



Government of West Bengal
Directorate of Forests

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No. 288 /CS/2M-991

Dated: 09.04.2019

To : (1) Shri Rana Dutta, DFO, Nadia-Murshidabad Divn.
(2) Shri Angsuman Mukhopadhyay, DFO, 24-Pgs (N) Divn.
(3) Shri Santosha G R, DFO, 24-Pgs (S) Divn.
(4) Shri Harikrishnan, DFO, Birbhum Divn.
(5) Shri Debasish Sharma, DFO, Burdwan Divn.
(6) Shri Jiju Jaesper J, DFO, Darjeeling Wildlife Divn.

Sub : Management Effectiveness Evaluation of National Parks and Wildlife Sanctuaries.

Sir,

Govt. of India, MoEF & CC, asked the Wildlife Institute of India to undertake Management Effectiveness Evaluation of different National Parks and Wildlife Sanctuaries in India. The Wildlife Institute of India constituted committees of eminent Wildlife experts all over the country. In the state of West Bengal, the following sanctuaries were evaluated by the team :-

- (1) Bethuadahari Wildlife Sanctuary
- (2) Bibhutibhushan Wildlife Sanctuary
- (3) Chintamani Kar Bird Sanctuary
- (4) Ballavpur Wildlife Sanctuary
- (5) Lothian Island Wildlife Sanctuary
- (6) Ramnabagan Wildlife Sanctuary
- (7) Senchal Wildlife Sanctuary

The team consisting of Wildlife experts has since submitted their report to Wildlife Institute of India who in turn has published the result of the Management Effectiveness Evaluation in the form of a report which has been endorsed and forwarded by MoEF & CC to different States. Attached with this letter is the evaluation done by the Wildlife experts covering management strength, weaknesses and also **immediate actionable points**.

In this connection, you are, therefore, requested to go through the entire evaluation report specially the immediate actionable points and take accordant action as suggested in the report. As the financial year is just starting, you can include some of the immediate actionable points in your current year's Annual Action Plan. If the Management Plan of the area is under revision, necessary action may be taken to include such actionable points in the Management Plan so that the Sanctuaries under your control can improve further.

The matter is important and linked with the general people who are visiting these Sanctuaries in large numbers so, due priority should be given the above instructions.

Yours faithfully,


(N K PANDEY)

Principal Chief Conservator of Forests,
Head of Forest Force, West Bengal

No. 289 /CS/2M-991

Dated: 09.04.2019

Copy together with copy of above report forwarded for information and taking necessary action to :-

- (1) The Principal Chief Conservator of Forests, Wildlife
- (2) The Principal Chief Conservator of Forests, RMD
- (3) The Principal Chief Conservator of Forests, General
- (4) The Chief Conservator of Forests, MIS & E.Gov. – For uploading in the website.


(N K PANDEY)

Principal Chief Conservator of Forests,
Head of Forest Force, West Bengal

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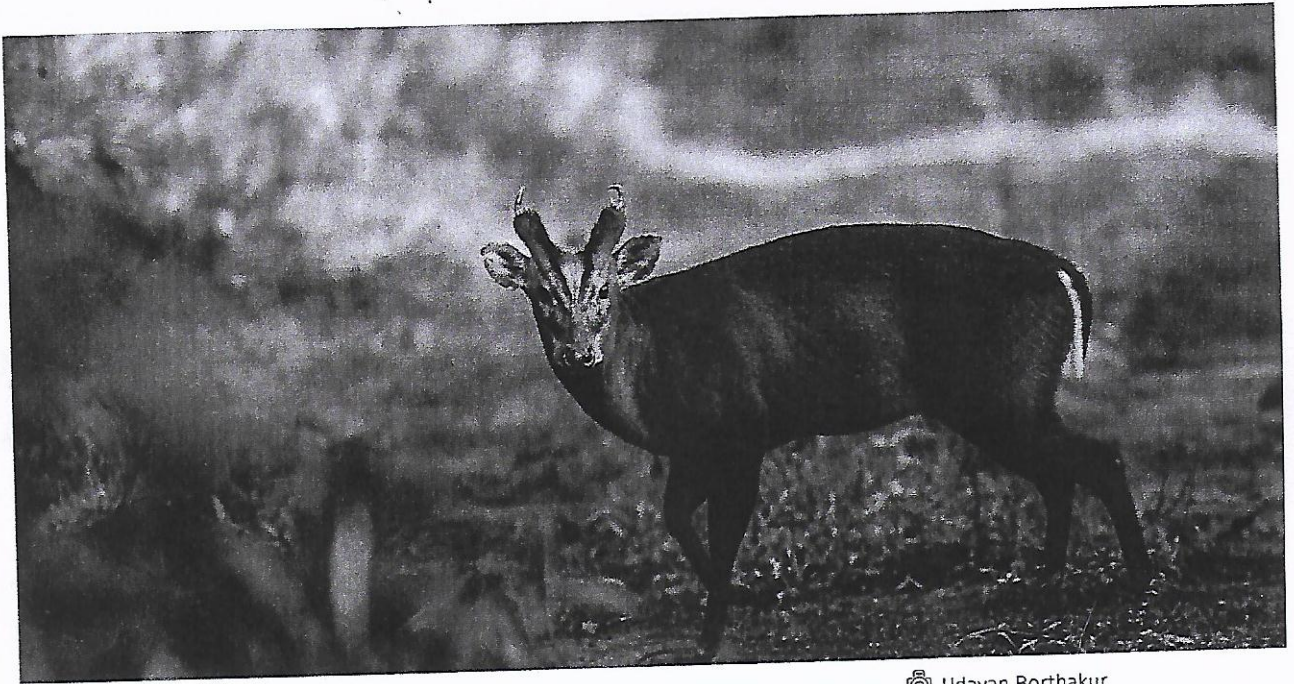
Bethuadahari Wildlife Sanctuary, West Bengal

Management Strengths

1. Despite the Sanctuary being an isolated patch, it is very well protected against illicit felling, grazing, fire and poaching. A 8-10 feet high mesh iron fencing has been installed all around the Sanctuary.
2. The availability of fodder in the Sanctuary is being improved by opening the canopy and planting grasses in patches of 1-2 ha. The plots are opened in rotation for wild ungulate grazing.
3. Because of the continued growth of the chital population in the Sanctuary, some of these animals were translocated to Buxa Tiger Reserve to replenish the prey population there in 2012.
4. There are two water bodies inside the Sanctuary, which are being maintained regularly. As such there is no shortage of water for the animals.
5. The diverse flora and fauna provide a good resource for conducting education and awareness programmes for students.
6. Being close to Krishnanagar town and NH 34, the Sanctuary is a good tourist attraction.
7. The staff and EDC members show their commitment and sincerity and ensure that tourists visiting the Sanctuary/park do not cause any harm to the fauna and flora.

Management Weaknesses

1. The Sanctuary is not connected with any other Protected Area or forested landscape as it is an isolated patch located near a town.
2. Bethuadahari Wildlife Sanctuary is largely being managed as an urban forest, park or mini zoo rather than a wildlife Sanctuary. No real purpose is being served by its having been declared as a Sanctuary. The site belittles the concept of a wildlife Sanctuary and creates a



 Udayan Borthakur

4. The sanctity of Sanctuary is not maintained as it is open to tourists and people are allowed to visit each and every part of the park.
5. Uncontrolled tourism does pose a threat to the site. The site faces biotic interference from the tourism activities as there are trails all over the Sanctuary.
6. The chital population is not increasing during recent years.
7. *Polyalthia suberosa* (hamjam) is proliferating like a weed. Although some efforts are being made to eradicate/remove the hamjam, they are not successful.
8. The nature interpretation centre (NIC) in the Sanctuary showcases mostly the tourist attractions of the district, and there is not much information about Bethuadahari Wildlife Sanctuary itself. The NIC need to be re-developed to depict the fauna, flora, natural ecosystem and forest of the area.

Immediate Actionable Points

1. Prior to 1980, the area was used as a nature park and rescue centre for injured wild animals and/or animals that strayed outside the natural forest. Even now it is being treated as an urban forest and mini zoo. The state government should review the present status of the area as a Sanctuary since the sanctity and objective of a Sanctuary are not being maintained.
2. The forest of the area is an appropriate place for conservation of biodiversity. The state/national biodiversity board should be consulted to study the biodiversity of the area and maintain it as a natural park.
3. As a number of tourists and students visit the area, the plants should be identified. Their common and scientific names should be displayed for education and creating awareness. An arboretum can be created for this purpose near the NIC.
4. Micro plans are to be developed with the involvement of the EDCs.
5. Currently, the frontline staff use their own mobiles and also recharge them on their own for making official communications. They should be provided with mobile phones and phone allowances as per the admissible rates.
6. The NIC centre needs to be re-developed with the involvement of professionals. Models of different local animals, plants, significance of conserving forests, biodiversity and ecosystems should be displayed.
7. *Polyalthia suberosa* forms majority of the undergrowth of the Sanctuary. This species needs to be controlled effectively.

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Bibhutibhushan Wildlife Sanctuary, West Bengal

Management Strengths

1. This Sanctuary has the only natural habitat found within 24 Parganas (North) District. The other natural habitats in the district are under the Social Forestry Division of the Sunderban Biosphere Reserve.
2. The vegetation within the limits of the Sanctuary is natural.
3. Chital population inside the Sanctuary seems to be healthy and growing.
4. Local people are generally supportive of conservation.
5. Minimal dependence of local communities on the forest resources of the Sanctuary.
6. Healthy chital population is a source for reintroduction or translocation in other areas.
7. The area also harbours other rich biodiversity of the region.
8. The Sanctuary area has a very rich avifauna.
9. A good tourist attraction
10. The Sanctuary is encircled on three sides by river Ichhamati, which is also a resting place for many migratory birds in winter.

Management Weaknesses

1. According to the records available, the entire current population of about 200 chital has been built up from 14 individuals, and this may have caused severe inbreeding.
2. Extensive growth of unpalatable species in open areas
3. Untrained staff. Most of them are aging and on the verge of retirement.
4. Poor involvement of local people in tourism activities.

Immediate Actionable Points

1. Minimising stall feeding of chital inside the enclosures by developing fodder by habitat improvement and removing non-palatable species.
2. Regular monitoring of the health of the growing chital population.
3. Upgrading the existing tourism infrastructure. State-of-art interpretation centre highlighting the importance of the area and associated bird species.
4. According to the records, the chital population started with a founder population of 14 individuals. It is therefore important to keep adding chital from other areas to avoid inbreeding in the population.
5. Biodiversity assessment of the area to generate baseline data on species presence, vegetation dynamics, etc. needs to be initiated.
6. Need to develop surrounding area as Important Bird Area, considering the rich bird diversity of the area.

Evaluators

Shri Azam Zaidi, Former CWLW, West Bengal
Dr. Bibhav Talukdar, AARANYAK, Guwahati
Dr. Diwakar Sharma, Director, PM, M&E, WWF-India
Dr. Bilal Habib, Scientist, WII, Dehradun

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Chintamoni Kar Bird Sanctuary, West Bengal

Management Strengths

1. The Sanctuary is the only natural habitat in the middle of an urban sprawl. It is very well managed and protected as a natural ecosystem.
2. It meets the aspirations of the local people. The site is used very well by local people for birdwatching and recreational purposes.
3. The area is reasonably well protected because of being surrounded by a boundary wall.
4. The local people are generally supportive of conservation.
5. Local communities do not depend on the Sanctuary for resources.

Management Weaknesses

1. Poor availability of water for the wildlife within the Sanctuary during the lean season.
2. Untrained staff in the Sanctuary.
3. Proposed Kamalgazi-Baruipur extension of the Eastern Metropolitan Bypass along either side of the Adi Ganga (a flow of river Hooghly also known as Gobindpur Creek or Tolly's Nallah and flowing in between Tollygunge and Bay of Bengal) is a threat to this bird haven, as it would transgress a portion of the ecologically sensitive Chintamoni Kar Sanctuary.

Immediate Actionable Points

1. The importance of the Sanctuary as an Important Bird Area needs to be highlighted.
2. Display boards highlighting the biodiversity of the Sanctuary and its importance should be placed within the Sanctuary and its adjacent areas.
3. The government may consider enhancing the strength of the trained field staff.
4. State-of-the-art interpretation centre highlighting the importance of the area and associated bird species should be constructed.
5. Arrangements should be made for provisioning water for wildlife during lean season.
6. Local universities, Institutions should be engaged for carrying out a biodiversity assessment of the area to generate baseline data on species presence, vegetation dynamics, potential threats etc. Since the area is well protected, this information can be used for long-term ecological monitoring.
7. Forest Department in collaboration with the state Tourism Department may promote this park as a popular tourist destination by developing regulated eco-tourism with involvements of the local communities.

Ballavpur Wildlife Sanctuary, West Bengal

A. Management Strengths

1. This 200 ha PA is located within the city limits of a very important tourist place 'Santiniketan'. An ecotourism initiative is being administered by the State Forest Development Agency (SFDA). The revenue is credited to the agency.
2. Three wetlands attract a large number of water birds and other migratory birds during winter. They are an additional attraction for tourists.
3. The population of Spotted Deer is growing, and the animals can be reintroduced in any other PA of the state.
4. The PA status helps protect the flora and fauna of the sanctuary.
5. This sanctuary is a perfect example of an urban PA within city limits and has immense potential in terms of conservation education and providing a clean and high-quality environment to its citizens. As such, the PA should be developed with good investment of resources.

B. Management Weaknesses

1. There are four villages adjoining the sanctuary. These are Khaspada, Kalipanaj, Pear Sampalli and Lalbagh. The villagers indulge in unauthorized collection of medicinal plants, mushrooms, dry sticks, poles and fuel wood. The important medicinal plants collected from the sanctuary are Kalmegh, Shatmuli, Sarpagandha, Adathoda vasica and wild garlic.
2. The sanctuary boundary requires a permanent fencing. Similarly, the wetlands require maintenance. The chain link fencing provided to the 60 ha Spotted Deer enclosure is getting rusted. It is therefore advisable to go for a compound wall along the 8 km perimeter of the sanctuary.
3. There is a shortage of permanent staff members. Similarly, there is a shortage of staff members trained in different wildlife subjects.
4. There is an acute shortage of funds that is affecting routine maintenance works such as maintenance of the boundary fencing/wall, habitat improvement and wetland maintenance.

C. Immediate Actionable Points

1. The most important protection measure requiring immediate attention is construction of a boundary wall along the 8 km periphery of the sanctuary.
2. There is a bird trail for educating tourists and promoting awareness among them. Winter birds add to the attraction. The PA should initiate bird watching facilities and promote them.

approved master plan/management plan, priority works can be implemented whenever funds are received. If necessary, the existing management plan, which is in currency till 2020, can undergo a midterm revision.

4. The revenue realized from eco-cottages and tourist visits is credited to the SFDA. Part of this fund should also be made available to the DFO Birbhum for carrying out maintenance works of the facilities at least on par with North Bengal PAs.
5. The growth of the Spotted Deer population needs to be controlled strictly. If the population continues to increase, it will exert an immense pressure on the limited resources of the land, funds and staff, and as a result the forest department receives undue flak. Sterilization of males should be considered as a first step in this direction. The excess population should be rehabilitated in any deficient area.
6. If Spotted Deer have to be kept within the sanctuary, there must be an indentified location in the sanctuary to control their maximum number.
7. The potential of this sanctuary arises from its three wetlands, which attract a large number of migratory winter waterfowl. The sanctuary may also be named a bird sanctuary or managed as a bird Sanctuary with all facilities and infrastructure.
8. There is a need to upgrade and renovate the existing nature interpretation centre and interpretive materials. The fossils should also be part of the interpretation programme.
9. There are plantations of *Acacia auriculiformis* and *Cassia tora* within the sanctuary. These should be replaced by local plants, particularly *Ficus*, in due course after making the initiative a part of the habitat development prescriptions of the management plan.
10. The importance of the PA in climate change and its role in carbon capture should be highlighted and included in the updating mechanism of the plan.

Lothian Island Wildlife Sanctuary, West Bengal

A. Management Strengths

1. Estuarine areas are heavily populated and any ecological imbalance may result in disasters such as tsunamis and cyclones and take a heavy toll on the population. Coastlines throughout the world are facing problems of coastal erosion and the threat of rising sea levels. Mangrove forests are between the land and sea and can provide better protection to the shoreline compared with any engineering and technological solutions. Mangroves also act as catalysts in reclaiming the land from the sea. The state government has rightly notified this area as a sanctuary and is making all-out efforts to protect it.
2. The sanctuary island is free of human and cattle populations. There are two patrolling camps, one in the northern portion and the other in the southern portion. The presence of forest officials in these camps and their patrolling on the island ensures better protection of the flora and fauna from illicit cutting of mangrove trees and hunting of wild animals. There is a monitoring protocol in place, and the patrolling of the staff is recorded and monitored by senior officers who inspect the sanctuary.

4. The state government has initiated steps for creating an ecosensitive zone of a width of 2 km all around the sanctuary. This zone being a water body is under threat due to the movements of fishing trollies and boats carrying persons likely to indulge in illicit cutting of mangrove trees and hunting in the sanctuary. With the notification of the ecosensitive zone, the management will be in a better position to exercise checks and controls against the aforesaid illegal activities.

B. Management Weaknesses

1. The islands around the sanctuary are heavily populated. The livelihoods of the sizeable population at Namkhana and the block headquarters, Patharpratima, depend upon fishing and crab collection. When we moved in a launch from Namkhana in the River Hatania Doania and joined the River Saptmukhi, we came across many boats and trolleys moving in the water body in the vicinity of the sanctuary. Fishing nets were also spread in these rivers by a large number of fishermen.
2. There are two anti-poaching camps established on the sanctuary island. At least four members, comprising permanent watchers and casual daily workers, are present in each camp. The post of Forester and one of the two posts of forest guard are vacant in the sanctuary. The West Bengal government has not taken up recruitment of Foresters and forest guards for several years. It may not be practicable to protect the sanctuary without the assistance of adequate trained staff members.
3. Several saline banks can be seen from the watchtower of the south camp of the island sanctuary. The vegetation in these banks is damaged, as salt water has remained stagnant for lack of proper drainage during low tides. The Forest Department has to remain alert against fishing and crab collection communities blocking drainages.
4. Planting of casuarina and mangrove species has been taken up on shores of sanctuary as well as other adjoining Islands. Fishermen while spreading their nets damage the rows of some of the plantations. As ascertained during interaction with Forest Protection Committee members of Bhagwatpur village, the livelihood of nearly one third of the house hold is fishing.

C. Immediate Actionable Points

1. As explained previously, the islands adjoining the sanctuary are heavily populated, and a sizeable portion of the population depends on fishing and crab collection. This poses a threat to the sanctuary. Since an area of 2 km width all round is becoming the ecosensitive zone, the fishermen in this belt may be helped to find alternate livelihood options.
2. The ecosensitive zone may be notified early.
3. The state government should regularly recruit and train forest guards and Foresters so that these posts do not remain vacant in critical areas where there is a threat of smuggling and poaching.
4. No census of herbivores has been taken up. It is advised to take up a herbivore census periodically so that the status of the wildlife and the effectiveness of management interventions are determined at regular intervals.

laid in mangrove forests. It is the responsibility of the Forest Department to provide livelihood options for these families.

6. The sanctuary requires two more speed boats. An additional jetty needs to be constructed for the patrolling staff for better connectivity.
7. The management plan (2010-2020) requires a midterm review. New schemes dealing with climate change need to be included.

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Ramnabagan Wildlife Sanctuary, West Bengal

A. Management Strengths

1. Despite the sanctuary being located in a city that is a district headquarters, it is very well protected against illicit felling of trees, grazing and fire. The fencing and compound wall running all around the sanctuary provide foolproof protection. The protection staff have shown their commitment and sincerity and ensured that tourists visiting the zoo and sanctuary do not cause any harm to the flora and fauna.
2. The sanctuary area is low lying. It retains rain water for long durations, thereby sparing the township from heavy floods. During the years 1999-2000 and 2000-2001 the sanctuary remained under 3-4 feet of water for nearly 10 days. The sanctuary has, thus, a very important hydrological value.
3. Fodder is being developed in the sanctuary in two blocks of 1 ha each. The plots are opened for rotational grazing to the deer population.
4. The growth of the deer population in the sanctuary has helped reintroduce deer in forests across the state.
5. The biodiversity of the sanctuary is rich. The presence of diverse floral species in the sanctuary, which is located in the heart of the town, provides a very good resource for conducting education and awareness programmes for students of life sciences.
6. There are three water holes in the sanctuary, and these have been maintained regularly. In addition, concrete tubs have been placed at various places in the sanctuary for providing water. Thus there is no dearth of water for the animals.

B. Management Weaknesses

1. The sanctuary does not provide any connectivity with a wider ecological network as it is an isolated patch located in the middle of a town, which is a district headquarters. Construction of enclosures inside the sanctuary, for Bardhaman Zoological Park, is in progress.
2. The Forest Department is treating the sanctuary as an urban forest and zoo. No real purpose is being served by the sanctuary.

C. Immediate Actionable Points

1. The state government should review the situation. If this sanctuary is being treated as an urban forest and zoo, then the objectives of the sanctuary management need not be pursued. However the sanctuary should never be denotified, as its current status ensures better protection.
2. The Government of West Bengal has not recruited forest guards and Foresters for several years. As a result there is a shortage of young blood at the field level. The protection of forests in general is suffering. The government should review its action and commence recruitment early.
3. As this sanctuary is an appropriate place for conservation of urban biodiversity, the state and national biodiversity boards should consider granting some funds for the purpose. Also, studies relating to urban biodiversity should be taken up by recognized institutions. The CWLW may approach the state biodiversity board in this regard.
4. The management plan expired in 2011-2012, and a new plan has been in place with effect from 2012-2013. The new plan requires the approval of the Chief Wildlife Warden of the state.
5. Medicinal plants have regenerated well in a patch near the sloth bear enclosure. It must be preserved at all costs.
6. The biodiversity of the area is rich. Name plates with the scientific names may be fixed on plants. This will help education and awareness programmes.

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Senchal Wildlife Sanctuary, West Bengal

A. Management Strengths

1. The sanctuary has very important significance as it the catchment of artificial reservoirs with water storage for Darjeeling town. Protection of the forests will not only help wild animals but is very necessary for optimal water harvesting from the catchment.
2. The sanctuary has upper and middle hill natural forests, which support an immense diversity of plants and animals.
3. Villagers in the vicinity of the sanctuary practice organic farming. Fruits, vegetables and crops are grown without using chemicals.
4. All of Darjeeling District is under the Gorkha Hill Council. There are no village panchayats in any village. The process of granting rights to the land occupied by tribal and forest dwellers has not been initiated in this district. During discussions with the officers, it was gathered that the Forest Rights Act, 2006 is by and large not misused in West Bengal.
5. In order to overcome the loss of trees for fire wood consumption, especially in winter, LPG connections are being provided in villages. Although many households are still to be covered, there are positive signs, and the situation is likely to improve.
6. Extraction of trees in areas above 600 m in altitude is prohibited in the state. However many

some good plantations of broad leaved species such as *Bucklandia edulis* (Pipli), *Machilus edulis*, *Ficus hukkeri*, *Swirria nepalensis*, *Eriobotrya petiolata* (Maya), *Machilus gamiana* (Kavalu), *Acer kambli* (Maple) and *Quercus lensifolia*. A sincere attempt is therefore being made in the sanctuary to improve the habitat for wild animals.

7. The ecotourism facilities of the forest department and the home stay at Chhatakpur have provided employment opportunities for many villagers. Similarly, ecodevelopment works in the villages have also helped provide alternate livelihood options.

B. Management Weaknesses

1. Villagers and many labourers in adjoining tea gardens depend on the forests for their fire wood requirements. Although a beginning has been made in providing LPG connections, we have still to go a long way.
2. Maling Bamboo (*Arundinaria maling*) has covered the degraded areas in the sanctuary and even outside. The new shoots of this species are the food of the Himalyan Black Bear, but heavy infestation has degraded the habitat. The Maling Bamboo has been cleared, and plantations of broad leaved species are being raised, but a large area is still to be covered. It was found during the MEE that only an extent of 40 ha is taken up for plantation annually in the sanctuary.
3. No important institution is engaged in research in the sanctuary. The reason for the extinction of the Mountain Quail in the recent past in the sanctuary needs to be investigated. Research should also be conducted on other threatened animals. The PA is part of a biodiversity hotspot, and special attention is required to preserve rare beetles, newts and other important wildlife.
4. During our interaction with the EDC at Rampuria village, we learnt that some households have still not been provided LPG connections, the houses built under the Geetanjali scheme by contractors are of poor quality and potato and maize crops damaged by Wild Boars, monkeys and Hares have still not been adequately compensated in all cases. Those involved may please address these grievances.
5. Half of the frontline staff positions are vacant. The state has not taken up recruitment of Forest Guards and Foresters for more than 10 years. Similarly, there is a shortage of personnel who are trained in wildlife management.
6. There is a shortage of four-wheel patrolling vehicles and two wheelers, which the staff need to, cover the difficult terrain.
7. There is very little monitoring equipment (camera traps, GPS, range finders, communication facilities) available.

C. Immediate Actionable Points

1. Providing LPG connections to villagers who are yet to be covered should be taken up on priority.
2. In the adjoining tea estates where labourers are dependent on the forests of the sanctuary, alternatives must be found. The owners of tea gardens must be impressed to

- damage due to wild animals. The villagers must be educated about this.
3. Compensation for damage caused by wildlife should be paid timely. The rates for ex-gratia payment require periodic reviews. After a few years, old rates become irrelevant.
 4. Regular recruitment of frontline staff members should be restarted. The PCCF (HoFF) and CWLW must explain the urgency to the government and prevail on them to take favourable action.
 5. Reputed institutions should be involved in research in the sanctuary. A biodiversity survey of the area should also be conducted and reports documented.
 6. The sanctuary provides connectivity with the forests of Nepal via Singhalila National Park and the territorial forests of Darjeeling, Kurseong, Sikkim, Kalimpong, Jaldapara and Bhutan. The working plans and management plans of these areas should have appropriate prescriptions in the interest of landscape-level conservation.
 7. The benefits of ecotourism should be shared in the ratio 1:1:1 between Government Revenue, the ecodevelopment committee and development charges. This will attract the local community towards conservation.
 8. Patrolling vehicles, monitoring facilities and communication facilities should be provided to the staff at the earliest.
 9. The plantation area should be doubled to restore the habitat. The plantation rates should be revised to meet the extra expenses involved in replacing maling.
 10. Capacity building of the staff in terms of modern monitoring and documentation techniques should be a regular feature.

