the animals. Jackal and wolf are also problem here.

- (ii) ***There was consensus on the need to study the mammals of S Bengal and it was suggested that a proposal may be submitted to PMU for funding from the WBFBCP under its contingency. The Addl. PCCF/ Wildlife was asked to prepare the proposal. The Director, SFR, WB mentioned about a discussion he had with ZSI on a small mammals study in S Bengal.***
- (iii) The Principal Secretary, FD, has clarified that wild boar depredations can be compensated. The CCF/ Western Circle called for the proper control of NGOs if and when their services are used. The DFO, South has mentioned that langur, civet cat, etc. are the main problems there. The rhesus problem there is escalating. The reintroduced population of spotted deer in Bankura has now grown to 500 animals, after 20 years.
- (iv) ***The CPD PMU explained the funds being provided for addressing the small mammals conflicts under the project, and called on the DFOs to utilize the same.***
- (v) ***It was suggested to prepare and publish a booklet/manual on how to tackle the animal conflicts under WBFBCP.***
- (vi) The chair called for the suggestions for the revision of the calendar. He also called for further capacity building of the staff by utilizing the funds currently available.
- (vii) The OSD, FD, complimented PMU for organizing such a discussion and called for a rapid assessment of the populations of the small mammals.
- (viii) The Biodiversity Conservation Specialist PMC informed of the provisions under which support is provided under the project. He proposed a vote of thanks.

APPROVED


Principal Chief Conservator of Forests
Wildlife & Chief Wildlife Warden
West Bengal

List of Participants of Seminar on Elephant-Human Conflict & Evaluation of Biodiversity Research Studies on 15th June, 2017 at Conference Hall, Aranya Bhawan at 10:30 A.M.		
SI No	Name	Designation
1	SHRI C.SINHA, IAS	PRINCIPAL SECRETARY, FOREST DEPARTMENT, GOVT OF WEST BENGAL
2	SHRI D. BISWAS, IFS	PCCF, RESEARCH, MONITORING AND DEVELOPMENT
3	SHRI N.K.PANDEY, IFS	PCCF, GENERAL, WB
4	SHRI S.BARARI, IFS	PCCF & CHIEF PROJECT DIRECTOR. WEST BENGAL FOREST AND BIODIVERSITY CONSERVATION PROJECT
5	SHRI P. VYAS, IFS	OSD, FOREST DEPARTMENT, WB
6	SHRI RAVI KANT SINHA, IFS	PCCF & CWLW, WB
7	DR. R.P.SAINI, IFS	DIRECTOR, SUNDARBAN BIOSPHERE RESERVE
8	SHRI S. SUNDRIYAL, IFS	APCCF, WILDLIFE
9	SHRI.S.CHAUDHURI, IFS	CCF & PROJECT DIRECTOR (FINANCE), WEST BENGAL FOREST AND BIODIVERSITY CONSERVATION PROECT
10	SHRI. K.L.GHOSH, IFS	CCF & PROJECT DIRECTOR (M&E), WEST BENGAL FOREST AND BIODIVERSITY CONSERVATION PROECT
11	SHRI S.S.DEY, IFS	CCF, WESTERN CIRCLE
12	SHRI S.P.YADAV, IFS	CCF, CENTRAL CIRCLE
13	SHRI D. RAY, IFS	CCF, SOUTH-WEST
14	SHRI K. DAS, IFS	CCF, SOUTH-EAST
15	SHRI S. SENGUPTA, IFS	CF, WL HQ
16	SMT S.BHATTACHARYYA, IFS	CF & ADDL. PROJECT DIRECTOR (IMPLEMENTATION), WEST BENGAL FOREST AND BIODIVERSITY CONSERVATION PROJECT
17	SHRI R.N. SAHA, IFS	DFO, MIDNAPUR DMU
18	SHRI A.MUKHERJEE, IFS	DFO, KHARAGPUR DMU
19	SHRI D.M.PRADHAN, IFS	DFO, BANKURA SOUTH DMU
		DFO, BANKURA NORTH DMU
20	SHRI HARI KRISHNAN, IFS	DFO,BIRBHUM DMU
21	SHRI A. SENGUPTA, WBFS	DFO, RUPNARAYAN DMU
22	SHRI N.PANDA, WBFS	DFO, PANCHET DMU
23	SHRI M. K. MANDAL, WBFS	DFO,DURGAPUR DMU
24	SHRI H.N.KUMARA, Ph.D	SENIOR SCIENTIST, CONSERVATION BIOLOGY, SACON
25	DR. S. FAIZI	BIODIVERSITY CONSERVATION SP
26	SHRI S.MAJUMDAR	ADFO/JHARGRAM DMU
27	SHRI M.S.HAZRA	ADFO/MEDINIPUR DMU
28	SHRI B.MONDAL	ADFO/BANKURA NORTH DMU
29	Dr.ANUPAM KHAN	ADFO/PANCHET DMU
30	SHRI S.CHAUDHURY	ADFO/BKSD
31	SHRI TIYAS BHANJA	A/O RUPNARAYAN DMU
32	SHRI BIJAN KR NATH	ADFO/BIRBHUM DMU

