

MEE Team-wise Report

S. No.	MEE Team No.	MEE Team (Chairman & Members)	Region	State	Name of PA	MEE Year	Page index
1.	12.	Shri D.V.S Khati	Eastern	West Bengal	1. Gorumara NP	2008-09	3-16
2.			Dr. Ashish David	Eastern	West Bengal	2. Singalila NP	2008-09
3.		Eastern		West Bengal	3. Neora Valley NP	2009-10	31-45
4.		Dr. Nita Shah	Eastern	West Bengal	4. Chapramari WLS	2012-13	46-66
5.			Dr. Abhijit Das	Eastern	West Bengal	5. Lothian Island WLS	2015-16
6.		Eastern		West Bengal	6. Ramnabagan WLS	2015-16	84-98
7.		Eastern		West Bengal	7. Ballavpur WLS	2016-17	99-115
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WEST BENGAL

1. GORUMARA NATIONAL PARK, WEST BENGAL

MEE Year (2006–09)

A. Management Strengths

1. All the values and threats to the site are well documented and assessed.
2. The threats from human and other biotic interference have been significantly reduced through awareness and participation of the people.
3. The site has well-defined core and buffer zones. The final notification was issued in 1998 and core, buffer, wilderness and ecotourism zones have been visibly defined with clear objectives.
4. There is a comprehensive management plan for the period from 2007–2008 to 2017–2018.
5. The management plan is routinely and systematically updated after every 10 years. There is some participation of stakeholders.
6. The biodiversity values are suitably safeguarded through protection, people's participation and eco-development activities.
7. The local stakeholders are represented in eco-development committees and involved in most of the planning and conservation activities.
8. All the programmes of habitat improvement have been identified, planned and monitored through field visits by the state forest department.
9. Sambar, Spotted Deer and Gharial have been introduced and monitored through approved programmes.
10. Patrolling is carried using vehicles, motor cycles and departmental elephants. There are an adequate number of watch towers and communication system.
11. There is hardly any human–wildlife conflict in the national park and in its immediate vicinity.
12. The site is integrated into the greater landscape. The original 8.62 km² of the sanctuary has been expanded to 79.45 km², before its declaration as a national park.
13. Resource allocation is primarily made for priority action and funds are generally released in time.
14. NGOs primarily contribute to census operations, public awareness programmes and field trainings. They supply patrolling kits.
15. Frontline staff members are trained at the Wildlife Institute of India and Forest School. They in turn train the grass roots-level workers.
16. The performance management of all staff members are directly linked to achievement of relevant management objectives.
17. EDCs are clubbed to block-level and range-level co-ordination committees. Fringe dwellers support most aspects of PA management through EDCs.
18. The PA management adequately addresses the issue of livelihood through various EDC programmes. Very often such programmes provide more income than traditional means.
19. Excellent arrangements have been made in several places in the form of eco-huts and eco-tourist facilities, which help enhance the values of the protected area (PA).
20. Management-related trends are systematically evaluated and routinely reported. Evaluation is through census reports, annual reports, etc. which are presented routinely to higher authorities.

21. There is a systematic inventory of wild animals. Habitat assessment is carried out through management plans, especially maintenance of plantations.
22. The populations of the Rhinoceros, Gaur and Wild pig have increased significantly. The populations of the other species are more or less stable.
23. The PA has well preserved, pristine high forests sustaining the native biodiversity in which biological communities may be evaluated.
24. Most of the threats to the site have been reduced through protection and JFM with the active participation of local people.
25. The expectations of most visitors have met. Even sitting in the compound of the FRH, one can see gaur, rhinoceroses and wild pigs foraging daily.
26. The evaluation team met the Forest Minister, MP and local MLA as well as various EDC members and other people living on the fringe areas. All were supportive of the PA management.
27. The cultural heritage of the local people has been preserved through organization of regular social and cultural programmes in eco-villages and eco-tourist centres.

B. Management Weaknesses

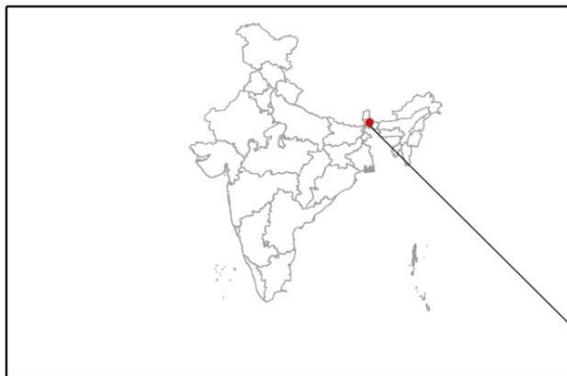
1. The available personnel are explicitly allotted for PA management, but there are large numbers of vacancies in the field staff, which are now filled by casual workers.
2. The resources available from Centrally Sponsored Scheme (CSS) are good, but the state plan allocation is poor. Only in 2007–2008 was the state plan allocation significantly increased. All resources are mobilized for management objectives.
3. The complaint handling system is discussed at block-level and range-level co-ordination committee meetings, but there is no logging of individual complaints through complaint boxes and individual responses.

C. Actionable Points

1. Filling up vacancies in the field staff, especially Forest Guards, mahouts and grass cutters, is essential for PA management.
2. The resources available from the state plan allocation need to be enhanced.
3. The complaint handling system needs to log individual complaints through complaint boxes and individual responses are required.
4. Brochures, booklets and hoardings provide detailed information about the park, but these need to be provided in regional languages for better understanding.

77°15'0"E

Gorumara National Park West Bengal



28°30'0"N

28°30'0"N



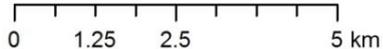
28°25'0"N

28°25'0"N



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

IT and RS & GIS Cell - 2014



Notified Area: 79.45 Sq. km
Notification Year: 1992

77°15'0"E

1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Values not systematically documented, assessed or monitored.	Poor		These are well documented in current management plan, assessed through study reports and monitored through periodic vegetation assessment and census.
Values generally identified but not systematically assessed and monitored.	Fair		
Most values systematically identified and assessed and monitored.	Good	✓	
All values systematically identified and assessed and monitored.	Very good		

1.2 Are the threats to site values well documented and assessed?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats not systematically documented or assessed.	Poor		All threats to site are well documented and assessed.
Threats generally identified but not systematically assessed.	Fair		
Most threats systematically identified and assessed.	Good		
All threats systematically identified and assessed.	Very good	✓	

1.3 Is the site free from human and biotic interference?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
The site has extensive human and biotic interference.	Poor		The threats from human and other biotic interference have been significantly reduced through awareness and people's participation.
The site has some human and biotic interference.	Fair		
The site has little human and biotic interference.	Good	✓	
The site has no human and biotic interference.	Very good		

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
Site not identified correctly or categorized.	Poor		Final notification done in 1998 and clear cut zonation for core, buffer, wilderness zone and ecotourism zone with clear objectives are in position.
Site identified correctly but not categorized.	Fair		
Site identified correctly but not systematically categorized.	Good		
Site identified correctly and systematically categorized with proper zonation plans.	Very good	✓	

2.2 Does the site have a comprehensive Management Plan?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
No relevant Management Plan in place.	Poor		Comprehensive management plan with effect from 2007-08 to 2017-18 is in operation.
Management Plan exist but not comprehensive.	Fair		
Site has a comprehensive Management Plan.	Good	✓	
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good		

2.3 Is the Management Plan routinely and systematically updated?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		Management plan routinely and systematically updated in 10 years cycle; participation of stakeholders is partial.
Management Plan sometimes updated in adhoc manner.	Fair		
Management Plan routinely and systematically updated.	Good	✓	
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good		

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		Biodiversity values are suitably safeguarded through protection, people's participation and ecodevelopment activities.
Sites safeguards a few threatened biodiversity values.	Fair		
Sites safeguards a large number of threatened biodiversity values.	Good		
Sites safeguards all threatened biodiversity values.	Very good	✓	

2.5 Are stakeholders given an opportunity to participate in planning?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		Local stakeholders are organized in eco development committees and involved in most of the planning and conservation activities.
Stakeholders participate in some planning.	Fair		
Stakeholders participate in most planning processes.	Good	✓	
Stakeholders routinely and systematically participate in all planning processes.	Very good		

2.6 Are habitat restoration programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Habitat restoration programmes are entirely adhoc.	Poor		All programmes of habitat improvement identified, well planned and monitored through field visits and monitoring of the state forest department.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair		
Habitat restoration programmes are generally well planned and monitored.	Good		
Habitat restoration programmes are thoroughly planned and monitored.	Very good	✓	

2.7 Are reintroduction programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Reintroduction programmes are entirely adhoc.	Poor		Sambar, Spotted deer and Gharial introduced through approved programme and monitored.
Limited planning and monitoring programmes are in place for reintroduction programmes.	Fair		
Reintroduction programmes are generally well planned and monitored.	Good	✓	
Reintroduction programmes are thoroughly planned and monitored.	Very good		

2.8 Does the site has an effective protection strategy?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Site has no protection strategy.	Poor		Patrolling is done through vehicles, motor cycles and departmental elephants. Adequate watch towers and communication systems exists.
Site has an adhoc protection strategy.	Fair		
Site has a comprehensive protection strategy but is not very effective.	Good		
Site has a comprehensive and very effective protection strategy.	Very good	✓	

2.9 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Human-wildlife conflicts are rampant.	Poor		There is hardly any human and wildlife conflict in and immediate recanting of the National Park.
Site has been able to mitigate few human-wildlife conflicts.	Fair		
Site has been able to mitigate many human-wildlife conflicts.	Good		
Site has been able effective in mitigating all human-wildlife conflicts.	Very good	✓	

2.10 Is the site integrated into a wider ecological network following the principles of the ecosystem approach?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Site not integrated into a wider network/ landscape.	Poor		The site is integrated into greater landscape. The original 8.62 sq. km of sanctuary has been expanded to 79.45 sq. km and declared as National Park.
Some limited attempts to integrate the site into a network/ landscape.	Fair		
Site is generally quite well integrated into a network/ landscape.	Good	✓	
Site is fully integrated into a wider network/ landscape.	Very good		

3. Inputs

3.1 Are personnel well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		Available personnel are explicitly allotted for PA management , but there are high vacancies in field staff, which are now manned by casual workers.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair		
Some personnel explicitly allocated towards achievement of specific management objectives.	Good	✓	
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good		

3.2 Are resources (vehicle, equipment, building etc.) well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		Resources availability from CSS is good but State plan allocation is poor. Only in 2007-08 the state plan allocation has been significantly increased. All resources are mobilized for management objectives.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair		
Some resources explicitly allocated towards achievement of specific management objectives.	Good	✓	
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good		

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resource allocation is adhoc and funds are never released in time.	Poor		Resource allocation is primarily made for priority action and funds are generally released in time. Condemned vehicles should to be replaced.
Some specific allocation for management of priority action and some funds released in time.	Fair		
Comprehensive formulae systematically applied to decide most resource allocation and generally funds released in time.	Good	✓	
Comprehensive formulae systematically applied to decide complete allocation of resources for management and on-time release of funds.	Very good		

3.4 What level of resources is provided by NGOs?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
NGOs contribute nothing for the management of the site.	Poor		NGOs primarily contribute to census operation, public awareness programme field training and supply of patrolling kits; but these are not systematically sought and negotiated in a planned manner.
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair	✓	
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good		
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good		

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resources insufficient for most tasks.	Poor		Filling up vacancies in field staff especially forest guards, mahouts and grass cutter is essential
Resources sufficient for some tasks.	Fair		
Resources sufficient for most tasks.	Good	✓	
Resources are in excess for most tasks.	Very good		

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Very few trained officers and frontline staff in the site.	Poor		Frontline staff are trained in Wildlife Institute of India and Forest School. They in turn train the grass root level workers, still some staff require training.
Few trained officers and frontline staff, who are posted in the site.	Fair		
A large number of trained officers and frontline staff are posted in the site.	Good	✓	
All trained managers and frontline staff posted in the site.	Very good		

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No linkage between staff performance management and management objectives.	Poor		Performance management of all staff are directly linked to achievement of relevant management objectives.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good		
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good	✓	

4.3 Is there effective public participation in PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no public participation in PA management.	Poor		EDC committees are clubbed to Block level and Range level co-ordination committees. Fringe dwellers through EDC support most aspects of PA management.
Opportunistic public participation in some aspects of PA management.	Fair		
Systematic public participation in most aspects of PA management.	Good		
Comprehensive and systematic public participation in all important aspects of PA management.	Very good	✓	

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic approach to handling complaints.	Poor		These are discussed in Block level and Range level co-ordination committee meetings but logging of individual complaints through complaint box and individual response is not in position.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair	✓	
Coordinated system logs and responds effectively to most complaints.	Good		
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good		

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially women?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No livelihood issues are addressed by PA management.	Poor		The PA management adequately address the issue of livelihood through various EDC programmes. Very often such programmes provide more income than traditional means.
Few livelihood issues are addressed by PA management.	Fair		
Substantial livelihood issues are addressed by PA management.	Good		
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good	✓	

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no information on PA management publicly available.	Poor		Brochures, booklets and hoardings are there giving detailed information regarding the Park, but these are also required to be provided in Hindi and Bengali for better understanding and reach.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair		
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good	✓	
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good		

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		Excellent arrangements have been made in several places through eco-huts and eco-tourist facilities which are helping in enhancing the PA values.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair		
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good		
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓	

5.3 Are management related trends systematically evaluated and routinely reported?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no systematic evaluation or routine reporting of management related trends.	Poor		Management related trends are systematically evaluated through census reports, annual reports etc and routinely reported to higher authorities, but scope for making these reports comprehensive is there.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair		
Systematic evaluation and routine reporting of management related trends undertaken.	Good	✓	
Systematic evaluation and comprehensive reporting of management related trends undertaken.	Very good		

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic inventory or maintenance schedule.	Poor		Systematic inventory for wild animal is there Habitat assessment is done through management plans specially maintenance of plantations, fund is an inadequate.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair		
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good	✓	
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good		

6. Outcomes

6.1 Are threatened/ endangered species populations stable or increasing?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threatened/ endangered species populations declining.	Poor		The population of Rhino, Gaur and Wild pig has increased significantly. The rest of the populations are more or less stable.
Some threatened/ endangered species populations increasing, most others stable.	Fair		
Most threatened/ endangered species populations increasing, most others stable.	Good	✓	
All threatened/ endangered species populations either increasing or stable.	Very good		

6.2 Are biological communities at a mix of ages and spacings that will support native biodiversity?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Biological communities unlikely to be able to sustain native biodiversity.	Poor		The PA displays wonderful status of preservation of a large part of pristine high forest sustaining native biodiversity and helping evaluation of biological communities
Some biological communities likely to be able to sustain native biodiversity.	Fair		
Most biological communities likely to be able to sustain native biodiversity.	Good		
All biological communities likely to be able to sustain native biodiversity.	Very good	✓	

6.3 Have the threats to the site being abated/ minimized?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats to the site have not abated but have enhanced.	Poor		Most of the threats to the site have been reduced through protection and JFM with active participation of local people.
Some threats to the site have been abated.	Fair		
Most threats to the site have been abated.	Good	✓	
All threats to the site have been abated.	Very good		

6.4 Are the expectations of visitors generally met or exceeded?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Expectations of visitors generally not met.	Poor		Even sitting in the compound of FRH one can see everyday common foraging by Gaur, Rhino and Wild pig.
Expectations of many visitors are met.	Fair		
Expectations of most visitors are met.	Good		
Good expectations of most visitors are met.	Very good	✓	

6.5 Are neighbours and adjacent communities supportive of PA management?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Neighbours/adjacent communities are hostile.	Poor		Evaluation team met Minister, MP and local MLA as well as various EDC members and other fringe people. All are supportive of PA management.
Key neighbours/communities are supportive.	Fair		
Most neighbours/communities are supportive of PA management.	Good		
All neighbours and communities supportive of PA management.	Very good	✓	

6.6 Are cultural heritage assets protected?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Little or no management undertaken, or despite management efforts, deterioration of cultural heritage assets continues, or values are unknown.	Poor		Cultural heritage of local people have been preserved through regular organization of social and cultural programme in Eco-villages and Eco-tourist centres.
Some management activity, but deterioration continues.	Fair		
Planned approach to management underway and deterioration of assets is being redressed.	Good		
Planned approach to management underway and deterioration of assets is being significantly redressed.	Very good	✓	

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	25	84.1%
2.	Planning	10	10	100	87.5	
3.	Inputs	05	10	50	35	
4.	Process	05	10	50	42.5	
5.	Outputs	04	10	40	32.5	
6.	Outcomes	06	10	60	55	
Total		33		330*	277.5	

* The six Framework Elements were subsequently assigned equal weightage of 100 each. The total MEE score is 600 out of which this site has score 498.8 or 83.1%

2. SINGALILA NATIONAL PARK, WEST BENGAL

MEE Year (2006–09)

A. Management Strengths

1. The values have been well documented in the management plan and assessed and monitored through annual reports and periodic censuses.
2. All threats have been properly documented in the management plan, and most of them have been assessed from time to time.
3. The site was finally notified as a national park in December 1992. It has three clear management zones, viz. wilderness, habitat improvement and eco-tourism zones.
4. The site has a comprehensive management plan.
5. The site safeguards all threatened biodiversity values of upper temperate, both broadleaf and conifers and sub-alpine forests.
6. Habitat restoration programmes are planned and monitored thoroughly.
7. Re-introduction programmes for the red panda, the keystone species, have been well planned and monitored.
8. Several camps have been opened along the vulnerable Indo-Nepal border. Regular patrolling is carried out, and linkages have been developed with SSB camps.
9. There is little man–animal conflict due to the adjoining forest of Darjeeling Division in the Indian side.
10. The site is fully integrated into the wider network/landscape. On the Indian side it is integrated with the lower temperate forests of Darjeeling Division and on the Sikkim side with its forest, where conservation management is practiced.
11. All the available staff members are organized and linked with the management objectives of the protected area (PA).
12. All the resources are well organized and allocated for PA management.
13. All the resources are allocated for priority actions, and most of the funds are released in time.
14. The contributions of NGOs are sought and obtained for education and awareness programmes, garbage disposal and monitoring the red panda, the keystone species.
15. One FR is undergoing training at the Wildlife Institute of India. Foresters are trained in programmes organized by forest training centres.
16. The performance of all the staff members is linked with the relevant management activities. Duty registers are maintained at all camps for monitoring their work.
17. There is only one village on the fringe of the PA on the Indian side, and the villagers participate in all important aspects of PA management through EDCs.
18. A coordinated system logs and responds effectively to most complaints.
19. A substantial part of the livelihood of the only village on the fringe is provided by various programmes of EDCs.
20. All the visitor services and facilities accord with the relevant PA category and enhance the PA values.
21. The management trends are provided in periodic reports and evaluation is performed through analysis of duty and wildlife monitoring registers.
22. Most of the biological communities (except the ridge area along the Indo-Nepal border) are likely to sustain the native biodiversity.

23. Most of the threats to the site, except the ridge area along Indo-Nepal border, have been effectively managed.
24. Visitors are mostly mountain trekkers and nature tourists, whose expectations are met.
25. All the neighbours and communities are supportive of the PA management as tourism is mostly nature tourism and provide them livelihood.

B. Management Weaknesses

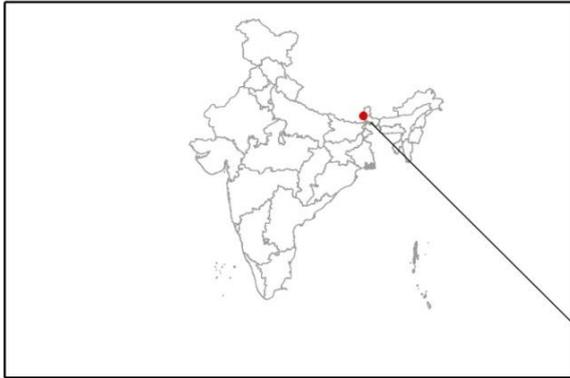
1. A substantial part of the livelihood of the only village is provided through various programmes of the EDC. However, there are no special programmes for women.
2. The information made available to the public is general and has limited relevance to the accountability of the management and the condition of public assets.
3. The schedule of maintenance is systematic, but the available funds are not adequate for carrying out all maintenance appropriately.
4. The populations of some threatened and endangered species are increasing, and others are more or less stable.

C. Actionable Points

1. The biotic interference, mostly along the western boundary of Nepal, needs to be curbed immediately.
2. There should be some livelihood programmes for resource-dependent people, especially women.
3. Ponies are needed for patrolling by the Forest Rangers and other staff members in the camps.
4. All the camps should be headed at least by a Forest Guard. Special provisions are required for heating and a high-altitude allowance.
5. Adequate funds are needed to carry out appropriate maintenance activities related to assets.
6. Documents made available to the public are only in English. Documents in Nepali providing insights into major management issues should be prepared and made available to the public.

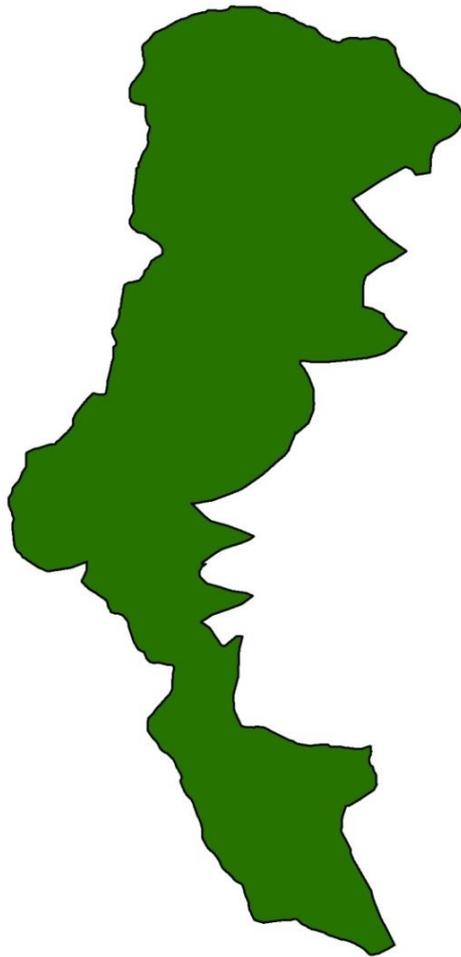
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Singalila National Park West Bengal



28°30'0"N

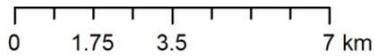
28°30'0"N



28°25'0"N

28°25'0"N

 भारतीय वन्यजीव संस्थान
Wildlife Institute of India
IT and RS & GIS Cell - 2014



Notified Area: 78.60 Sq. km
Notification Year: 1986

77°15'0"E

1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Values not systematically documented, assessed or monitored.	Poor		Sites values are well described in Management Plan. The assessment is through periodic visits and inspection
Values generally identified but not systematically assessed and monitored.	Fair		
Most values systematically identified and assessed and monitored.	Good	✓	
All values systematically identified and assessed and monitored.	Very good		

1.2 Are the threats to site values well documented and assessed?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats not systematically documented or assessed.	Poor		All threats have been properly documented in the Management Plan and most of them are assessed from time to time.
Threats generally identified but not systematically assessed.	Fair		
Most threats systematically identified and assessed.	Good		
All threats systematically identified and assessed.	Very good	✓	

1.3 Is the site free from human and biotic interference?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
The site has extensive human and biotic interference.	Poor		The site has significant forests in its fringes along south and east, the biotic interference is mostly along the western boundary along Nepal.
The site has some human and biotic interference.	Fair		
The site has little human and biotic interference.	Good	✓	
The site has no human and biotic interference.	Very good		

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
Site not identified correctly or categorized.	Poor		The site has been finally notified as National Park in December 1992. It has three clear management zones viz. wilderness, habitat improvement and ecotourism.
Site identified correctly but not categorized.	Fair		
Site identified correctly but not systematically categorized.	Good		
Site identified correctly and systematically categorized with proper zonation plans.	Very good	✓	

2.2 Does the site have a comprehensive Management Plan?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
No relevant Management Plan in place.	Poor		The site has a comprehensive Management Plan but it is mostly a departmental exercise.
Management Plan exist but not comprehensive.	Fair		
Site has a comprehensive Management Plan.	Good	✓	
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good		

2.3 Is the Management Plan routinely and systematically updated?

<i>Assessment criteria</i>			
Condition	Category*	(Tick ✓)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		The first Management Plan expired in 2000 and present plan cover the period 2000-01 to 2009-10. The exercise for revision has been initiated and stakeholders views are being considered.
Management Plan sometimes updated in adhoc manner.	Fair		
Management Plan routinely and systematically updated.	Good	✓	
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good		

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		The site safeguards all threatened biodiversity values of upper temperate both broadleaf and conifers and sub-alpine forests.
Sites safeguards a few threatened biodiversity values.	Fair		
Sites safeguards a large number of threatened biodiversity values.	Good		
Sites safeguards all threatened biodiversity values.	Very good	✓	

2.5 Are stakeholders given an opportunity to participate in planning?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		It is only EDC community which participates in planning process. The views of tourists, mule owners and taxi operators should also be considered in future revision.
Stakeholders participate in some planning.	Fair	✓	
Stakeholders participate in most planning processes.	Good		
Stakeholders routinely and systematically participate in all planning processes.	Very good		

2.6 Are habitat restoration programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Habitat restoration programmes are entirely adhoc.	Poor		The habitat restoration programmes are thoroughly planned in strategies with spelled out action taken and steps required.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair		
Habitat restoration programmes are generally well planned and monitored.	Good		
Habitat restoration programmes are thoroughly planned and monitored.	Very good	✓	

2.7 Are reintroduction programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Reintroduction programmes are entirely adhoc.	Poor		Re-introduction programmes for Red Panda the key stone species is well planned and monitored.
Limited planning and monitoring programmes are in place for reintroduction programmes.	Fair		
Reintroduction programmes are generally well planned and monitored.	Good	✓	
Reintroduction programmes are thoroughly planned and monitored.	Very good		

2.8 Does the site has an effective protection strategy?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Site has no protection strategy.	Poor		Several camps have been opened along vulnerable Indo-Nepal border, regular patrolling is done and linkage with SSB camps have been developed.
Site has an adhoc protection strategy.	Fair		
Site has a comprehensive protection strategy but is not very effective.	Good		
Site has a comprehensive and very effective protection strategy.	Very good	✓	

2.9 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Human-wildlife conflicts are rampant.	Poor		The site has little man animal conflict due to adjoining forest of Darjeeling Division in Indian side.
Site has been able to mitigate few human-wildlife conflicts.	Fair		
Site has been able to mitigate many human-wildlife conflicts.	Good		
Site has been able effective in mitigating all human-wildlife conflicts.	Very good	✓	

2.10 Is the site integrated into a wider ecological network following the principles of the ecosystem approach?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Site not integrated into a wider network/ landscape.	Poor		In Indian side it is integrated into lower temperate forests of Darjeeling Division and on Sikkim side by its forest, where conservation management is practiced.
Some limited attempts to integrate the site into a network/ landscape.	Fair		
Site is generally quite well integrated into a network/ landscape.	Good		
Site is fully integrated into a wider network/ landscape.	Very good	✓	

3. Inputs

3.1 Are personnel well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		Through the staff strength is not adequate, all available staff are organized and linked to management objectives of the protected area.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair		
Some personnel explicitly allocated towards achievement of specific management objectives.	Good	✓	
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good		

3.2 Are resources (vehicle, equipment, building etc.) well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		All resources are well organized and allocated for PA management. However, there is a need for supply of pony at Government cost for patrolling by the Forest Rangers and other staff in the camps.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair		
Some resources explicitly allocated towards achievement of specific management objectives.	Good	✓	
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good		

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resource allocation is adhoc and funds are never released in time.	Poor		Entire resources are allocated for priority actions and most of the funds are released in time. On high attitude a regular provision should be given for heating of camps and special high attitude allowance.
Some specific allocation for management of priority action and some funds released in time.	Fair		
Comprehensive formulae systematically applied to decide most resource allocation and generally funds released in time.	Good	✓	
Comprehensive formulae systematically applied to decide complete allocation of resources for management and on-time release of funds.	Very good		

3.4 What level of resources is provided by NGOs?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
NGOs contribute nothing for the management of the site.	Poor		NGOs contribution are sought and obtained for education and awareness programmes, garbage disposal and monitoring of key stone species Red Panda.
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair		
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good	✓	
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good		

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resources insufficient for most tasks.	Poor		All camps should be headed at least by a Forest Guard. Special provision required for heating and high altitude allowance.
Resources sufficient for some tasks.	Fair	✓	
Resources sufficient for most tasks.	Good		
Resources are in excess for most tasks.	Very good		

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Very few trained officers and frontline staff in the site.	Poor		One FR is undergoing training in Wildlife Institute of India. Foresters are trained in programmes organized by forest training centers.
Few trained officers and frontline staff, who are posted in the site.	Fair		
A large number of trained officers and frontline staff are posted in the site.	Good	✓	
All trained managers and frontline staff posted in the site.	Very good		

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No linkage between staff performance management and management objectives.	Poor		Performance of all staff linked with the relevant management activities. Duty registers are maintained at all camps for monitoring their works.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good		
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good	✓	

4.3 Is there effective public participation in PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no public participation in PA management.	Poor		There is only one village in the fringe of PA on Indian side and their participation is taken in all important aspects of PA management through EDC.
Opportunistic public participation in some aspects of PA management.	Fair		
Systematic public participation in most aspects of PA management.	Good		
Comprehensive and systematic public participation in all important aspects of PA management.	Very good	✓	

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic approach to handling complaints.	Poor		There is a complaint box at the visitors centre in Manebhajan which is the formal entry point for the park to tourists. There is however scope of improvement of feedbacks and response for all stakeholders.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair		
Coordinated system logs and responds effectively to most complaints.	Good	✓	
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good		

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially women?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No livelihood issues are addressed by PA management.	Poor		Substantial livelihood of the only fringe village is provided through various programs of ED. However, no special programme for woman.
Few livelihood issues are addressed by PA management.	Fair		
Substantial livelihood issues are addressed by PA management.	Good	✓	
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good		

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no information on PA management publicly available.	Poor		Publicly available documents are only in English. There is a need for preparation of publicly available documents in Nepali detailing insight into major management issues.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair	✓	
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good		
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good		

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		All visitors services and facilities accord to relevant PA category and enhance the PA values.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair		
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good		
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓	

5.3 Are management related trends systematically evaluated and routinely reported?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no systematic evaluation or routine reporting of management related trends.	Poor		Management trends are provided in periodic reports and evaluation done through analysis of duty and wildlife monitoring registers.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair		
Systematic evaluation and routine reporting of management related trends undertaken.	Good	✓	
Systematic evaluation and comprehensive reporting of management related trends undertaken.	Very good		

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic inventory or maintenance schedule.	Poor		Schedule of maintenance is systematic but funds are not adequate to carry out all maintenance appropriately.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair		
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good	✓	
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good		

6. Outcomes

6.1 Are threatened/ endangered species populations stable or increasing?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threatened/ endangered species populations declining.	Poor		Some threatened and endangered spp are increasing and others are more or less stable.
Some threatened/ endangered species populations increasing, most others stable.	Fair	✓	
Most threatened/ endangered species populations increasing, most others stable.	Good		
All threatened/ endangered species populations either increasing or stable.	Very good		

6.2 Are biological communities at a mix of ages and spacings that will support native biodiversity?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Biological communities unlikely to be able to sustain native biodiversity.	Poor		Most of the biological communities, (except the ridge area along Indo-Nepal border) are likely to sustain native biodiversity.
Some biological communities likely to be able to sustain native biodiversity.	Fair		
Most biological communities likely to be able to sustain native biodiversity.	Good	✓	
All biological communities likely to be able to sustain native biodiversity.	Very good		

6.3 Have the threats to the site being abated/ minimized?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats to the site have not abated but have enhanced.	Poor		Most of the threats to the site, except the ridge area along Indo-Nepal border, have been abated.
Some threats to the site have been abated.	Fair		
Most threats to the site have been abated.	Good	✓	
All threats to the site have been abated.	Very good		

6.4 Are the expectations of visitors generally met or exceeded?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Expectations of visitors generally not met.	Poor		Visitors are mostly mostly mountain trekkers and nature tourists, whose expectations are met.
Expectations of many visitors are met.	Fair		
Expectations of most visitors are met.	Good		
Good expectations of most visitors are met.	Very good	✓	

6.5 Are neighbours and adjacent communities supportive of PA management?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Neighbours/adjacent communities are hostile.	Poor		All neighbors and communities are supportive of PA management as nature and preserved mountain tourism provide their livelihood.
Key neighbours/communities are supportive.	Fair		
Most neighbours/communities are supportive of PA management.	Good		
All neighbours and communities supportive of PA management.	Very good	✓	

6.6 Are cultural heritage assets protected?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Little or no management undertaken, or despite management efforts, deterioration of cultural heritage assets continues, or values are unknown.	Poor		Only cultural heritage site is Kalipokhri, which is zealously protected.
Some management activity, but deterioration continues.	Fair		
Planned approach to management underway and deterioration of assets is being redressed.	Good		
Planned approach to management underway and deterioration of assets is being significantly redressed.	Very good	✓	

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	25	81.8%
2.	Planning	10	10	100	87.5	
3.	Inputs	05	10	50	35	
4.	Process	05	10	50	42.5	
5.	Outputs	04	10	40	30	
6.	Outcomes	06	10	60	50	
Total		33		330*	270	

* The six Framework Elements were subsequently assigned equal weightage of 100 each. The total MEE score is 600 out of which this site has score 484.2 or 80.7%

3. NEORA VALLEY NATIONAL PARK, WEST BENGAL

MEE Year (2009–10)

A. Management Strengths

1. Most values and threats have been systematically identified and assessed. Local and international site values have been recognized adequately. This is one of the oldest reserve forests (1881) free from rights and encumbrances.
2. Except for the southern portion, the site is free of human and biotic interference.
3. The area has been identified properly, including inter-state and international boundaries. The zonation for management purposes is adequate (core and eco-tourism zones).
4. The site has a duly approved written management plan for 10 year (2008–2017) period. The current plan need to be imbedded in available resource database and brought in tune with the guidelines of the Wildlife Institute of India (WII).
5. The management plan is routinely and systematically updated.
6. The site safeguards all threatened biodiversity values.
7. Stakeholders participate in most planning processes. An advisory committee is in place and meets regularly. A draft plan may be placed before the committee for scrutiny and suggestions. The DFO states that the stakeholders, including the eco-tourism industry, are being taken into confidence.
8. Habitat restoration programmes are generally well planned and monitored.
9. There is a comprehensive strategy and consistent efforts have been made during the last two decades to preserve the pristine nature of the site by not introducing roads within the core zone. Wildlife protection camps located at strategic places have kept in check human interference.
10. Man–animal conflicts are limited to the southern region, during specific periods. The management is making consistent efforts to curb possible threats by involving EDCs.
11. The site is well connected with Chaparamari–Gorumara National Park and Mahananda Sanctuary (in the protected area network within the state), Pangulakha Sanctuary (in the adjacent state of Sikkim) and Torsa Strict Nature Reserve or Toorse Nature Reserve (which is situated in Bhutan and sprawls over 644 sq km and covers two Dzongkhags of Haa and Samtse).
12. Resources are linked to priorities according to the management plan. Gol funds are released in time and utilized optimally.
13. In terms of NGO contribution, Himalayan Nature & Adventure Foundation (HNAF), WTI, WWF, NAS, SPAWAN, JSNC, Dooars Jagran/Aaranyak, etc. (about 20 NGOs) are associated with and provide assistance in terms of insurance/equipment/training/law enforcement/crime control.
14. The resources are sufficient for most of the tasks.
15. As in any other division, the PA supervisory staff have a system of linking the performance of the staff with management objectives.
16. A sanctuary advisory committee is in place. The human population living on the fringe in Gopipala, Bhujeigaon, Chulina, Ambiok, Lava and Mulkhagra are involved in mitigation of man–animal conflicts. EDCs activities negate the impact of visitors on heritage sites.
17. A coordinated system logs and responds effectively to most complaints.
18. There are special women’s EDCs that deal with livelihood issues such as horticulture, floriculture and crop cultivation, as seen at Chulina Busty EDC. The innovative way of providing an assured market is proving to be effective.
19. The website, brochures, hoardings, signage and 2 Nature Interpretation Centres are commendable.

20. All the visitor services and facilities accord with the relevant PA category and enhance the PA values. There are a large number of private facilities. Local youth are trained to provide guide services.
21. Status reports on some of the key species (wild dog, red panda, khaleej pheasant, etc.) are being prepared/ planned including medicinal plants in-situ Orchid, Rhododendron.
22. A systematic inventory provides the basis of the maintenance schedule, and adequate funds are made available for assets/infrastructure.
23. The difficult terrain and limited visibility impose limitations on regular, close monitoring; however the protection camps are generating considerable data on key mammal species such as the red panda, tiger, clouded leopard, wild dog, tahr, Himalayan bear, leopard, lesser cats and marten and the rich avifauna. The populations of these key elements are considered stable and increasing.
24. All the biological communities are being sustained to support the native biodiversity.
25. All the threats to the site have been dealt with.
26. All the reasonable expectations of serious wildlife lovers are met.
27. The immediate neighbours are supportive, thanks to EDC or JFM activity in the buffer zone. The convergence of various development agencies is giving positive results.
28. Jore Pokhari and Panch Pokhari have cultural values and are being fostered.

B. Management Weaknesses

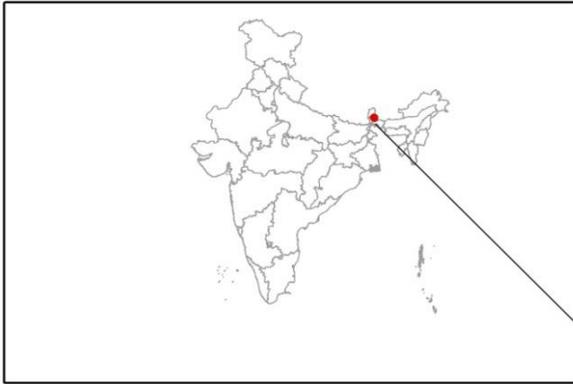
1. The southern portion has some biotic interference due to a small village inside the PA.
2. The situation of the staff is precarious. There are too many vacancies (RFO 2/0, BO 6/4 and FG 20/6).
3. Only a few staff members are trained in wildlife management.

C. Actionable Points

1. The biotic interference arising from the southern portion needs to be mitigated immediately.
2. Some parts of the PA need to be demarcated properly.
3. Detailed data collection and literature reviews are needed to identify the scope for re-introduction.
4. The vacancies (RFO 2/0, BO 6/4 and FG 20/6) need to be filled to improve the situation regarding the staff.
5. The supervisory staffs need vehicles for mobility, as well as a wireless network. The protection camps need to be strengthened with amenities such as high-altitude gear, potable water and solar lights. Inspection and patrolling paths are also needed. Range-/beat-level staff quarters are required.
6. The deployment of human resources needs to be improved. A greater thrust is needed on inventorying and monitoring (sample plots/permanent transects/PIP). WII should provide guidelines.
7. The frontline staff members need to be trained more in wildlife management.
8. The shortcomings can be explained against the backdrop of the deteriorating law and order situation, but improvement should be effected at the earliest.

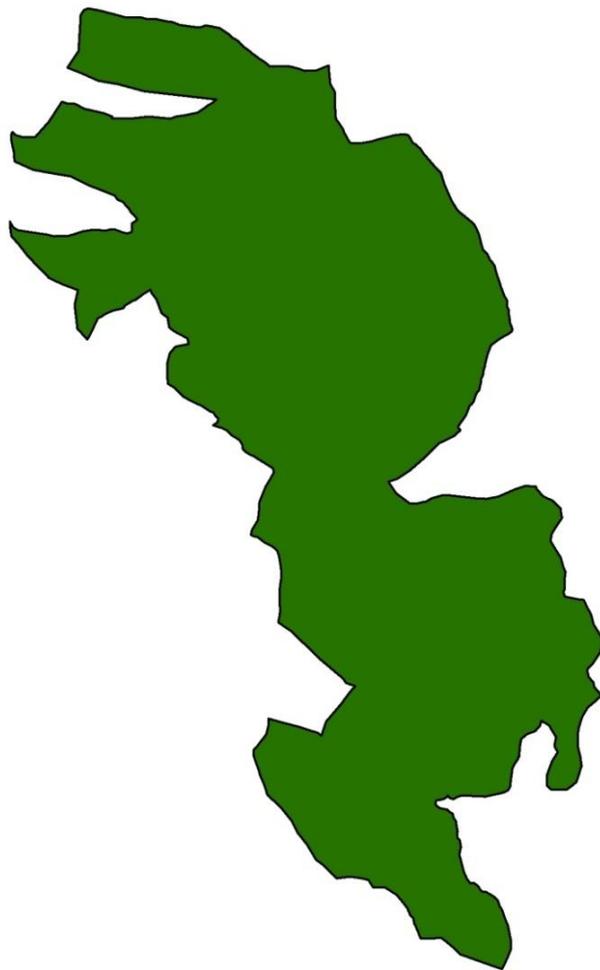
77°15'0"E

Neora Valley National Park West Bengal



28°30'0"N

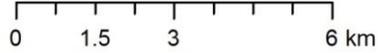
28°30'0"N



28°25'0"N

28°25'0"N

 भारतीय वन्यजीव संस्थान
Wildlife Institute of India
IT and RS & GIS Cell - 2014



Notified Area: 88.00 Sq. km
Notification Year: 1986

77°15'0"E

1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Values not systematically documented, assessed or monitored.	Poor		Site values from local to international levels have been recognized adequately [Draft management plan para 1.3] At local level it is life support for Kalingpong city and this needs emphasis. Key species of relevance at National (Schedule 1 WL (P) Act) / International levels (IUCN / CITES) have been listed but leaves scope for enlargement i.e. Hill stream fishes/ amphibians/ Orchids / Pteridophytes / Peripatus (the link between Annelids and Arthropods), etc. Scope to improve monitoring
Values generally identified but not systematically assessed and monitored.	Fair		
Most values systematically identified and assessed and monitored.	Good	✓	
All values systematically identified and assessed and monitored.	Very good		

1.2 Are the threats to site values well documented and assessed?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats not systematically documented or assessed.	Poor		One of the oldest Reserve Forest [1881] free from rights / encumbrances. Being part of "un development"/Protection working circles for long, hence almost entire area has > 0.4 forest cover of natural forest; steep hills coupled with no road net work. Alubari, a settlement, was vacated earlier; except for one small encroachment, Mithun Tar [32 HH] there is no village within. Adequate buffer zone. Southern portion in vulnerable and threats identified
Threats generally identified but not systematically assessed.	Fair		
Most threats systematically identified and assessed.	Good	✓	
All threats systematically identified and assessed.	Very good		

1.3 Is the site free from human and biotic interference?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
The site has extensive human and biotic interference.	Poor		Southern portion vulnerable, otherwise well preserved.
The site has some human and biotic interference.	Fair		
The site has little human and biotic interference.	Good	✓	
The site has no human and biotic interference.	Very good		

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Site not identified correctly or categorized.	Poor		Area identified properly, includes inter state and international boundaries. Some parts need be given proper demarcation. Zonation for management purpose adequate [Core & Eco tourism zones.]
Site identified correctly but not categorized.	Fair		
Site identified correctly but not systematically categorized.	Good	✓	
Site identified correctly and systematically categorized with proper zonation plans.	Very good		

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No relevant Management Plan in place.	Poor		Site has a written draft plan [2008- 17], plan for previous period was duly approved & available. The current plan to be imbedded in available resource data base [Working plan by Dr. Ghosh] and brought in tune with WII guide lines.
Management Plan exist but not comprehensive.	Fair		
Site has a comprehensive Management Plan.	Good	✓	
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good		

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		Fund requisition made to GoI, under APO, is duly linked with the Management plans. Up dating [said to be done]; systematic timely review need be developed by the CWLW / Govt, so that next duly approved plan is in place before expiry of the current plan.
Management Plan sometimes updated in adhoc manner.	Fair		
Management Plan routinely and systematically updated.	Good	✓	
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good		

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		It safe guards most of the biodiversity values; voluntary participation for protection during festival [Ram Navami]; wild life squads provided.
Sites safeguards a few threatened biodiversity values.	Fair		
Sites safeguards a large number of threatened biodiversity values.	Good		
Sites safeguards all threatened biodiversity values.	Very good	✓	

2.5 Are stakeholders given an opportunity to participate in planning?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		Advisory committee in place & meets regularly/ draft plan may be placed before the committee for scrutiny & suggestions. As informed by the DFO, Stake holders including Eco tourism industry is being taken into confidence.
Stakeholders participate in some planning.	Fair		
Stakeholders participate in most planning processes.	Good	✓	
Stakeholders routinely and systematically participate in all planning processes.	Very good		

2.6 Are habitat restoration programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Habitat restoration programmes are entirely adhoc.	Poor		Plantations of exotic timber species would have required Eco restoration; as per records [Annexure 11] an area of approx. 2 km ² was planted prior to NP declaration; this mainly includes plantation of miscellaneous species and thus does not require restoration. Proposed prescription of plantations in Rachilla chak blanks [prior potato cultivation] may be reconsidered as such openings can be kept as grazing lands for the high altitude herbivores.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair		
Habitat restoration programmes are generally well planned and monitored.	Good	✓	
Habitat restoration programmes are thoroughly planned and monitored.	Very good		

2.7 Are reintroduction programmes systematically planned and monitored?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Reintroduction programmes are entirely adhoc.	Poor		Need detailed data collection /literature review to identify scope for re-introduction.
Limited planning and monitoring programmes are in place for reintroduction programmes.	Fair		
Reintroduction programmes are generally well planned and monitored.	Good	✓	
Reintroduction programmes are thoroughly planned and monitored.	Very good		

2.8 Does the site has an effective protection strategy?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Site has no protection strategy.	Poor		There is a comprehensive strategy and consistent efforts during last two decades to preserve pristine nature by not introducing roads within the core zone. Wild life protection camps located at strategic places has kept in check probable human interferences.
Site has an adhoc protection strategy.	Fair		
Site has a comprehensive protection strategy but is not very effective.	Good	✓	
Site has a comprehensive and very effective protection strategy.	Very good		

2.9 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Human-wildlife conflicts are rampant.	Poor		Man animal conflicts are limited to southern region in specific period; management is making consistent efforts to curb possible threats by involving EDCs.
Site has been able to mitigate few human-wildlife conflicts.	Fair		
Site has been able to mitigate many human-wildlife conflicts.	Good		
Site has been able effective in mitigating all human-wildlife conflicts.	Very good	✓	

2.10 Is the site integrated into a wider ecological network following the principles of the ecosystem approach?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Site not integrated into a wider network/ landscape.	Poor		Site is well connected - with PA net work within the state [Chaparamari – Gorumara NP - Mahananda Sanctuaries; inter state with Sikkim [Pangulakha sanctuary; Inter-National with Bhutan Torsa Strict Nature Reserve or Toorse Nature Reserve that sprawls over 644 sq km and covers two Dzongkhags of Haa and Samtse
Some limited attempts to integrate the site into a network/ landscape.	Fair		
Site is generally quite well integrated into a network/ landscape.	Good		
Site is fully integrated into a wider network/ landscape.	Very good	✓	

3. Inputs

3.1 Are personnel well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		DFO WL 2 supervises three PAs/ At the RFO level, dedicated staff for PA; it is as per norms & adequate but there are too many vacancies [RFO 2/0, BO 6/4, FG 20/6]. Need to improve this precarious position. May consider assigning an independent ACF to head the office. Resources available to staff.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓	
Some personnel explicitly allocated towards achievement of specific management objectives.	Good		
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good		

3.2 Are resources (vehicle, equipment, building etc.) well organised and managed with access to adequate resources?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		Fund release and utilization [Lakhs] Supervisory staff needs vehicle for mobility/ wireless network [mobile phones]. Protection camps need be strengthened with amenities like high altitude gear/potable water/ solar lights, etc. Inspection/ patrolling paths needed. Range /Beat level staff quarters required.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓	
Some resources explicitly allocated towards achievement of specific management objectives.	Good		
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good		

Year	Amount	Remarks
2005- 06	32.78	Mainly for Infra structure and maintenance
2006- 07	36.18	Leopard/flying squirrel survey/ EDC
2007-08	45.80	Infra structure / Camps/ EDC
2008- 09	51.30	EDC activity (8 lakhs)
2009- 10	55.50	Infra structure , EDC (8.3 Lakhs)

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resource allocation is adhoc and funds are never released in time.	Poor		Resources linked to priorities as per Management plan; deployment of human resources need be improved. More thrust needed for inventory & monitoring [sample plots/ permanent transect /PIP]; may be WII can provide guide lines. Gol funds release timely and its utilization is optimal.
Some specific allocation for management of priority action and some funds released in time.	Fair		
Comprehensive formulae systematically applied to decide most resource allocation and generally funds released in time.	Good	✓	
Comprehensive formulae systematically applied to decide complete allocation of resources for management and on-time release of funds.	Very good		

3.4 What level of resources is provided by NGOs?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
NGOs contribute nothing for the management of the site.	Poor		Himalayan Nature & Adventure Foundation [HNAF], WTI, WWF, NAS, SPAWAN, JSNC, Dooars Jagran / Aranyak, etc (about 20) are associated and provide assistance in the sphere of insurance/ equipment/ training law enforcement/ crime control
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair		
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good	✓	
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good		

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Resources insufficient for most tasks.	Poor		
Resources sufficient for some tasks.	Fair		
Resources sufficient for most tasks.	Good	✓	
Resources are in excess for most tasks.	Very good		

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Very few trained officers and frontline staff in the site.	Poor		RFO is a key level staff but both the posts are vacant; DR/Fr/BO out of five only two are trained. On the back drop of deteriorating Law and order situation, the shortcoming can be explained but should improve at the earliest.
Few trained officers and frontline staff, who are posted in the site.	Fair	✓	
A large number of trained officers and frontline staff are posted in the site.	Good		
All trained managers and frontline staff posted in the site.	Very good		

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No linkage between staff performance management and management objectives.	Poor		Like any other Division, PA supervisory staff has system of linking performance of staff with management objectives.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good	✓	
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good		

4.3 Is there effective public participation in PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no public participation in PA management.	Poor		Sanctuary advisory committee in place, but does not meet frequently. Fringe human population in Gopipala, Bhujeigaon, Chulina, Ambik, Lava, Mulkhagra integrated in mitigation of man animal conflicts/ possible visitor impact on heritage sites. Better co operation noticed following EDC activity.
Opportunistic public participation in some aspects of PA management.	Fair		
Systematic public participation in most aspects of PA management.	Good	✓	
Comprehensive and systematic public participation in all important aspects of PA management.	Very good		

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic approach to handling complaints.	Poor		
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair		
Coordinated system logs and responds effectively to most complaints.	Good	✓	
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good		

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially women?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No livelihood issues are addressed by PA management.	Poor		Special women EDCs that deal with livelihood issues / horticulture/ floriculture /crop cultivation as seen at Chulina Busty EDC. [EDC President, Mrs. Pama Lemo Sherpa]. Innovative way of providing assured market is proving to be effective.
Few livelihood issues are addressed by PA management.	Fair		
Substantial livelihood issues are addressed by PA management.	Good	✓	
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good		

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no information on PA management publicly available.	Poor		Web site/ brochures / hoardings / signages / NIC at two places are commendable.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair		
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good		
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good	✓	

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		DFO WL (2) runs with the EDC support facilities at Lava / Chaudaferi/ Mauchaki; WBFDC LTD runs facilities at Lava / Lolegaon/ Samsing/ Shantalakhola /Jal Dhaka, etc. Large number of private facilities, do exist. Local youth oriented, trained to provide guide services. New interpretation center at Lava is innovative, well planned. Emphasis on adventure tourism is welcome.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair		
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good		
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓	

5.3 Are management related trends systematically evaluated and routinely reported?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Little or no systematic evaluation or routine reporting of management related trends.	Poor		Status reports on some of the key species [Wild dog, Red panda/ Khalij pheasant, etc. are being executed / planned. Medicinal plants in situ / orchid / Rhododendron are also being planned.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair		
Systematic evaluation and routine reporting of management related trends undertaken.	Good	✓	
Systematic evaluation and comprehensive reporting of management related trends undertaken.	Very good		

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
No systematic inventory or maintenance schedule.	Poor		
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair		
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good		
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good	✓	

6. Outcomes

6.1 Are threatened/ endangered species populations stable or increasing?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threatened/ endangered species populations declining.	Poor		Difficult terrain, limited visibility have limitations on regular close monitoring/ protection camps is generating considerable data on key mammal species like Red panda / tiger/ Clouded leopard / wild dogs/ Thar/ Himalayan bear/ Leopards /lesser cats / Martin etc ; Rich Avifauna. Considering these key elements population as may be considered stable & increasing.
Some threatened/ endangered species populations increasing, most others stable.	Fair		
Most threatened/ endangered species populations increasing, most others stable.	Good		
All threatened/ endangered species populations either increasing or stable.	Very good	✓	

6.2 Are biological communities at a mix of ages and spacings that will support native biodiversity?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Biological communities unlikely to be able to sustain native biodiversity.	Poor		As narrated above, monitoring has limitations but over all impression is positive; recent storms have lead to wind falls creating natural small opening from time to time – age gradations – mosaic of habitats. All the biological communities are being sustained to support native biodiversity.
Some biological communities likely to be able to sustain native biodiversity.	Fair		
Most biological communities likely to be able to sustain native biodiversity.	Good		
All biological communities likely to be able to sustain native biodiversity.	Very good	✓	

6.3 Have the threats to the site being abated/ minimized?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Threats to the site have not abated but have enhanced.	Poor		Most of the threats have been abated.
Some threats to the site have been abated.	Fair		
Most threats to the site have been abated.	Good		
All threats to the site have been abated.	Very good	✓	

6.4 Are the expectations of visitors generally met or exceeded?

Assessment criteria			
Condition	Category*	(Tick ✓)	Remarks
Expectations of visitors generally not met.	Poor		All the reasonable expectations of serious wildlife lovers are met with.
Expectations of many visitors are met.	Fair		
Expectations of most visitors are met.	Good		
Good expectations of most visitors are met.	Very good	✓	

6.5 Are neighbours and adjacent communities supportive of PA management?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Neighbours/adjacent communities are hostile.	Poor		Immediate neighbors are supportive thanks to EDC or JFM activity in the buffer zone. Convergence of varied development agencies is giving positive results.
Key neighbours/communities are supportive.	Fair		
Most neighbours/communities are supportive of PA management.	Good		
All neighbours and communities supportive of PA management.	Very good	✓	

6.6 Are cultural heritage assets protected?

Assessment criteria			
Condition	Category	(Tick ✓)	Remarks
Little or no management undertaken, or despite management efforts, deterioration of cultural heritage assets continues, or values are unknown.	Poor		Jor pokhari / Panch Pokhari have cultural values and are being fostered.
Some management activity, but deterioration continues.	Fair		
Planned approach to management underway and deterioration of assets is being redressed.	Good	✓	
Planned approach to management underway and deterioration of assets is being significantly redressed.	Very good		

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	22.5	81.06%
2.	Planning	10	10	100	82.5	
3.	Inputs	05	10	50	32.5	
4.	Process	05	10	50	35	
5.	Outputs	04	10	40	37.5	
6.	Outcomes	06	10	60	57.5	
Total		33		330*	267.5	

* The six Framework Elements were subsequently assigned equal weightage of 100 each. The total MEE score is 600 out of which this site has score -----%

4. CHAPRAMARI WILDLIFE SANCTUARY, WEST BENGAL

MEE Year (2012-13)

A. Management Strengths

1. Chapramari WLS is located in Lower Gangetic Plain bio-geographic zone (7B). This wildlife sanctuary is the habitat/visiting place of a number of animals that fall in Scheduled-I of the Wildlife Protection Act, 1972. They are the (1) Indian elephant (*Elephas maximus*), (2) gaur/Indian bison (*Bos gaurus*), (3) Chinese pangolin (*Manis pentadactyla*), (4) common leopard (*Panthera pardus*), (5) reticulated python (*Python reticulatus*), (6) Malayan giant squirrel (*Ratufa bicolor*) and (7) leopard cat (*Felis benghalensis*). Recently the sanctuary has been frequently visited by the Indian one-horned rhinoceros, coming from the adjoining Gorumara National Park (NP). In fact one adult male rhinoceros is staying permanently in the sanctuary. Chapramari is a stronghold of mega-herbivore diversity.
2. The sanctuary is connected by forest blocks with Gorumara NP and can potentially be linked with Neora Valley NP. Landscape-level management of biodiversity could be achieved by securing the reserved forests of Jalpaiguri Division and Kalimpong Division surrounding and juxtaposed between Gorumara NP, Chapramari WLS and Neora Valley NP (in West Bengal), Pangolakha WLS (in Sikkim) and Toorsa Reserve (in Bhutan). This can be a compact corridor, which will not only secure movements of the populations of elephants and rhinoceroses in a larger landscape but also open up the possibility of tiger movements from Neora Valley NP.
3. The sanctuary has a long history of conservation. The first reservation in this area was made in 1879 and the site was declared a reserve forest in 1895 under the Indian Forest Act, 1878. In 1939, 2129 acres of the forest in Upper Tondu Forest was declared Chapramari Game Sanctuary. Subsequently 2373 acres was notified as a WLS on 18 November 1940 and 30 August 1941. In 1976, the intentional notification of Chapramari Wild Life Sanctuary was issued under the Wildlife Protection Act, 1972, and the final notification was issued in 1998. This has facilitated wildlife-oriented conservation in this landscape.
4. The experience of the West Bengal Forest Department in executing JFM in a participatory mode has enabled the PA Management in developing a functional entity for integrating local communities into conservation and eco-tourism.

B. Management Weaknesses

1. Lack of adequate staff and existing Staffs have no formal training in wildlife.
2. The size of Chapramari WLS is only 9.60 sq. Km, which is too small for effective wildlife habitat management.
3. The reserved forest compartments adjoining Chapramari WLS, like Panjhora 3, Hillajhora, Sipchu and Chapramari 1 are not covered by the management plan. Grazing, forest fires

and collection of fuelwood and other NTFP items are not regulated in these areas. But they are frequently used by wild animals as corridors for movement.

4. The monoculture vegetation has come up as a result of previous forestry practices. For example, there is a teak plantation in Panjhora Block, which is not used by wild animals.
5. The PA does not have any natural salt licks. There is a natural salt lick in a reserved forest nearby, in Kumani Block, in Kalimpong Division, at Naxaljhora, but the area is highly disturbed and hence cannot be used by wild animals frequently. But all herbivores require micro-elements for their physiological demands.
6. There are three tea gardens adjacent to the sanctuary. The absence of an interface between the tea garden and forest acts as a constraint for the management. The management of wild animal conflicts is a major issue. Moreover, uncontrolled use of pesticides in the tea gardens causes alarming levels of pollution around the sanctuary. Huge amounts of pesticides leach into the river system and affect the indigenous aquatic fauna as well as avifauna of the sanctuary.
7. The Siliguri–Alipur Duar broad gauge railway track passes through the southern side of the sanctuary, cutting across the corridor and dividing the reserved forests of Panjhora Block, of Jalpaiguri Division. Till 2003 it was a metre gauge railway track, after the conversion of the track from the metre gauge to the broad gauge, the southern stretch of the PA and its adjoining areas have become a death trap for wild animals. Many elephants, gaurs and other animals, such as pythons, deer and leopards, have got killed in railway accidents.

C. Actionable Points

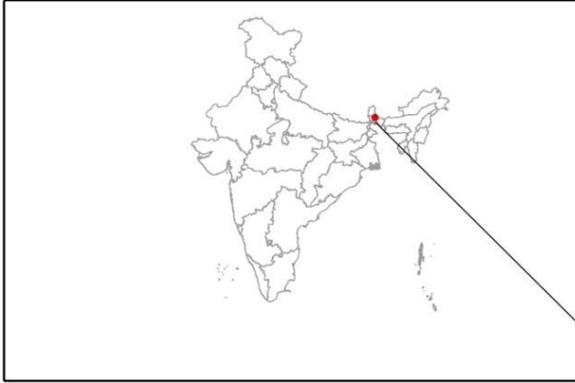
1. The staffs need vigorous capacity building in wildlife management. Short-term training courses/ programmes in wildlife management (planning, protection and monitoring) should be taken up at the division level for building the capacity of all the field staff on high priority.
2. Funding should be ensured for carrying out all habitat restoration prescriptions and for the scheduled maintenance work of inventories.
3. More motor cycles and suitable departmental patrolling vehicles should be provided expeditiously to the PA management for effective protection.
4. The excellent work being done in tourism management should be built on by making its base broader and integrating it with existing EDCs and VFCs.
5. An Interpretation centre should be established for imparting nature education effectively.
6. A study should be taken up urgently to assess the carrying capacity of the PA for tourism so that no damage from these activities happens in the future.
7. Modern spatial technology tools must be adopted in the day-to-day management of the PA.
8. Long-term wildlife ecology and biology studies should be taken up on a priority basis on mega-herbivore habitats and species and on critical management issues such as conflict mitigation and landscape-level wildlife management.
9. Declaration of the forests surrounding the Chapramari–Gorumara landscape as a conservation reserve is badly needed to secure Neora Valley. The proposal submitted to

the state wildlife board must be considered expeditiously, and comprehensive management planning must be carried out for the landscape.

10. A joint action plan should be drawn up and implemented by both the Forest Department and railways to prevent accidents. This matter has to be given high priority at the state and Central government levels.
11. The conflicting situation with tea garden workers and the pesticide pollution issues need to be resolved through local coordination meetings with the tea garden management, district authorities and PA managers, followed by state-level meetings.

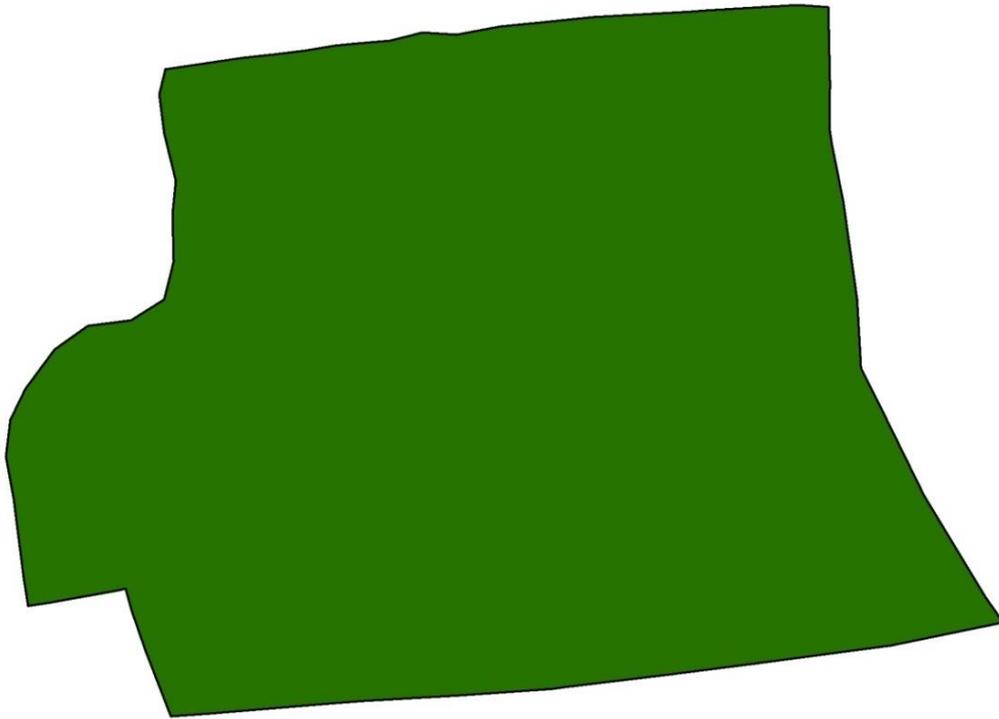
77°15'0"E

Chapramari Wildlife Sanctuary West Bengal



28°30'0"N

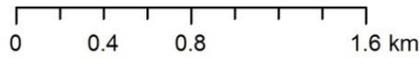
28°30'0"N



28°25'0"N

28°25'0"N

 भारतीय वन्यजीव संस्थान
Wildlife Institute of India
IT and RS & GIS Cell - 2014



Notified Area: 9.60 Sq. km
Notification Year: 1976

77°15'0"E

1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Values not systematically documented, assessed or monitored.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The Chapramari WLS represents one of the finest extant dooar ecosystems of the lower Gangetic plains biogeographic zone of 7B and is one of the oldest WLS of West Bengal. The values are well documented in Management Plan (2011–12 to 2021-22). In the plan (1) Real/ Economic value, (2) Biological value, (3) Conceptual value, (4) Recreational value, (5) Scientific value and (6) Educational values of the site has been recorded. Further the values have been scaled for different levels, such as: Global, National, Regional, State and Local levels. Periodically these are assessed through the Annual Reports and routine wildlife census reports, regular monitoring and study reports of different agencies.
Values generally identified but not systematically assessed and monitored.	Fair			
Most values systematically identified and assessed and monitored.	Good			
All values systematically identified and assessed and monitored.	Very good	✓		

*Values would also include geo-morphological, historico-cultural and faunal and floral species.

1.2 Are the threats to site values well documented and assessed?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats not systematically documented or assessed.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Although most of the threats have been identified and well documented in the Management Plan with systematic assessment some requires to be assessed as regards to their degree/quantum.
Threats generally identified but not systematically assessed.	Fair			
Most threats systematically identified and assessed.	Good	✓		
All threats systematically identified and assessed.	Very good			

* This assessment should be based on number, nature and extent of threats. Threats within and outside PA should both be considered. Impacts, if any on the population abundance of key species may be indicated in the remarks.

1.3 Is the site free from human and biotic interference?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
The site has extensive human and biotic interference.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	There are 1 Revenue Village, 3 Forest Villages and 3 nos. of Tea Garden around the Sanctuary. There are more than 8000 people (out of which 50% below poverty line and belongs to schedule caste and tribe) and about 3000 of cattles around the PA. However, the level of human and biotic interference has drastically reduced due to vibrant functioning of Eco-Development Committees,
The site has some human and biotic interference.	Fair			
The site has little human and biotic interference.	Good	✓		
The site has no human and biotic interference.	Very good			

*This assessment should be based on existence of human settlements/ villages; livestock grazing, cultivation, encroachments etc, resource extraction/ livelihood dependence of local communities and should reflect the overall interference due to all the above factors. Number and size of human settlements/ enclaved villages and their impacts on the site may be indicated in the Remarks.

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not identified correctly or categorized.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Chapramari Wild Life Sanctuary comprising of an area of 960.31 ha of forests was finally notified as a sanctuary in 1998 under WL (P) Act. The site is an excellent habitat of not only the Doar forest ecosystem but also harbours the mega-faunal biodiversity such as the endangered Asiatic Elephant, Great Indian One Horned Rhinoceros, Parti-colored flying squirrel (Hylopetes alboniger), and threatened Leopard, Chinese Pangolin (Manis pentadactyla), Malayan Giant squirrel (Ratufa bicolor) and Gaur (Bos gaurus) Although area is very small to support a biologically viable population, Chapramari serves as a vital link between the forest of Sipchu and Khumani in the North and Panjhora Forest Block in the South. This forms a corridor which is widely utilised by migrating elephants both North – South and East – West and vice versa. The Sanctuary has clear cut zonation- wilderness zone, habitat improvement zone, eco-tourism zone and zone of influence with specific prescriptions. However, the buffer area is yet to be secured
Site identified correctly but not categorized.	Fair			
Site identified correctly but not systematically categorized.	Good	✓		
Site identified correctly and systematically categorized with proper zonation plans.	Very good			

Management prescriptions for various zones (Core, Buffer, Tourism etc) may be carefully assessed.

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No relevant Management Plan in place.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The Chapramari wild Life Sanctuary has a comprehensive management plan for the period 2011–12 to 2021–22, which has been duly approved by the CWLW.
Management Plan exist but not comprehensive.	Fair			
Site has a comprehensive Management Plan.	Good	✓		
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good			

Is the Management Plan consistent with WII Guidelines or not? The extent to which the concerns of the stakeholders, if any have been incorporated in the Management Plan may be commented upon.

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The site was being managed as "Game Sanctuary Working Circle" from the 5th Forest Working Plan (1942-43 to 1956-57) to 8th Plan (1990-91 to 1999-2000). For the period 1999-2000 to 2009-10 it was managed by a wild life management plan, which was revised and replaced by the current plan.
Management Plan sometimes updated in adhoc manner.	Fair			
Management Plan routinely and systematically updated.	Good	✓		
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good			

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The threatened biodiversity is suitably safeguarded through incorporation of habitat management activities like creation and maintenance of fodder plantation, Tree-fodder plantation, bamboo plantation, cut back and control burning and creation and maintenance of water harvesting structures, including fringe area management and Eco-Development activities so that the sanctuary remains a safer haven for the endangered Asiatic Elephant, Great Indian One Horned Rhinoceros, Parti-colored flying squirrel (<i>Hylopetes alboniger</i>), and threatened Leopard, Chinese Pangolin (<i>Manis pentadactyla</i>), Malayan Giant squirrel (<i>Ratufa bicolor</i>) and Gaur (<i>Bos gaurus</i>)
Sites safeguards a few threatened biodiversity values.	Fair			
Sites safeguards a large number of threatened biodiversity values.	Good	✓		
Sites safeguards all threatened biodiversity values.	Very good			

* Remarks need to elaborate on the kind of safeguards and how they work or are intended to work

2.6 Are stakeholders given an opportunity to participate in planning?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Local Stake holders, organized in community groups in the Eco-Development committees, are involved in the process of planning in different developmental and conservation activities. EDC communities are involved in Participatory Rural Appraisal are done for developmental works, ecotourism activities. The micro-planning and activities are selected through bottom-up approach . This has resulted in lessening poaching cases, illicit felling, man-animal conflicts. However, there is no system to put the draft management plan in public domain. The participatory process followed in preparing the plan is not clear.
Stakeholders participate in some planning.	Fair			
Stakeholders participate in most planning processes.	Good	✓		
Stakeholders routinely and systematically participate in all planning processes.	Very good			

* The result of participation must show in the field and not merely reported as a routine exercise. Further, is there a system/scope of putting the draft Management Plan in Public Domain in place?

2.6 Are habitat restoration programmes systematically planned and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Habitat restoration programmes are entirely adhoc.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The management plan has spelled out detailed strategy and action plans for restoration of habitat ecologically as well as for providing better shelters. Habitat restoration activities like creation and maintenance of fodder plantation, tree fodder plantation, bamboo plantation, Habitat management, Cut back and control burning and creation and maintenance of water harvesting structures along with various protection measures are undertaken systematically as per the prescriptions of the Management plan. More funds are needed for implementing all the prescriptions given for habitat restoration in the plan.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair			
Habitat restoration programmes are generally well planned and monitored.	Good	✓		
Habitat restoration programmes are thoroughly planned and monitored.	Very good			

* This assessment should be primarily based on habitat management programmes in relation to habitats for species that are threatened (IUCN categories), are habitat specialists, subjected to seasonal movements, wide ranging with emphasis on the breeding and rearing habitat and may include factors such as food, water, shelter (all connotations). Habitat structure, composition, unique patches of vegetation and sensitive sites, sources of water and their distribution are integral. Corridors within buffer zone are critically important. For example, all riparian habitats. Have these been addressed? Is there a planning process in place? What is the extent of 'invasive species in the Site? Are there any measures to reduce/ remove them? Have these been successful?

2.7 Does the site has an effective protection strategy?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Site has no protection strategy.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The varied Eco-Developmental activities and participatory forest management including Eco-Tourism, has greatly enabled to control the illegal activities to a great extent. This is evident from the Offence report of last 5 years. Two anti poaching camps and one entry check post exists at the boundary, Panjhora Forest village has been developed as Eco village. Mobile patrolling is also carried out. However many strategies prescribed in the plan is yet to be implemented.
Site has an adhoc protection strategy.	Fair			
Site has a comprehensive protection strategy but is not very effective.	Good	✓		
Site has a comprehensive and very effective protection strategy.	Very good			

* This assessment takes *inter-alia* into account the nature of threats, the number and location of patrolling camps and foot and mobile patrolling, needs that relate to available manpower, terrain difficulties, practicability of area coverage, readiness to contain specific threats with necessary support and facilities. Is there any coordination with other wings of the Forest Department/ Police/ Customs etc? Are these effective?

2.8 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Human-wildlife conflicts are rampant.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Man-animal conflicts are in rise due to blockage of traditional elephant corridors by ever increasing population of Tea Gardens, Human settlements and agricultural fields of burgeoning inland as well as migratory populace from neighboring states and Countries. The Sanctuary administration maintains one elephant squad to drive away the depredated elephant herds. Many cases of strayed out Gaurs and Leopards were solved by tranquilizing and successfully translocating them in Sanctuary or in the adjoining NP. There is very little damage from wild animals like Gaurs and Leopards. The mgmt. is in dialogue with Tea estate owners and villagers. Ex gratia payment of Rs 1 lac for death, Rs 50,000 for permanent disability with a provision for Rs 20,000 for immediate disbursement. The mgmt. is alive to the immediate requirement of villagers, affected and appropriate help/assistance rendered. There are 2 human deaths and 27 injury cases in last 3years.
Site has been able to mitigate few human-wildlife conflicts.	Fair			
Site has been able to mitigate many human-wildlife conflicts.	Good	✓		
Site has been able effective in mitigating all human-wildlife conflicts.	Very good			

* Judgment needs to consider staff training, capabilities, equipment, logistics, local attitude and politics (negatively aided and/or abetted), assistance of relevant agencies (e.g. police. Local administration, Local people themselves) PR, follow-up actions and monitoring. Details of compensation paid for human injury/ death and property damage in the last 3 year may be collected.

2.9 Is the site integrated into a wider ecological network landscape following the principles of the ecosystem approach?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not integrated into a wider network/ landscape.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The PA has to be integrated with Gorumara National park by adding some RF area of Jalpaiguri Division as Great Indian One Horn Rhinoceros already started to stray into this Sanctuary. There should be a linkage with the Neora Valley NP also which will ensure landscape level management of biodiversity. A landscape approach of management including Gorumara NP, Chapramari WLS and Neora Valley NP in West Bengal and Pangolakha WLS in Sikkim and Toorsa Reserve in Bhutan should be the vision through developing a compact corridor comprising of reserved forests of Jalpaiguri Division and Kalimpong Division. This will not only secure movement of population of elephants and Rhinos in a large landscape but also open up possibility of Tiger movements from Neora valley NP. In the plan the adjacent forests have been proposed for creation of conservation reserve. It was told that The proposal is being placed before the state wildlife advisory board. However the forest area outside the PA is disturbed and Forest W. Plans need integration.
Some limited attempts to integrate the site into a network/ landscape.	Fair			
Site is generally quite well integrated into a network/ landscape.	Good	✓		
Site is fully integrated into a wider network/ landscape.	Very good			

* Assessment needs to consider the scope of opportunities on the landscape scale that exist. Consider whether any attempts have been made and what are these? Have all the important corridors been identified? What actions are planned/implemented for their security? Have the Forest Working Plans and Forest Development Corporation Plans within the identified landscapes taken cognizance of such new requirement? What kind of relationship exists with the District Administration and other Line Departments? Does the Site get any funds from these agencies?

3. Inputs

3.1 Are personnel adequate, well organised and deployed with access to adequate resources in the site?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The protected area has inadequate personnel There are only 4 sanctioned posts(1 FR+1 Fr+ 2 FG), against which 2 (two) persons (1 FR+ 1 Fr.) are working. In addition 14 (Fourteen) nos. casual staff (only 9 are directly involved with protection works) are working. Thus the PA authority has to maintain lot many casual workers from the fund which can otherwise be used for developmental activities. There is need to increase staff strength at FG level for effective patrolling.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair			
Some personnel explicitly allocated towards achievement of specific management objectives.	Good	✓		
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good			

* This assessment should *inter-alia* be based on number of personnel allocated for attainment of PA objectives at the Range , Round, Beat and Patrolling camps levels or as relevant to the needs (sanctioned posts *vis- a- vis* existing personnel and needs beyond the sanctioned strengths. It is possible that posts have last been sanctioned several years back that do not now account for the current needs)

3.2 Are resources (vehicle, equipment, building etc.) adequate, well organised and managed with access to adequate resources?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The PA has only one motor cycle and does not have departmental vehicles to patrol. It is managed by hiring a jeep, which has its own limitation. Fast moving vehicles like Diesel Jeep Euro- IV are desirable for the Sanctuary. For better communication RT net work is obsolete and needs modernisation. In addition, providing mobile phones to staff would be very helpful for information gathering. There is no electricity in the PA. All establishments are solar operated. There are 12 buildings- 10 office-cum-residences /residences/barracks for staff, 1 garage and 1 FRH.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓		
Some resources explicitly allocated towards achievement of specific management objectives.	Good			
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good			

* These form a variety of resources. These may be segregated into immovable (structures) and movable categories and each further may be considered under the essential and desirable categories. It is best to start with what are the minimum needs to attain each objective, what is available and manner of use/deployment. The proportions of the 'essentials' and 'desirables' along the importance gradient of objectives would serve as pointers for score categories. Specific remarks would be vitally important.

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria																				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks																
Resource allocation is adhoc, funds are inadequate and seldom released in time and not utilized.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	<p>The position of funding from Central Govt. Schemes (Wildlife+ PE+RIDF) and State Schemes (in lakhs) in last 3 years are as under:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>CG Scheme</th> <th>State Scheme</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>09-10</td> <td>43.34</td> <td>1.30</td> <td>44.64</td> </tr> <tr> <td>10-11</td> <td>24.30</td> <td>0.39</td> <td>24.69</td> </tr> <tr> <td>11-12</td> <td>25.09</td> <td>3.19</td> <td>28.28</td> </tr> </tbody> </table> <p>All the funds released to PA have almost been utilized. The fund is not adequate as the engagement of large no. of casual workers for protection work is draining funds, which could have otherwise used for Developmental works of the sanctuary.</p>	Year	CG Scheme	State Scheme	Total	09-10	43.34	1.30	44.64	10-11	24.30	0.39	24.69	11-12	25.09	3.19	28.28
Year	CG Scheme	State Scheme			Total															
09-10	43.34	1.30			44.64															
10-11	24.30	0.39			24.69															
11-12	25.09	3.19	28.28																	
Some specific allocation for management of priority action. Funds are inadequate and there is some delay in release, partially utilized.	Fair																			
Comprehensive planning and allocation that meets the most important objectives. Generally funds released with not much delay and mostly utilized.	Good	✓																		
Comprehensive planning and allocation of resources for attainment of most objectives. Funds generally released on-time and are fully utilized.	Very good																			

*Obtain details of funds released by MoEF and their utilization by site in the last 3 years and indicate them under 'Remarks'. Also comment on the problems associated with funds and their mitigation.

3.4 What level of resources is provided by NGOs?

Assessment criteria*				
Condition*	Category*	(Tick ✓)	Reference document(s)	Remarks
NGOs contribute nothing for the management of the site.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	<p>NGOs participating in various programmes including Wildlife census. 9 Local NGOs are participating to generate public awareness for preservation of the flora and fauna. Insurance scheme for staff is being financed and managed by the Wildlife Trust of India, In the year 2000 a detailed study was carried by ATREE (Ashoka Trust for Research in Ecology and Environment) with the help of Central Pollution Control Board. Their preliminary report suggested that the pesticides pollution in the river system is alarming.</p>
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair			
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good	✓		
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good			

Details of contributions(cash/kind) made by the NGOs in the last 3 years may be collected.

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resources insufficient for most tasks.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The existing human and financial resources are not sufficient to manage all the works of the PA.
Resources sufficient for some tasks.	Fair	✓		
Resources sufficient for most tasks.	Good			
Resources are in excess for most tasks.	Very good			

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Very few trained officers and frontline staff in the site.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	There is no formal WL trained staff. However, the DFO has been trained at National institute of crime and Forensic Sciences, New Delhi. The Frontline staffs have been trained from the West Bengal Forest School, Dow-hill, and Forest guard training centre. The regular training and workshop on different subjects related to forestry and Wildlife management are being done. On-the-job training and experience has improved their skill. However, more trained staff are required.
Few trained officers and frontline staff, who are posted in the site.	Fair	✓		
A large number of trained officers and frontline staff are posted in the site.	Good			
All trained managers and frontline staff posted in the site.	Very good			

* Indicate % of trained staff in various categories. i.e. Higher Management: ACF/ DCF/ CF/ CCF; Frontline Staff: Range Officer; Beat Officer; Forest Guard; Casual Daily Labour (CDL); Others.

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No linkage between staff performance management and management objectives.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The staff's duties schedules are designed to suit the target set in the Management Plan objectives. Performance evaluation at annual interval is being carried out for all the staff as per service rule.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair	✓		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good			
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good			

*Has the PA staff received award/ appreciation from any agency in the last 3 years?

4.3 Is there effective public participation in PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no public participation in PA management.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit. Meeting with EDC members.	Joint Forest Management is in operation in the PA through the EDC. Issues of PA management and development activities are analyzed threadbare. The Panjhora Wilderness Camp with 4 double bedded rooms is run by EDC including providing foods and sale of souvenirs made locally. Local people are also associated in census. They are engaged in forest protection and habitat management works and also as eco tourism guides. The PA in turn received overwhelming support by the participation of villagers. This is evident by way of less poaching, less tree felling and zero staff assault cases.
Opportunistic public participation in some aspects of PA management.	Fair			
Systematic public participation in most aspects of PA management.	Good			
Comprehensive and systematic public participation in all important aspects of PA management.	Very good	✓		

* Participation would include Conservation & awareness programmes, Census operations, Intelligence gathering, Forest fire control etc.

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic approach to handling complaints.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The comments from the Monitoring Wing of State Forest department are quickly attended through taking remedial steps. Any other complaints regarding the PA management is discussed at the Range Level Coordination Committee meetings of the PA and remedial courses taken without any delay. Feed back/ complaint boxes have been kept in prominent places in Range and the beats. Visitor notebook and complaint / feedback book are also kept in Forest Guest House.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair			
Coordinated system logs and responds effectively to most complaints.	Good			
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good	✓		

* Number of queries made and response thereof under the Right to Information (RTI), Act in the last 3 years may be compiled.

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially of women?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No livelihood issues are addressed by PA management.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit. Meeting with members of EDC.	The PA management addresses the livelihood issues for PA dependent communities through the process of prioritization in section of beneficiaries while implementing various Eco-development activities. Various income generating activities such as Piggery, Apiary, Mushroom cultivation, handloom, Eco-tourism etc. were tried out to reduce their dependency on the PA. Importance is given on the agriculture sector by providing training and inputs in alternate crops like Ginger, Bengal Gram, and Horticulture etc. EDC/ Villagers get good income from ecotourism activities- like community share from day visitors and cottages, folk dance(90% women), handicraft making (100% women), nature guides, food to visitors , house-keeping, and tea etc. The income from eco-tourism in 2008-09, 09-10, 10-11, 11-12 and 12-13 are Rupees 6.10, 8.12, 11.83, 12.71 and 11.74 lakhs respectively. The women members are grouped into SHGs and scheme like, Handloom, sale centre, cultural activities, Eco-tourism are given to them. The daily patrolling duties are also allotted to some the female members. The efforts by PA management are commendable.
Few livelihood issues are addressed by PA management.	Fair			
Substantial livelihood issues are addressed by PA management.	Good			
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good	✓		

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no information on PA management publicly available.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Excellent Brochures, Booklets and hoardings are being created to disseminate information about the PA. The division has a web site providing information. However, more efforts necessary to update the site at regular intervals.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair			
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good	✓		
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good			

* Does the Site has a website? If yes, is it comprehensive, well-managed and periodically updated?

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		Discussion with DFO, information from Management plan and other documents, field visit and visit to tourist facility.	Adequate visitors' services and facilities have been created and maintained in places like Chapramari Forest Rest House and Panjhora Eco tourism centre. Facility of drinking water, sheds, toilets, Information brochures, nature guides, designated vehicles, garbage bins and signages are available at Chalsa/ Lataguri Entry ticket issuing centre. Similar facilities are also available at Chapramari watch tower. Wildlife week, adventure camps, campsite education, etc. are also taken up by the PA management.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair			
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good			
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓		

* Include the existence and quality of visitor and interpretation centers, including skills and capabilities of personnel manning these, site related publications, films, videos; arrangements of stay (including places serving refreshments and food owned and managed by site), watch towers and hides including safety factors, vehicles assigned for visitors including riding elephants, if any and their deployment, drinking water, rest rooms, garbage disposal, attended and self guided services in the field, visitor feed back on the quality of wilderness experience. Details of numbers of visitors/ tourists (both domestic and overseas) coming in the last 3 years and the revenue earned may be compiled.

5.3 Are research/ monitoring related trends systematically evaluated and routinely reported and used to improve management?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no systematic evaluation or routine reporting of trends.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The management related trends are systematically evaluated through Annual reports; Census reports etc. and routinely reported higher authorities. Biannual census by two different methods is being followed. In addition, a Protection Monitoring Protocol (PMP) is being followed. Some projects on elephant, gaur, leopard, fish and orchid survey have been done by the Forest Department in collaboration with NGO and other resource persons along with that of Gorumara NP.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair			
Systematic evaluation and routine reporting of management related trends undertaken.	Good			
Systematic evaluation and comprehensive reporting of trends undertaken and attempts made at course corrections as relevant.	Very good	✓		

* Not all site attract projects and researchers and with exceptions, little research takes place on the site own steam because of systemic limitations. However, monitoring of some critical issues is expected e.g. population of tiger, co-predators and prey with insights into their demography and distribution (some opportunistic sampling by sightings, signs and spatial distribution during assessment would be extremely useful in terms of expert impression and as a pulse), monitoring incidence of livestock grazing, fires, weeds, sources of water, a variety of illegal activities typically associated with the reserve, wildlife health (e.g. epidemics, immunization of livestock) regeneration and change in vegetation, visitors and their activities, offence cases, ex-gratia payments etc. Details of number of research projects in the last 3 years, institutions involved, salient outcomes may be collected and used in awarding scores.

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic inventory or maintenance schedule.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	All the Range Officers maintain infrastructure/ assets created in respective Ranges for funds provided in different schemes. The systematic maintenance plantation is recorded in the form of Plantation Journals. Control forms have been prescribed in the Plan to keep systematic records of for various operations and thus provides basis for timely maintenance schedule. More funds are needed for scheduled maintenance of all inventories.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair			
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good	✓		
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good			

6. Outcomes

6.1 Are populations of threatened species especially key faunal species declining, stable or increasing?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threatened/ endangered species populations declining.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	Biannual census by two different methods is being followed. In addition, a Protection Monitoring Protocol (PMP) is being followed. Routine data is also being collected by the staff in the animal sighting diary. The trends of wild life populations can be assessed as also the habitat occupancy and relative abundance and density. The trend shows improvement in most threatened/ endangered species.
Some threatened/ endangered species populations increasing, most others stable.	Fair			
Most threatened/ endangered species populations increasing, most others stable.	Good	✓		
All threatened/ endangered species populations either increasing or stable.	Very good			

* This needs to practically relate to the natural ecosystem potential rather than being driven merely by numbers and visibility. The assessment score may be elaborated under remarks. Comments on the population trends may be made under Remarks.

6.2 Have the threats to the site being reduced/ minimized or is there an increase?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats to the Site have not abated but have enhanced.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The threats to the PA from the biotic pressure have been reduced through the implementation of JFM and Eco Development programmes with the active participation of forest fringe villages.
Some threats to the Site have abated, others continue their presence	Fair			
Most threats to the Site have abated. The few remaining are vigorously being addressed	Good			
All threats to the Site have been effectively contained and an efficient system is in place to deal with any emerging situation	Very good	✓		

6.3 Are the expectations of visitors generally met or exceeded?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Expectations of visitors generally not met.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The no. of visitors in last 3 years are:- 17,397 in 2010-12, 10,938 in 2011-12 and 11,364 in 2012-13. For first time, in 2012-13, 27 foreigners also visited the PA. There has been a very good increase in the tourist visitation and many repeat tourism cases are reported.
Expectations of many visitors are met.	Fair			
Expectations of most visitors are met.	Good			
Good expectations of most visitors are met.	Very good	✓		

* Is there any system of receiving/ analyzing visitor feedback?

6.4 Are local communities supportive of PA management?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Local communities are hostile.	Poor		Discussion with DFO, information from Management plan and other documents, and field visit.	The local communities of the PA are the members of EDCs. PA management has built up strong social fencing around the PA with the help of these people through the joined Forest Management System. The benefits derived from eco tourism are a big incentive. Consequently, they are highly supportive to the PA Management. They protect the PA and shares with the view of
Some are supportive.	Fair			
Most locals are supportive of PA management.	Good			
All local communities	Very good	✓		

supportive of PA management.				the Management. They feel that the Sanctuary is their pride and they should protect its glory.
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* There could be many reasons for disenchantment. It could be real because of managerial neglect or the managerial efforts could be appropriate but there could be local elements/organizations who would like to keep the dis-affectation simmering for their own ulterior motives. Likewise success could be entirely because of the efforts of managers or they might be fortunate in striking partnerships with credible NGOs. Assessment may take the prevailing causes into account.

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	25	79.17%
2.	Planning	09	10	90	67.5	
3.	Inputs	05	10	50	32.5	
4.	Process	05	10	50	40	
5.	Outputs	04	10	40	35	
6.	Outcomes	04	10	40	37.5	
Total		30		300	237.5	

5. LOTHIAN ISLAND WILDLIFE SANCTUARY, WEST BENGAL

MEE Year (2015-16)

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.
3. The sanctuary is a part of the Sundarbans Biosphere Reserve, which is a UNESCO World Heritage site. It provides connectivity to a larger ecological network. Its protection is a key to averting/minimize the effects of any disaster hitting the area.
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.

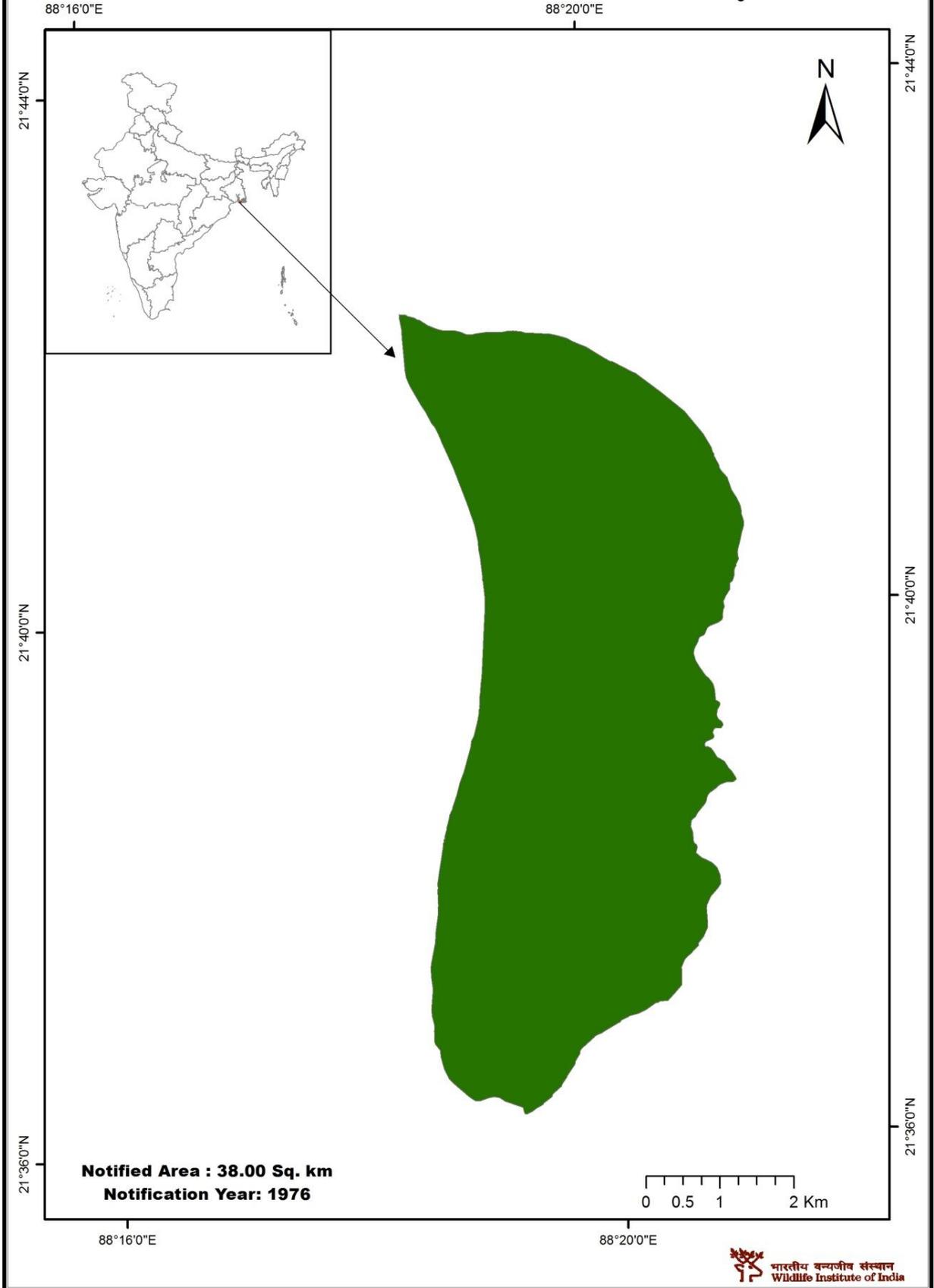
Management Weaknesses

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 trollies 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.

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.
5. During an interaction with the Forest Protection Committee of Paschchim Darokhapur, it was found that nearly 400 out of the 1130 families are tribal and of Santhal Pargana origin. These tribal families were moved for coupe work during British rule. In those days, coupes were 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.

Lothian Island Wildlife Sanctuary



1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Values not systematically documented, assessed or monitored.	Poor		Management Plan (2010-2020), DFO Report	1. The values provided in the Management Plan have local, national and international importance. 2. The sanctuary shelters Fishing Cats, Gangetic Dolphins, water monitor lizard, Estuarine Crocodiles and Olive Ridley Turtles, all Schedule 1 species. 3. It protects 14 IUCN and CITES Appendix. Species. 4. The sanctuary has scientific importance for 64 species of flora, many faunal species and also for breeding of fishes. 5. The sanctuary has anthropological (site for stone age implements), cultural and historical values
Values generally identified but not systematically assessed and monitored.	Fair			
Most values systematically identified and assessed and monitored.	Good			
All values systematically identified and assessed and monitored.	Very good	✓		

*Values would also include geo-morphological, historico-cultural and faunal and floral species.

1.2 Are the threats to site values well documented and assessed?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats not systematically documented or assessed.	Poor		Management Plan, DFO report	1.All the threats like poaching,NTFP collection, Firewood collection, grazing etc have been documented and assessed
Threats generally identified but not systematically assessed.	Fair			
Most threats systematically identified and assessed.	Good			
All threats systematically identified and assessed.	Very good	✓		

* This assessment should be based on number, nature and extent of threats. Threats within and outside PA should both be considered. Impacts, if any on the population abundance of key species may be indicated in the remarks.

1.3 Is the site free from human and biotic interference?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
The site has extensive human and biotic interference.	Poor		Management Plan, DFO report, Field visit	1. The site has negligible human and biotic interference. The sanctuary, by and large, is not threatened by fire grazing, NTFP collection and poaching. Sometimes Santhals enter the sanctuary to collect crabs.
The site has some human and biotic interference.	Fair			
The site has little human and biotic interference.	Good	✓		
The site has no human and biotic interference.	Very good			

*This assessment should be based on existence of human settlements/ villages; livestock grazing, cultivation, encroachments etc, resource extraction/ livelihood dependence of local communities and should reflect the overall interference due to all the above factors. Number and size of human settlements/ enclaved villages and their impacts on the site may be indicated in the Remarks.

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not identified correctly or categorized.	Poor		Management Plan, DFO Report, Field Visits	The site (38 Sq.Kms) is correctly identified as it is one land mass surrounded by river Saptmukhi and sea. There is no ambiguity with regard to sanctuary boundary, as there are no village enclosures in the island. Two kms strip of Eco-sensitive zones around the sanctuary is proposed.
Site identified correctly but not categorized.	Fair			
Site identified correctly but not systematically categorized.	Good			
Site identified correctly and systematically categorized with proper zonation plans.	Very good	✓		

Management prescriptions for various zones (Core, Buffer, Tourism etc) may be carefully assessed.

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No relevant Management Plan in place.	Poor		Current Management Plan, DFO report, Interaction with CF, DFO and ADFO	The Management Plan, of the sanctuary is in place. Although there is a provision of review after five years, the managers should get into the habit of exercising this option every now and then to accommodate the changing scenario, especially with regard to climate change etc.
Management Plan exist but not comprehensive.	Fair			
Site has a comprehensive Management Plan.	Good			
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good	✓		

Is the Management Plan consistent with WII Guidelines or not? The extent to which the concerns of the stakeholders, if any have been incorporated in the Management Plan may be commented upon.

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		Current Management Plan	The plan has the prescription for review and updating after 5 years. The MEE team has not found any proposal for the review.
Management Plan sometimes updated in adhoc manner.	Fair			
Management Plan routinely and systematically updated.	Good			
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good	✓		

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		Management Plan, interaction with officers and staff, field visits	The site safeguards about five Schedule 1 species, 14 species of IUCN & CITES Appendices, 64 species of mangrove and littoral flora, breeding migratory rotes of fishes like Hilsa Polynemas etc, a large number of crabs, breeding grounds of Olive Ridley Turtles, King Cobra, King Crab, Honey Bees etc.,
Sites safeguards a few threatened biodiversity values.	Fair			
Sites safeguards a large number of threatened biodiversity values.	Good			
Sites safeguards all threatened biodiversity values.	Very good	✓		

* Remarks need to elaborate on the kind of safeguards and how they work or are intended to work

2.7 Are stakeholders given an opportunity to participate in planning?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		Management Plan, Interaction with Villagers, local staff and other stakeholders like fishermen and tourism operators.	1. Stake holders have been consulted at the time of preparation of plan; the details are annexed with it. 2. The schemes are generally implemented through stakeholders and Panchayats.
Stakeholders participate in some planning.	Fair			
Stakeholders participate in most planning processes.	Good	✓		
Stakeholders routinely and systematically participate in all planning processes.	Very good			

* The result of participation must show in the field and not merely reported as a routine exercise. Further, is there a system/scope of putting the draft Management Plan in Public Domain in place?

2.6 Are habitat restoration programme systematically planned and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Habitat restoration programme are entirely adhoc.	Poor		DFO report, Field Visits, Interaction with officers and staff, APO of last three years	1. A total of 400 ha. of habitat restoration zone has been demarcated. 2. Non-mangrove strip plantation, Mangrove plantation, Fresh water pond and deep bore wells have been taken up under the restoration program in in the sanctuary and its buffer areas of water bodies and adjoining islands. 3. The habitat restoration program are systematically planned and implemented.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair			
Habitat restoration programme are generally well planned and monitored.	Good	✓		
Habitat restoration programme are thoroughly planned and monitored.	Very good			

* This assessment should be primarily based on habitat management programme in relation to habitats for species that are threatened (IUCN categories), are habitat specialists, subjected to seasonal movements, wide ranging with emphasis on the 'breeding and rearing habitat and may include factors such as food, water, shelter (all connotations).Habitat structure, composition, unique patches of vegetation and sensitive sites, sources of water and their distribution are integral. Corridors within buffer zone are critically important. For example, all riparian habitats. Have these been addressed? Is their a planning process in place? What is the extent of 'invasive species in the Site? Are there any measures to reduce/ remove them? Have these been successful?

2.7 Does the site has an effective protection strategy?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Site has no protection strategy.	Poor		Management Plan ,Interaction with officials and staff; Field observations	1. The sanctuary has two protection camps (Old camp and new camp, which is also known as Eco Camp), equipped with two watch towers, 04staff barracks, and 02 mechanized boats for patrolling. 2. The protection strategy and co-ordination with other line departments is found to be good. 3. 08 numbers of field staff are stationed in the sanctuary with adequate facilities of stay and patrolling. The post of Forest Guard and Forester is lying vacant. The Forester working in adjoining island is in additional charge. 4. The sanctuary is surrounded by brackish water with little availability of freshwater. Bore wells in both the camps also do not yield sweet water which has to be regularly transported for the consumption of staff.
Site has an adhoc protection strategy.	Fair			
Site has a comprehensive protection strategy but is not very effective.	Good	✓		
Site has a comprehensive and very effective protection strategy.	Very good			

* This assessment takes *inter-alia* into account the nature of threats, the number and location of patrolling camps and foot and mobile patrolling, needs that relate to available manpower, terrain difficulties, practicability of area coverage, readiness to contain specific threats with necessary support and facilities. Is there any coordination with other wings of the Forest Department/ Police/ Customs etc? Are these effective?

2.8 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Human-wildlife conflicts are rampant.	Poor		DFO Report, Interaction with officers and staff, Field visit	1. There is no felling, grazing, fire or poaching in the sanctuary. 2. The patrolling is taken up by boat and on foot. 3. Many of the wildlife offences registered in the sanctuary is collection of crabs by Santhals 4. The staff has registered 440 such cases in last 3 years. Three of these offences are under trial stage.
Site has been able to mitigate few human-wildlife conflicts.	Fair			
Site has been able to mitigate many human-wildlife conflicts.	Good	✓		
Site has been able effective in mitigating all human-wildlife conflicts.	Very good			

* Judgment needs to consider staff training, capabilities, equipment, logistics, local attitude and politics (negatively aided and/or abetted), assistance of relevant agencies (e.g. police. Local administration, Local people themselves) PR, follow-up actions and monitoring. Details of compensation paid for human injury/ death and property damage in the last 3 year may be collected.

2.9 Is the site integrated into a wider ecological network landscape following the principles of the ecosystem approach?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not integrated into a wider network/ landscape.	Poor		Management Plan, DFO report, Field visit	1. The sanctuary is part of Sunder ban Biosphere reserve (SBR) under UNSECO and is also part of International Biodiversity hot spot. 2. The management plan of SBR covers prescription for the wider ecological network which takes care of this sanctuary. In other words, the management Plan of the sanctuary is integrated in the management plan of Sunder ban biosphere Reserve.
Some limited attempts to integrate the site into a network/ landscape.	Fair			
Site is generally quite well integrated into a network/ landscape.	Good			
Site is fully integrated into a wider network/ landscape.	Very good	✓		

* Assessment needs to consider the scope of opportunities on the landscape scale that exist. Consider whether any attempts have been made and what are these? Have all the important corridors been identified? What actions are planned/implemented for their security? Have the Forest Working Plans and Forest Development Corporation Plans within the identified landscapes taken cognizance of such new requirement? What kind of relationship exists with the District Administration and other Line Departments? Does the Site get any funds from these agencies?

3. Inputs

3.1 Are personnel adequate, well organized and deployed with access to adequate resources in the site?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		Management Plan, DFO report, Interaction with Staff and Field Visits	1. The sanctuary is a small island (38 Sq.Kms) administered under Range Bhagabatpur. 2. Eight staff members are exclusively positioned to take care of this sanctuary. The post of a Forester and a Forest Guard is vacant and these positions are held in additional charge by the staff working in adjoining island. It is necessary to recruit and fill up these positions, so that the staff drawn from other duties is spared.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair			
Some personnel explicitly allocated towards achievement of specific management objectives.	Good	✓		
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good			

* This assessment should *inter-alia* be based on number of personnel allocated for attainment of PA objectives at the Range , Round, Beat and Patrolling camps levels or as relevant to the needs (sanctioned posts *vis- a- vis* existing personnel and needs beyond the sanctioned strengths. It is possible that posts have last been sanctioned several years back that do not now account for the current needs)

3.2 Are resources (vehicle, equipment, building etc.) adequate, well organized and managed with access to adequate resources?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		DFO report, Interaction with staff and field visit	As per the assessment, additional resources are required for more effective management of the sanctuary; Two speed boats, one additional jetty, one more patrolling camp and more funds for Eco-Development activities are needed.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair			
Some resources explicitly allocated towards achievement of specific management objectives.	Good	✓		
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good			

* These form a variety of resources. These may be segregated into immovable (structures) and movable categories and each further may be considered under the essential and desirable categories. It is best to start with what are the minimum needs to attain each objective, what is available and manner of use/deployment. The proportions of the 'essentials' and 'desirables' along the importance gradient of objectives would serve as pointers for score categories. Specific remarks would be vitally important.

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resource allocation is adhoc, funds are inadequate and seldom released in time and not utilized.	Poor		DFO report, staff and officer interaction	1. Funds (Plan, non-plan, state and central) are released timely and expenditure made for the works in the sanctuary for forest division. 2. There is no separate funding for this sanctuary. It is considered as part of the forest division 3. Works from MNREGA are also completed in time.
Some specific allocation for management of priority action. Funds are inadequate and there is some delay in release, partially utilized.	Fair			
Comprehensive planning and allocation that meets the most important objectives. Generally funds released with not much delay and mostly utilized.	Good	✓		
Comprehensive planning and allocation of resources for attainment of most objectives. Funds generally released on-time and are fully utilized.	Very good			

*Obtain details of funds released by MoEF and their utilization by site in the last 3 years and indicate them under 'Remarks'. Also comment on the problems associated with funds and their mitigation.

3.4 What level of resources is provided by NGOs?

Assessment criteria*				
Condition*	Category*	(Tick ✓)	Reference document(s)	Remarks
NGOs contribute nothing for the management of the site.	Poor		DFO report, Field visit	1. There is no national or international NGO involved in any activity in this sanctuary. 2. A local NGO Nature Mates (Kolkata Based) was involved in status survey of Biodiversity of Lothian Island in 2014.
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair			
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good	✓		
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good			

Details of contributions (cash/kind) made by the NGOs in the last 3 years may be collected.

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resources insufficient for most tasks.	Poor		DFO report, Interaction with officers and staff	Although the level of protection in the sanctuary is quite good, two speed boats, one jetty and one more patrolling camp etc may be additionally required. .
Resources sufficient for some tasks.	Fair			
Resources sufficient for most tasks.	Good	✓		
Resources are in excess for most tasks.	Very good			

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Very few trained officers and frontline staff in the site.	Poor		DFO report, Interaction with staff and officers	1. The field staff is trained during the course of their foundation training in the state. Moreover, two of them are trained in wildlife. 2. The watchers are recruited from the adjoining villages and they are experienced with regard to the local conditions.
Few trained officers and frontline staff, who are posted in the site.	Fair	✓		
A large number of trained officers and frontline staff are posted in the site.	Good			
All trained managers and frontline staff posted in the site.	Very good			

* Indicate % of trained staff in various categories. i.e. Higher Management: ACF/ DCF/ CF/ CCF; Frontline Staff: Range Officer; Beat Officer; Forest Guard; Casual Daily Labour (CDL); Others.

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria*

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No linkage between staff performance management and management objectives.	Poor		DFO report, Interaction with staff.	Two Forest guards and two Ban Sramiks were awarded by NGO Nature Mates. But their promotion is not linked to the performance. One gets promotion only when his turn comes.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair	✓		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good			
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good			

*Has the PA staff received award/ appreciation from any agency in the last 3 years?

4.3 Is there effective public participation in PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no public participation in PA management.	Poor		Field visits, interaction with Panchayats	1. The Forest Division level advisory committee involves local panchayats and line departments. 2. The panchayats are involved in planning and implementation of eco-tourism, works.
Opportunistic public participation in some aspects of PA management.	Fair			
Systematic public participation in most aspects of PA management.	Good	✓		
Comprehensive and systematic public participation in all important aspects of PA management.	Very good			

* Participation would include Conservation & awareness programmes, Census operations, Intelligence gathering, Forest fire control etc.

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic approach to handling complaints.	Poor		DFO report, Web sites	1. The complaint and suggestion boxes are in range office. 2. The complaint register is maintained and action taken reports are filled.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair			
Coordinated system logs and responds effectively to most complaints.	Good	✓		
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good			

* Number of queries made and response thereof under the Right to Information (RTI), Act in the last 3 years may be compiled.

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially of women?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No livelihood issues are addressed by PA management.	Poor		DFO report, Field interactions	1. There is no human habitation in the sanctuary, but adjacent islands have villages which are linked with Eco-development and Eco-tourism works. 2. The Santhals community needs some more eco development works for their development. 3. The trainings on Poultry and fishery were provided to women groups. This has helped in generating alternate livelihood options.
Few livelihood issues are addressed by PA management.	Fair			
Substantial livelihood issues are addressed by PA management.	Good	✓		
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good			

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no information on PA management publicly available.	Poor		DFO report, Brochures etc	1. The information about the sanctuary is available on state government web sites of Forests and Tourism departments. 2. The sanctuary has no official web site. 3. Signage, display boards, hand bills etc. are available
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair			
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good	✓		
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good			

* Does the Site has a website? If yes, is it comprehensive, well-managed and periodically updated?

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		DFO report, Field Visits	1. The tourists are not allowed in the sanctuary. All the tourism facilities are provided at Bhagabatpur. 2. The interpretation center, Salt water crocodile breeding and other tourist facilities are provided in Bhagabatpur. 3. Nearly 29,000 tourists visit the Bhagbatpur complex each year. Bokkhali is the nearest place with major tourist facilities. The department has earned the revenue of Rs 1,87,000 from tourism during 2014-15.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair			
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good	✓		
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good			

* Include the existence and quality of visitor and interpretation centers, including skills and capabilities of personnel manning these, site related publications, films, videos; arrangements of stay (including places serving refreshments and food owned and managed by site), watch towers and hides including safety factors, vehicles assigned for visitors including riding elephants, if any and their deployment, drinking water, rest rooms, garbage disposal, attended and self guided services in the field, visitor feed back on the quality of wilderness experience. Details of numbers of visitors/ tourists (both domestic and overseas) coming in the last 3 years and the revenue earned may be compiled.

5.3 Are research/ monitoring related trends systematically evaluated and routinely reported and used to improve management?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no systematic evaluation or routine reporting of trends.	Poor		DFO report, Documents	1. The major documentation of Biodiversity was carried out in 2014 which lists the presence of 6 species of mammals; 65 species of birds; 9 species of reptiles; 3 species of amphibians; 14 species of butterflies; 46 species of Arthropoda ; 15 species of crabs and 34 species of mangrove plants in the sanctuary. 2. The WWF conducted survey for herbivore in 2114. It is found from the survey that the number of Chital and wild Boar are increasing in the sanctuary. 3. The Bhagabatpur crocodile center has released 60 sub-adults in wild during last 3 years.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair			
Systematic evaluation and routine reporting of management related trends undertaken.	Good	✓		
Systematic evaluation and comprehensive reporting of trends undertaken and attempts made at course corrections as relevant.	Very good			

* Not all site attract projects and researchers and with exceptions, little research takes place on the site own steam because of systemic limitations. However, monitoring of some critical issues is expected e.g. population of tiger, co-predators and prey with insights into their demography and distribution (some opportunistic sampling by sightings, signs and spatial distribution during assessment would be extremely useful in terms of expert impression and as a pulse), monitoring incidence of livestock grazing, fires, weeds, sources of water, a variety of illegal activities typically associated with the reserve, wildlife health (e.g. epidemics, immunization of livestock) regeneration and change in vegetation, visitors and their activities, offence cases, ex-gratia payments etc. Details of number of research projects in the last 3 years, institutions involved, and salient outcomes may be collected and used in awarding scores.

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/ assets?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic inventory or maintenance schedule.	Poor		DFO report,	1The average expenditure in sanctuary during last three years on protection, infra-structure development and maintenance, restoration of habitat etc is Rs 12 lakhs. The fund allocation for sanctuary is meager. This does not suffice for the maintenance of infrastructure/ assets.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair	✓		
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good			
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good			

6. Outcomes

6.1 Are populations of threatened species especially key faunal species declining, stable or increasing?

<i>Assessment criteria*</i>				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threatened/ endangered species populations declining.	Poor		DFO report, documents and field visit	1. No regular census is being carried out, but data provided during the visit of the team indicate that the population of herbivore is on the increase. There are no tigers in the area. 2. The salt water crocodiles released from breeding center are being monitored.
Some threatened/ endangered species populations increasing, most others stable.	Fair	✓		
Most threatened/ endangered species populations increasing, most others stable.	Good			
All threatened/ endangered species populations either increasing or stable.	Very good			

* This needs to practically relate to the natural ecosystem potential rather than being driven merely by numbers and visibility. The assessment score may be elaborated under remarks. Comments on the population trends may be made under Remarks.

6.2 Have the threats to the site being reduced/ minimized or is there an increase?

<i>Assessment criteria</i>				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats to the Site have not abated but have enhanced.	Poor		DFO report, Field visit and interaction with staff	1. The members of two patrolling camps regularly patrol the area and their movement is also monitored by senior officers inspecting the sanctuary. 2. The threats have been reduced greatly as reported by officials.
Some threats to the Site have abated, others continue their presence	Fair			
Most threats to the Site have abated. The few remaining are vigorously being addressed	Good	✓		
All threats to the Site have been effectively contained and an efficient system is in place to deal with any emerging situation	Very good			

6.3 Are the expectations of visitors generally met or exceeded?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Expectations of visitors generally not met.	Poor		Interaction with tourists, local community, tour operators	1. The tourists are satisfied and demand the sanctuary to be opened up for tourism. In view of the fact that there are island with similar flora and fauna in the area, the MEE team does not recommend the sanctuary to be opened for tourism.
Expectations of many visitors are met.	Fair			
Expectations of most visitors are met.	Good	✓		
Good expectations of most visitors are met.	Very good			

* Is there any system of receiving/ analyzing visitor feedback?

6.4 Are local communities supportive of PA management?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Local communities are hostile.	Poor		Interaction with local communities, field staff	1. The local communities are supportive of management of the sanctuary. They help the department in protecting the sanctuary. 2. More initiatives for livelihood support is needed for Santhal community.
Some are supportive.	Fair			
Most locals are supportive of PA management.	Good	✓		
All local communities supportive of PA management.	Very good			

* There could be many reasons for disenchantment. It could be real because of managerial neglect or the managerial efforts could be appropriate but there could be local elements/organizations who would like to keep the dis-affectation simmering for their own ulterior motives. Likewise success could be entirely because of the efforts of managers or they might be fortunate in striking partnerships with credible NGOs. Assessment may take the prevailing causes into account.

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	27.5	77.5%
2.	Planning	09	10	90	80	
3.	Inputs	05	10	50	37.5	
4.	Process	05	10	50	32.5	
5.	Outputs	04	10	40	27.5	
6.	Outcomes	04	10	40	27.5	
Total		30		300	232.5	

6. RAMNABAGAN WILDLIFE SANCTUARY, WEST BENGAL

MEE Year (2015-16)

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.

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.
3. *Polyalthia longifolia* is proliferating like weeds. Although the management is taking action to clear it, it has not been successful.

Actionable Points

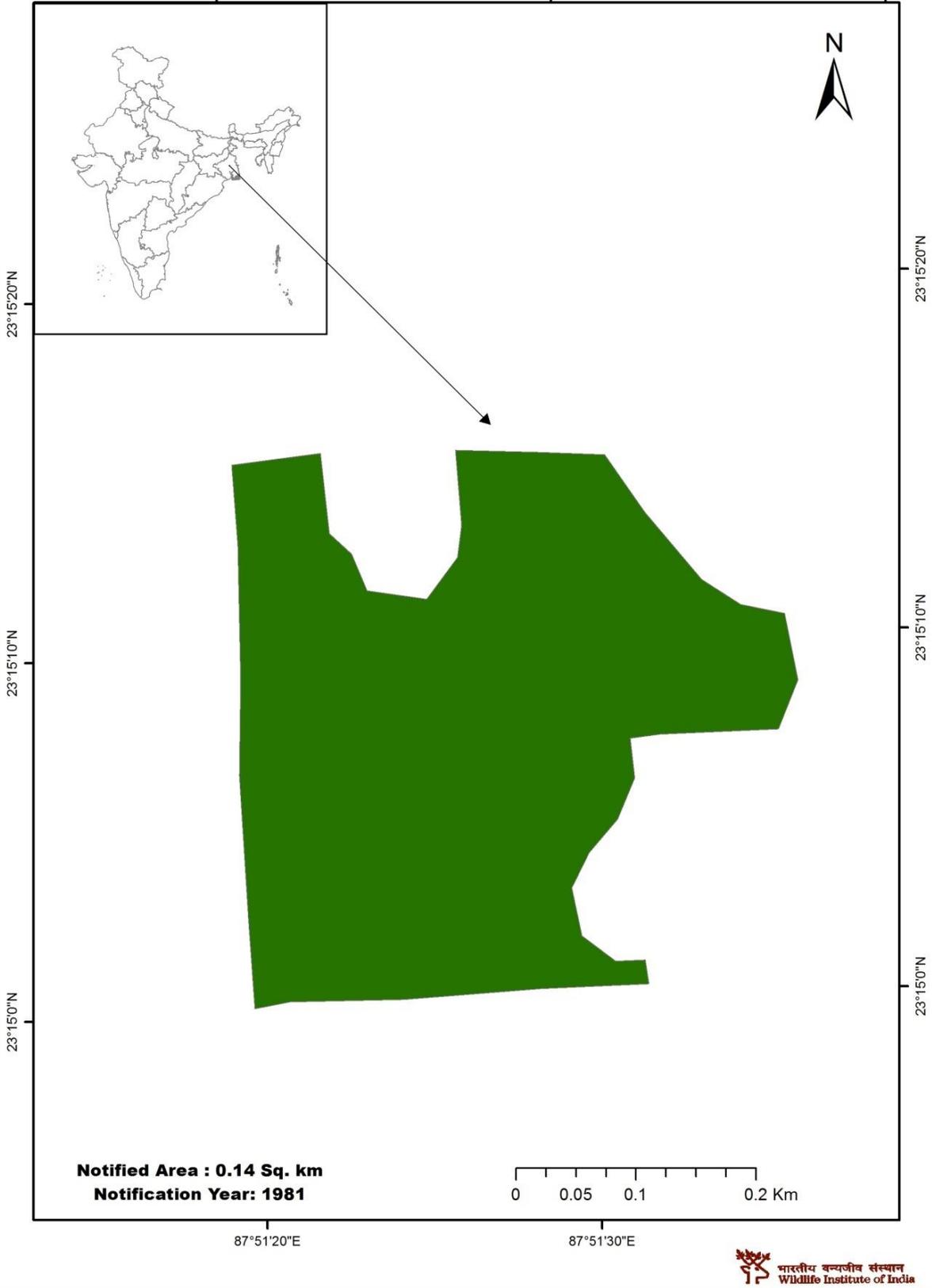
1. The state government should review the situation. If this sanctuary is being treated as an urban forest and zoo, then the objectives of the sanctuary management need not be pursued. However the sanctuary should never be denotified, as its current status ensures better protection.
2. The Government 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.

Ramnabagan Wildlife Sanctuary

87°51'20"E

87°51'30"E

87°51'40"E



1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Values not systematically documented, assessed or monitored.	Poor		New Management Plan(2012-13 to 2022-23)not yet approved, Interaction with DFO	1. The 14.31 ha. Of sanctuary area is the only forest area in this district town. This patch of greenery has historical, cultural, hydrological and urban biodiversity values. Further, it acts like pollutant sink for the township.
Values generally identified but not systematically assessed and monitored.	Fair	✓		
Most values systematically identified and assessed and monitored.	Good			
All values systematically identified and assessed and monitored.	Very good			

*Values would also include geo-morphological, historico-cultural and faunal and floral species.

1.2 Are the threats to site values well documented and assessed?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats not systematically documented or assessed.	Poor		Management Plan, interaction with DFO and staff	1. The PA is enclosed within compound wall and barbed wire fencing. It is well protected from all sides. Staff is also vigilant and there is no threat for the security. 2. The only threat is inundation by flood water during rainy season. This threat has been documented.
Threats generally identified but not systematically assessed.	Fair	✓		
Most threats systematically identified and assessed.	Good			
All threats systematically identified and assessed.	Very good			

* This assessment should be based on number, nature and extent of threats. Threats within and outside PA should both be considered. Impacts, if any on the population abundance of key species may be indicated in the remarks.

1.3 Is the site free from human and biotic interference?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
The site has extensive human and biotic interference.	Poor		New MP, interaction with DFO and Staff	1.As Zoo is also being developed inside the sanctuary area, there is presence of staff and no human or biotic interference is noticed
The site has some human and biotic interference.	Fair	✓		
The site has little human and biotic interference.	Good			
The site has no human and biotic interference.	Very good			

*This assessment should be based on existence of human settlements/ villages; livestock grazing, cultivation, encroachments etc, resource extraction/ livelihood dependence of local communities and should reflect the overall interference due to all the above factors. Number and size of human settlements/ enclaved villages and their impacts on the site may be indicated in the Remarks.

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not identified correctly or categorized.	Poor		New MP, Interaction with DFO	1. The PA is an isolated patch of small forest inside the town. There is no zonation, however, Eco-sensitive zone of 100 meter from the periphery of the sanctuary has been proposed.
Site identified correctly but not categorized.	Fair	✓		
Site identified correctly but not systematically categorized.	Good			
Site identified correctly and systematically categorized with proper zonation plans.	Very good			

Management prescriptions for various zones (Core, Buffer, Tourism etc) may be carefully assessed.

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No relevant Management Plan in place.	Poor		New MP	The new management plan has been sent to CWLW in 2014 for approval.
Management Plan exist but not comprehensive.	Fair	✓		
Site has a comprehensive Management Plan.	Good			
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good			

Is the Management Plan consistent with WII Guidelines or not? The extent to which the concerns of the stakeholders, if any have been incorporated in the Management Plan may be commented upon.

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No process in place for systematic review and update of Management Plan.	Poor	✓	New MP and interaction with DFO	The Management Plan is operational from 2012-13. The Plan still requires the approval of Chief Wildlife Warden. No attempts are made to review and update the Plan.
Management Plan sometimes updated in adhoc manner.	Fair			
Management Plan routinely and systematically updated.	Good			
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good			

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site does not safeguard the threatened biodiversity values.	Poor		New MP and interaction with DFO, area visit	1. Some threatened biodiversity species are safeguarded in the sanctuary. 2. It is working as source population of Chital & Sambhar, which is useful for translocating these species in natural forests.
Site safeguards a few threatened biodiversity values.	Fair	✓		
Sites safeguards a large number of threatened biodiversity values.	Good			
Sites safeguards all threatened biodiversity values.	Very good			

* Remarks need to elaborate on the kind of safeguards and how they work or are intended to work

2.8 Are stakeholders given an opportunity to participate in planning?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		New MP and interaction with DFO & Field staff	1. The PA area is small and is an extension of DFO office premise in district headquarter. The stake holders are district officers and University students & researchers etc. There are regular interaction between Forest officers and stakeholders in this sanctuary.
Stakeholders participate in some planning.	Fair	✓		
Stakeholders participate in most planning processes.	Good			
Stakeholders routinely and systematically participate in all planning processes.	Very good			

* The result of participation must show in the field and not merely reported as a routine exercise. Further, is there a system/scope of putting the draft Management Plan in Public Domain in place?

2.6 Are habitat restoration programme systematically planned and monitored?

Assessment criteria*

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Habitat restoration programs are entirely adhoc.	Poor		New MP and interaction with DFO, staff, other stake holders	1. In View of the fact that a zoological park has been conceived and is under construction in this sanctuary, the significance of the sanctuary is already lost. However the area should remain as sanctuary for better protection.
Limited planning and monitoring programmes are in place for habitat restoration.	Fair	✓		
Habitat restoration programmes are generally well planned and monitored.	Good			
Habitat restoration programmes are thoroughly planned and monitored.	Very good			

* This assessment should be primarily based on habitat management programmes in relation to habitats for species that are threatened (IUCN categories), are habitat specialists, subjected to seasonal movements, wide ranging with emphasis on the breeding and rearing habitat and may include factors such as food, water, shelter (all connotations).Habitat structure, composition, unique patches of vegetation and sensitive sites, sources of water and their distribution are integral. Corridors within buffer zone are critically important. For example, all riparian habitats. Have these been addressed? Is their a planning process in place? What is the extent of 'invasive species in the Site? Are there any measures to reduce/ remove them? Have these been successful?

2.7 Does the site has an effective protection strategy?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Site has no protection strategy.	Poor		Interaction and Field observations	The sanctuary is properly guarded by compound wall and barbed wire/ chain link fencing. Staff is also vigilant and proper protection is ensured..
Site has an adhoc protection strategy.	Fair	✓		
Site has a comprehensive protection strategy but is not very effective.	Good			
Site has a comprehensive and very effective protection strategy.	Very good			

* This assessment takes *inter-alia* into account the nature of threats, the number and location of patrolling camps and foot and mobile patrolling, needs that relate to available manpower, terrain difficulties, practicability of area coverage, readiness to contain specific threats with necessary support and facilities. Is there any coordination with other wings of the Forest Department/ Police/ Customs etc? Are these effective?

2.8 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Human-wildlife conflicts are rampant.	Poor		Interaction with DFO & staff	It is an isolated patch in the heart of district headquarters and is completely guarded from all sides. There is no human wild animal conflict.
Site has been able to mitigate few human-wildlife conflicts.	Fair	✓		
Site has been able to mitigate many human-wildlife conflicts.	Good			
Site has been able effective in mitigating all human-wildlife conflicts.	Very good			

* Judgment needs to consider staff training, capabilities, equipment, logistics, local attitude and politics (negatively aided and/or abetted), assistance of relevant agencies (e.g. police. Local administration, Local people themselves) PR, follow-up actions and monitoring. Details of compensation paid for human injury/ death and property damage in the last 3 year may be collected.

2.9 Is the site integrated into a wider ecological network landscape following the principles of the ecosystem approach?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not integrated into a wider network/ landscape.	Poor		New MP	Isolated patch of old forest area without any connectivity with any forests. Zoo is coming up inside this sanctuary.
Some limited attempts to integrate the site into a network/ landscape.	Fair	✓		
Site is generally quite well integrated into a network/ landscape.	Good			
Site is fully integrated into a wider network/ landscape.	Very good			

* Assessment needs to consider the scope of opportunities on the landscape scale that exist. Consider whether any attempts have been made and what are these? Have all the important corridors been identified? What actions are planned/ implemented for their security? Have the Forest Working Plans and Forest Development Corporation Plans within the identified landscapes taken cognizance of such new requirement? What kind of relationship exists with the District Administration and other Line Departments? Does the Site get any funds from these agencies?

3. Inputs

3.1 Are personnel adequate, well organised and deployed with access to adequate resources in the site?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		DFO report	There is no separate staff for sanctuary. The PA is managed by attached forest range of the division and staff on contract. However this arrangement is working well.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓		
Some personnel explicitly allocated towards achievement of specific management objectives.	Good			
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good			

* This assessment should *inter-alia* be based on number of personnel allocated for attainment of PA objectives at the Range , Round, Beat and Patrolling camps levels or as relevant to the needs (sanctioned posts *vis- a- vis* existing personnel and needs beyond the sanctioned strengths. It is possible that posts have last been sanctioned several years back that do not now account for the current needs)

3.2 Are resources (vehicle, equipment, building etc.) adequate, well organized and managed with access to adequate resources?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		DFO report	1. The resources are as per the requirement of PA. 2012-13-State Plan-Rs10.00L, Non-Plan-Rs12.95 L 2013-14-State plan-Rs9.50 L,Non-Plan-Rs.17.40 L 2014-15-State Plan-rs.9.50 L,Non-Plan-Rs.11.43 L . In view of total protection, no additional resources are required. Existing resources with the division are sufficient.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓		
Some resources explicitly allocated towards achievement of specific management objectives.	Good			
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good			

* These form a variety of resources. These may be segregated into immovable (structures) and movable categories and each further may be considered under the essential and desirable categories. It is best to start with what are the minimum needs to attain each objective, what is available and manner of use/deployment. The proportions of the 'essentials' and 'desirables' along the importance gradient of objectives would serve as pointers for score categories. Specific remarks would be vitally important.

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resource allocation is adhoc, funds are inadequate and seldom released in time and not utilized.	Poor		DFO report	Funds are released on time.
Some specific allocation for management of priority action. Funds are inadequate and there is some delay in release, partially utilized.	Fair			
Comprehensive planning and allocation that meets the most important objectives. Generally funds released with not much delay and mostly utilized.	Good	✓		
Comprehensive planning and allocation of resources for attainment of most objectives. Funds generally released on-time and are fully utilized.	Very good			

*Obtain details of funds released by MoEF and their utilization by site in the last 3 years and indicate them under 'Remarks'. Also comment on the problems associated with funds and their mitigation.

3.4 What level of resources is provided by NGOs?

Assessment criteria*				
Condition*	Category*	(Tick ✓)	Reference document(s)	Remarks
NGOs contribute nothing for the management of the site.	Poor	✓	DFO report	No NGO is involved. There is no requirement of support of any NGO in such small sanctuary.
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair			
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good			
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good			

Details of contributions(cash/kind) made by the NGOs in the last 3 years may be collected.

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resources insufficient for most tasks.	Poor		DFO report	Sufficient funds are flowing for the construction of Zoo. No additional fund is required. Staff manning the sanctuary and Zoo are adequate.
Resources sufficient for some tasks.	Fair	✓		
Resources sufficient for most tasks.	Good			
Resources are in excess for most tasks.	Very good			

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Very few trained officers and frontline staff in the site.	Poor		DFO report	Among the staff in the division, only two of them are trained. The contract staff in the Zoo is experienced in animal handling.
Few trained officers and frontline staff, who are posted in the site.	Fair			
A large number of trained officers and frontline staff are posted in the site.	Good	✓		
All trained managers and frontline staff posted in the site.	Very good			

* Indicate % of trained staff in various categories. i.e. Higher Management: ACF/ DCF/ CF/ CCF; Frontline Staff: Range Officer; Beat Officer; Forest Guard; Casual Daily Labour (CDL); Others.

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No linkage between staff performance management and management objectives.	Poor	✓	DFO Report	There is no linkage. No member of the management has ever thought about it.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair			
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good			
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good			

*Has the PA staff received award/ appreciation from any agency in the last 3 years?

4.3 Is there effective public participation in PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no public participation in PA management.	Poor		DFO report and interaction with Burdwan University faculty	1. The students from BU participate in some documentation of flora. 2. The PA has an advisory committee comprising of members from different sections of society, which is said to be working well.
Opportunistic public participation in some aspects of PA management.	Fair	✓		
Systematic public participation in most aspects of PA management.	Good			
Comprehensive and systematic public participation in all important aspects of PA management.	Very good			

* Participation would include Conservation & awareness programmes, Census operations, Intelligence gathering, Forest fire control etc.

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria*

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic approach to handling complaints.	Poor		DFO Report and visit	There is no such system but any complaint lodged in writing is attended and appropriate action is taken.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair	✓		
Coordinated system logs and responds effectively to most complaints.	Good			
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good			

* Number of queries made and response thereof under the Right to Information (RTI), Act in the last 3 years may be compiled.

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially of women?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No livelihood issues are addressed by PA management.	Poor		DFO report, Interaction with staff.	There is no resource dependent community on this sanctuary. The livelihood issues relating to other forest areas of the division are addressed separately at the division level.
Few livelihood issues are addressed by PA management.	Fair	✓		
Substantial livelihood issues are addressed by PA management.	Good			
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good			

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no information on PA management publicly available.	Poor		DFO report,	There is no website of the PA but information are available on state Forest Dept. web sites etc.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair	✓		
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good			
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good			

* Does the Site has a website? If yes, is it comprehensive, well-managed and periodically updated?

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		DFO report and visit in the PA	1. The PA attracts nearly 1.2 lakhs visitors / year. The facilities are adequate as only day visitors are coming.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair	✓		
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good			
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good			

* Include the existence and quality of visitor and interpretation centers, including skills and capabilities of personnel manning these, site related publications, films, videos; arrangements of stay (including places serving refreshments and food owned and managed by site), watch towers and hides including safety factors, vehicles assigned for visitors including riding elephants, if any and their deployment, drinking water, rest rooms, garbage disposal, attended and self guided services in the field, visitor feed back on the quality of wilderness experience. Details of numbers of visitors/ tourists(both domestic and overseas) coming in the last 3 years and the revenue earned may be compiled.

5.3 Are research/ monitoring related trends systematically evaluated and routinely reported and used to improve management?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no systematic evaluation or routine reporting of trends.	Poor		DFO report, Interaction with BU faculties, students.	1. There is a documentation of flora of the sanctuary. 2. Although University has been taking up some research here but systemic evaluation, monitoring and researches are still to pick up.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair	✓		
Systematic evaluation and routine reporting of management related trends undertaken.	Good			
Systematic evaluation and comprehensive reporting of trends undertaken and attempts made at course corrections as relevant.	Very good			

* Not all site attract projects and researchers and with exceptions, little research takes place on the site own steam because of systemic limitations. However, monitoring of some critical issues is expected e.g. population of tiger, co-predators and prey with insights into their demography and distribution (some opportunistic sampling by sightings, signs and spatial distribution during assessment would be extremely useful in terms of expert impression and as a pulse), monitoring incidence of livestock grazing, fires, weeds, sources of water, a variety of illegal activities typically associated with the reserve, wildlife health (e.g. epidemics, immunization of livestock) regeneration and change in vegetation, visitors and their activities, offence cases, ex-gratia payments etc. Details of number of research projects in the last 3 years, institutions involved, salient outcomes may be collected and used in awarding scores.

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks

No systematic inventory or maintenance schedule.	Poor		DFO report, APOs	1. There are adequate fund available for construction of enclosures of Zoo in the sanctuary. If more funds are provided they will expand the Zoo and Sanctuary will lose it's relevance.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair	✓		
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good			
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good			

6. Outcomes

6.1 Are populations of threatened species especially key faunal species declining, stable or increasing?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threatened/ endangered species populations declining.	Poor		DFO report, Observation of enclosures etc.	1. The animals are well kept in enclosure and are breeding. 2. There is a mechanism to release the extra stock in the wild.
Some threatened/ endangered species populations increasing, most others stable.	Fair			
Most threatened/ endangered species populations increasing, most others stable.	Good	✓		
All threatened/ endangered species populations either increasing or stable.	Very good			

* This needs to practically relate to the natural ecosystem potential rather than being driven merely by numbers and visibility. The assessment score may be elaborated under remarks. Comments on the population trends may be made under Remarks.

6.2 Have the threats to the site being reduced/ minimized or is there an increase?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats to the Site have not abated but have enhanced.	Poor		DFO report	Since the area is fully guarded, there is virtually no threat to the security. .
Some threats to the Site have abated, others continue their presence	Fair	✓		
Most threats to the Site have abated. The few remaining are vigorously being addressed	Good			
All threats to the Site have been effectively contained and an efficient system is in place to deal with any emerging situation	Very good			

6.3 Are the expectations of visitors generally met or exceeded?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Expectations of visitors generally not met.	Poor		DFO report, visit to PA	The day visitors are in plenty as it is situated inside the township. The heavy rush is reported during holidays and festivals. Most visitors are fully satisfied.
Expectations of many visitors are met.	Fair			
Expectations of most visitors are met.	Good	✓		
Good expectations of most visitors are met.	Very good			

* Is there any system of receiving/ analyzing visitor feedback?

6.4 Are local communities supportive of PA management?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Local communities are hostile.	Poor		DFO report	There is no hostility with local community.
Some are supportive.	Fair			
Most locals are supportive of PA management.	Good	✓		
All local communities supportive of PA management.	Very good			

* There could be many reasons for disenchantment. It could be real because of managerial neglect or the managerial efforts could be appropriate but there could be local elements/organizations who would like to keep the dis-affectation simmering for their own ulterior motives. Likewise success could be entirely because of the efforts of managers or they might be fortunate in striking partnerships with credible NGOs. Assessment may take the prevailing causes into account.

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	15	51.6%
2.	Planning	09	10	90	42.5	
3.	Inputs	05	10	50	25	
4.	Process	05	10	50	25	
5.	Outputs	04	10	40	20	
6.	Outcomes	04	10	40	27.5	
Total		30		300	155	

7. BALLAVPUR WILDLIFE SANCTUARY, WEST BENGAL MEE Year (2016-17)

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.

Management Weaknesses

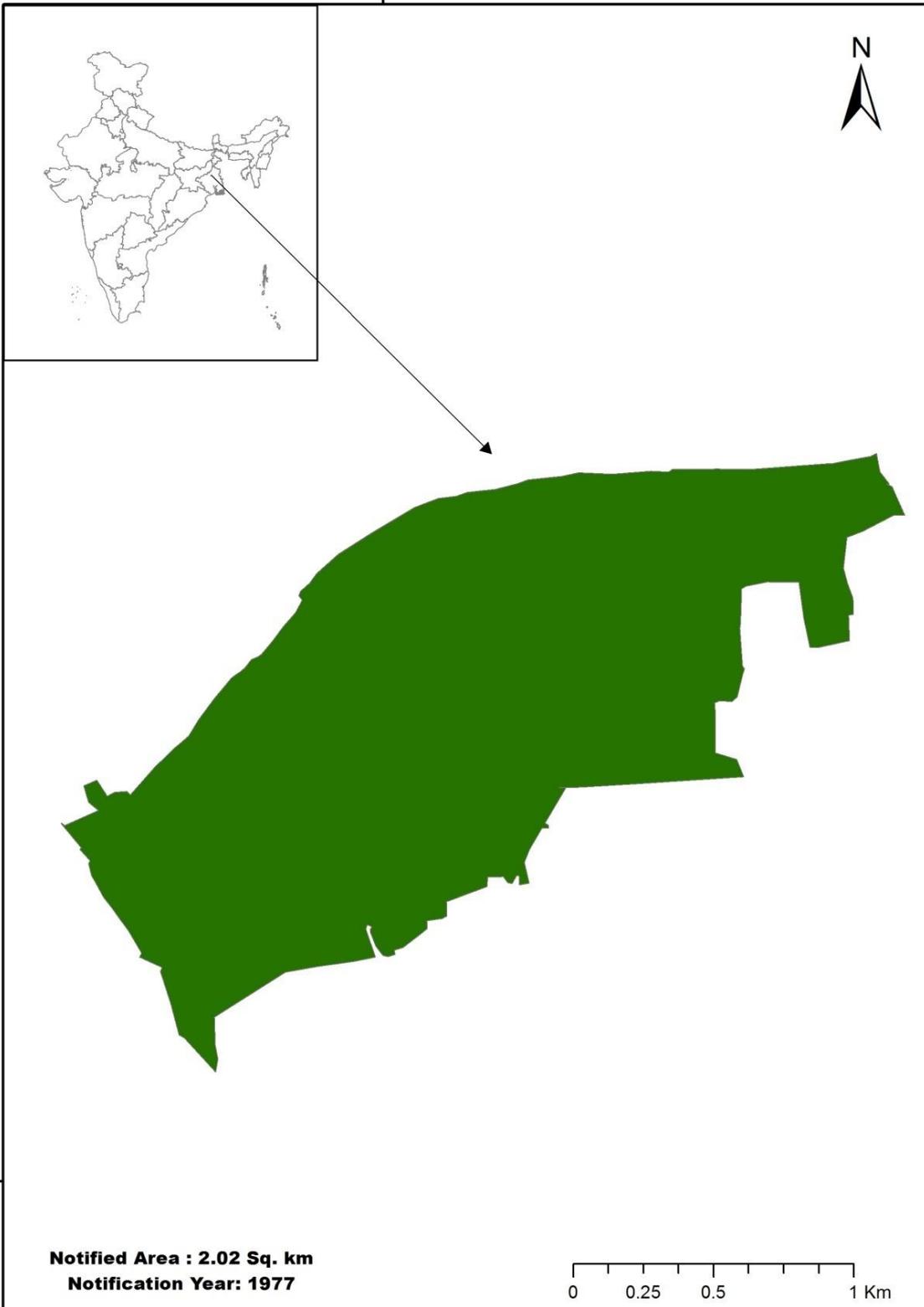
1. There are four villages adjoining the sanctuary. These are Khaspada, Kalipanj, Pear Sampalli and Lalbagh. The villagers indulge in unauthorized collection of medicinal plants, mushrooms, dry sticks, poles and fuel wood. The important medicinal plants collected from the sanctuary are *Kalmegh*, *Shatmuli*, *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.

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 through the media.
3. Experts may be consulted for maintenance of the wetlands. A master plan/management plan should be prepared for taking up the works of weeding, de-silting, etc. Once there is an 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 identified 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.

Ballavpur Wildlife Sanctuary

87°40'0"E



Notified Area : 2.02 Sq. km
Notification Year: 1977

0 0.25 0.5 1 Km



1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Values not systematically documented, assessed or monitored.	Poor		1. Approved Management Plan,(2009-10 to 2019-20)	1.The values like Biodiversity, Ecological, Wetland, Nature Education,Eco-tourism,Cultural and Historical have been documented in the plan. 2. It is an urban biodiversity and wetland area adjacent to historical Shantiniketan. 3. All the values are not systematically monitored.
Values generally identified but not systematically assessed and monitored.	Fair	✓		
Most values systematically identified and assessed and monitored.	Good			
All values systematically identified and assessed and monitored.	Very good			

*Values would also include geo-morphological, historico-cultural and faunal and floral species.

1.2 Are the threats to site values well documented and assessed?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats not systematically documented or assessed.	Poor		1. Management Plan 2. Field Visit 3. Interaction with staff	1. The threats like poaching by surrounding Santhal Tribes and utilization of PA resources by these tribal villaes;unfenced wetlands attract fishing & grazing ;adjacent road disturbs migratory birds and western part of the PA has acute soil erosion are identified and assessed in management plan .
Threats generally identified but not systematically assessed.	Fair			
Most threats systematically identified and assessed.	Good	✓		
All threats systematically identified and assessed.	Very good			

* This assessment should be based on number, nature and extent of threats. Threats within and outside PA should both be considered. Impacts, if any on the population abundance of key species may be indicated in the remarks.

1.3 Is the site free from human and biotic interference?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
The site has extensive human and biotic interference.	Poor		1. Management Plan	1. There are four villages and Bolpur township around the sanctuary. 2. The villages use the natural resources of PA for grazing, collection of medicinal plants, fishing and household timber. The site is under heavy biotic pressure..
The site has some human and biotic interference.	Fair	✓	2. Field Visit	
The site has little human and biotic interference.	Good		3. Interaction with staff	
The site has no human and biotic interference.	Very good			

*This assessment should be based on existence of human settlements/ villages; livestock grazing, cultivation, encroachments etc, resource extraction/ livelihood dependence of local communities and should reflect the overall interference due to all the above factors. Number and size of human settlements/ enclaved villages and their impacts on the site may be indicated in the Remarks.

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not identified correctly or categorized.	Poor		1. Management Plan	1. The site is categorized in to Forage development zone, Conservation zone, Management Intervention zone, Fodder production Zone and wetland zone. 2. The prescription has been provided in the MP on various Zones. 3. Proposal have been submitted on 0—2 Kms Eco Sensitive Zone around the sanctuary on 22/05/2015 to the State Government.
Site identified correctly but not categorized.	Fair		2. Field Visit	
Site identified correctly but not systematically categorized.	Good		3. Interaction with staff	
Site identified correctly and systematically categorized with proper zonation plans.	Very good	✓	4. DFOs Report	

Management prescriptions for various zones (Core, Buffer, Tourism etc) may be carefully assessed.

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No relevant Management Plan in place.	Poor		1. Management Plan	1. The site has approved Management Plan from 2009-10 to 2019-20.prepared on the guidelines of WII. The concern of stake holders from four villages around the sanctuary and semi urban population of Shantiniketan has not been addressed. .
Management Plan exist but not comprehensive.	Fair			
Site has a comprehensive Management Plan.	Good	✓		
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good			

Is the Management Plan consistent with WII Guidelines or not? The extent to which the concerns of the stakeholders, if any have been incorporated in the Management Plan may be commented upon.

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No process in place for systematic review and update of Management Plan.	Poor	✓	1. Management Plan	1. There is no practice of mid term revisions of Management Plan.. The present plan is seven years old and issues relating to threats from adjoining population is needed to be addressed and their dependency on sanctuary is to be reduced.
Management Plan sometimes updated in adhoc manner.	Fair		2. Field Visit	
Management Plan routinely and systematically updated.	Good		3. Interaction with staff	
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good		4. DFOs Report	

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		1. Management Plan	1.The site has the importance as an urban biodiversity site, safe guarding the wilderness and wetlands close to township. 2. It is safe guarding some medicinal plants, wetland flora, avian fauna, and rehabilitation center for Chitals and winter home of visiting birds.
Sites safeguards a few threatened biodiversity values.	Fair	✓	2. Field Visit	
Sites safeguards a large number of threatened biodiversity values.	Good		3. Interaction with staff	
Sites safeguards all threatened biodiversity values.	Very good		4. DFOs Report	

* Remarks need to elaborate on the kind of safeguards and how they work or are intended to work

2.9 Are stakeholders given an opportunity to participate in planning?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		1. Management Plan	1. The four EDCs are consulted before the approval of development works . 2. The PA has advisory committee constituted by Government of West Bengal on 27/7/2007 as per the provisions of Wildlife (Protection) Act 1972.. The committee comprises of various stake holders. This committee meets at least once in a year to finalize the various schemes.
Stakeholders participate in some planning.	Fair		2. Field Visit	
Stakeholders participate in most planning processes.	Good	✓	3. Interaction with staff	
Stakeholders routinely and systematically participate in all planning processes.	Very good		4. DFOs Report	

* The result of participation must show in the field and not merely reported as a routine exercise. Further, is there a system/scope of putting the draft Management Plan in Public Domain in place?

2.6 Are habitat restoration programme systematically planned and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Habitat restoration programme are entirely adhoc.	Poor		Management Plan	1. The major habitat is wetland which requires planning and proper development. 2. A small patch is also developed with grasses for rotational grazing by Chitals. 3. There are patches of woodlots with naturally occurring species of Sal and its associates.. The management has also taken up plantation of Acacia auriculiformis and Euclayptus in the past.
Limited planning and monitoring programme are in place for habitat restoration.	Fair	✓	2. Field Visit	
Habitat restoration programme are generally well planned and monitored.	Good		3. Interaction with staff	
Habitat restoration programmes are thoroughly planned and monitored.	Very good		4. DFOs Report	

* This assessment should be primarily based on habitat management programme in relation to habitats for species that are threatened (IUCN categories), are habitat specialists, subjected to seasonal movements, wide ranging with emphasis on the breeding and rearing habitat and may include factors such as food, water, shelter (all connotations).Habitat structure, composition, unique patches of vegetation and sensitive sites, sources of water and their distribution are integral. Corridors within buffer zone are critically important. For example, all riparian habitats. Have these been addressed? Is their a planning process in place? What is the extent of 'invasive species in the Site? Are there any measures to reduce/ remove them? Have these been successful?

2.7 Does the site has an effective protection strategy?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Site has no protection strategy.	Poor		Management Plan	1. The PA is nearly 200 ha in area and 60 ha is fenced in which Chitals are kept. The remaining area is wetland and open forest which requires protection. 2. The night patrolling is carried out by the staff and EDC members 3. Construction of one camp, two watch towers and repairing of chain link fencing were carried out in the PA. 4. PA requires compound wall all round for better protection.
Site has an adhoc protection strategy.	Fair		2. Field Visit	
Site has a comprehensive protection strategy but is not very effective.	Good	✓	3. Interaction with staff	
Site has a comprehensive and very effective protection strategy.	Very good		4. DFOs Report	

* This assessment takes *inter-alia* into account the nature of threats, the number and location of patrolling camps and foot and mobile patrolling, needs that relate to available manpower, terrain difficulties, practicability of area coverage, readiness to contain specific threats with necessary support and facilities. Is there any coordination with other wings of the Forest Department/ Police/ Customs etc? Are these effective?

2.8 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Human-wildlife conflicts are rampant.	Poor		Management Plan 2. Field Visit 3. Interaction with staff 4. DFOs Report	1. There are no instances of poaching reported in the sanctuary. Further since the chitals are kept captive, there is no question of any crop raid. 2. The grazing occurs in wetlands. 3. The collection of medicinal plants and other MFP from PA is a real threat to biodiversity.
Site has been able to mitigate few human-wildlife conflicts.	Fair	✓		
Site has been able to mitigate many human-wildlife conflicts.	Good			
Site has been able effective in mitigating all human-wildlife conflicts.	Very good			

* Judgment needs to consider staff training, capabilities, equipment, logistics, local attitude and politics (negatively aided and/or abetted), assistance of relevant agencies (e.g. police. Local administration, Local people themselves) PR, follow-up actions and monitoring. Details of compensation paid for human injury/ death and property damage in the last 3 year may be collected.

2.9 Is the site integrated into a wider ecological network landscape following the principles of the ecosystem approach?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not integrated into a wider network/ landscape.	Poor	✓	Management Plan Field visit	The PA is an isolated patch of forest and wetland. It is not a part of any connectivity or ecological network.
Some limited attempts to integrate the site into a network/ landscape.	Fair			
Site is generally quite well integrated into a network/ landscape.	Good			
Site is fully integrated into a wider network/ landscape.	Very good			

* Assessment needs to consider the scope of opportunities on the landscape scale that exist. Consider whether any attempts have been made and what are these? Have all the important corridors been identified? What actions are planned/implemented for their security? Have the Forest Working Plans and Forest Development Corporation Plans within the identified landscapes taken cognizance of such new requirement? What kind of relationship exists with the District Administration and other Line Departments? Does the Site get any funds from these agencies?

3. Inputs

3.1 Are personnel adequate, well organized and deployed with access to adequate resources in the site?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		Management Plan 2. Field Visit 3. Interaction with staff 4. DFOs Report	1.The site is under Bolpur Beat manned by a Forester,4 Forest Guards and 6 Ban majdoor/ Ban sramiks 2. The posts of 3 FGs are vacant, as the state has not taken the recruitment Foresters and Forest Guards for last ten years.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓		
Some personnel explicitly allocated towards achievement of specific management objectives.	Good			
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good			

* This assessment should *inter-alia* be based on number of personnel allocated for attainment of PA objectives at the Range , Round, Beat and Patrolling camps levels or as relevant to the needs (sanctioned posts *vis- a- vis* existing personnel and needs beyond the sanctioned strengths. It is possible that posts have last been sanctioned several years back that do not now account for the current needs)

3.2 Are resources (vehicle, equipment, building etc.) adequate, well organized and managed with access to adequate resources?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		.1. Field Visit 2.. Interaction with staff 3.. DFOs Report	1. There is no patrolling vehicle in the PA. 2. The 3 Jhils (Wetlands) need management, protection and development. 3. There is no monitoring and bird estimation equipment either..
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓		
Some resources explicitly allocated towards achievement of specific management objectives.	Good			
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good			

* These form a variety of resources. These may be segregated into immovable (structures) and movable categories and each further may be considered under the essential and desirable categories. It is best to start with what are the minimum needs to attain each objective, what is available and manner of use/deployment. The proportions of the 'essentials' and 'desirables' along the importance gradient of objectives would serve as pointers for score categories. Specific remarks would be vitally important.

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resource allocation is adhoc, funds are inadequate and seldom released in time and not utilized.	Poor		1. DFO report	1. The management does not receive funds on regular basis. 2. The fund released in lakh for last three years are shown below-
Some specific allocation for management of priority action. Funds are inadequate and there is some delay in release, partially utilized.	Fair	✓		
Comprehensive planning and allocation that meets the most important objectives. Generally funds released with not much delay and mostly utilized.	Good			
Comprehensive planning and allocation of resources for attainment of most objectives. Funds generally released on-time and are fully utilized.	Very good			

yr.	CS S	Stat e	Tot al
2013-14	00	9.5	9.5
14-15	4.73	9.5	14.73
15-16	7.59	17.00	24.59

*Obtain details of funds released by MoEF and their utilization by site in the last 3 years and indicate them under 'Remarks'. Also comment on the problems associated with funds and their mitigation.

3.4 What level of resources is provided by NGOs?

Assessment criteria*				
Condition*	Category*	(Tick ✓)	Reference document(s)	Remarks
NGOs contribute nothing for the management of the site.	Poor		DFOs Report	1. No NGO is involved. 2. Mrs. Urmila Ganguli of Shantiniketan involved in awareness development program
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair	✓		
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good			
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good			

Details of contributions(cash/kind) made by the NGOs in the last 3 years may be collected.

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resources insufficient for most tasks.	Poor		1. DFOs Report. Staff interaction.	1.The funds are inadequate 2. The fund is required for providing protection all round the PA, Planning and implementing wetland development program and eco-tourism promotion.
Resources sufficient for some tasks.	Fair	✓		
Resources sufficient for most tasks.	Good			
Resources are in excess for most tasks.	Very good			

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Very few trained officers and frontline staff in the site.	Poor		DFOs Report	1. DFO and ADFO are trained in wildlife but no other staff is trained.
Few trained officers and frontline staff, who are posted in the site.	Fair	✓	Field staff Interaction	
A large number of trained officers and frontline staff are posted in the site.	Good			
All trained managers and frontline staff posted in the site.	Very good			

* Indicate % of trained staff in various categories. i.e. Higher Management: ACF/ DCF/ CF/ CCF; Frontline Staff: Range Officer; Beat Officer; Forest Guard; Casual Daily Labour (CDL); Others.

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No linkage between staff performance management and management objectives.	Poor		1. DFOs Report 2. Interaction with Staff.	The good performance of the staff will always strengthen conservation and development of the sanctuary. However the management has not instituted any award/ reward for better performing officials.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair	✓		
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good			
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good			

*Has the PA staff received award/ appreciation from any agency in the last 3 years?

4.3 Is there effective public participation in PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no public participation in PA management.	Poor		1. DFO Report	1. The PA has an advisory committee represented by local MLA, Panchayats, Scientists, civilian wildlife warden etc. 2. Shantiniketan is also involved in awareness generation. 3. The EDCs are involved in patrolling and eco-tourism management.
Opportunistic public participation in some aspects of PA management.	Fair		2. Field Visit	
Systematic public participation in most aspects of PA management.	Good	✓	3. Interaction with staff.	
Comprehensive and systematic public participation in all important aspects of PA management.	Very good			

* Participation would include Conservation & awareness programmes, Census operations, Intelligence gathering, Forest fire control etc.

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic approach to handling complaints.	Poor		1. DFO Report.	1. The complaints and suggestion boxes are placed at entry gate, beat and range offices... 2. Complain register is also maintained. 3. No information from sanctuary management is sought under RTI. 4. Public issues relating to management is resolved in advisory committee meeting.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair		2. Field Visit	
Coordinated system logs and responds effectively to most complaints.	Good	✓		
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good			

* Number of queries made and response thereof under the Right to Information (RTI), Act in the last 3 years may be compiled.

4.5 Does PA management addresses the livelihood issues of resource dependent communities especially of women?

Assessment criteria

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No livelihood issues are addressed by PA management.	Poor		1.DFOs REPORT 2. Field Visit	1. The members of four EDCs are employed in eco-tourism management, running the canteen and casual labors in the sanctuary. 2. The women income generation is through labor, tailoring and eco-tourism. 3. However the opportunities for providing employment to all members of resource dependent communities is very much limited.
Few livelihood issues are addressed by PA management.	Fair			
Substantial livelihood issues are addressed by PA management.	Good	✓		
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good			

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no information on PA management publicly available.	Poor		1.DFOs REPORT 2. Field Visit	1.3 Nos. of websites have information on the PA. 2. The FD has started its own website www.birbhumforest.in 3. The display boards and signage have been put up.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair	✓		
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good			
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good			

* Does the Site has a website? If yes, is it comprehensive, well-managed and periodically updated?

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		1.DFOs REPORT 2. Field Visit	1. There is a Eco-tourism center with AC/Non AC rooms facilities along the wetland for visitors. 2. Approximately 40000 to 45000 visitors come to the PA annually .Year wise break up is shown below 2013-14—40847 2014-15---41077 2015-16----44178 3.. There is a canteen run by EDC members.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair			
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good			
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓		

* Include the existence and quality of visitor and interpretation centers, including skills and capabilities of personnel manning these, site related publications, films, videos; arrangements of stay (including places serving refreshments and food owned and managed by site), watch towers and hides including safety factors, vehicles assigned for visitors including riding elephants, if any and their deployment, drinking water, rest rooms, garbage disposal, attended and self guided services in the field, visitor feed back on the quality of wilderness experience. Details of numbers of visitors/ tourists(both domestic and overseas) coming in the last 3 years and the revenue earned may be compiled.

5.3 Are research/ monitoring related trends systematically evaluated and routinely reported and used to improve management?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no systematic evaluation or routine reporting of trends.	Poor	✓	1DFO Report 2. Office records	The PA is small closed area mostly acting as outreach to Shantiniketan .There is no research and documentation but the wetlands could be an ideal site for such activities.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair			
Systematic evaluation and routine reporting of management related trends undertaken.	Good			
Systematic evaluation and comprehensive reporting of trends undertaken and attempts made at course corrections as relevant.	Very good			

* Not all site attract projects and researchers and with exceptions, little research takes place on the site own steam because of systemic limitations. However, monitoring of some critical issues is expected e.g. population of tiger, co-predators and prey with insights into their demography and distribution (some opportunistic sampling by sightings, signs and spatial distribution during assessment would be extremely useful in terms of expert impression and as a pulse), monitoring incidence of livestock grazing, fires, weeds, sources of water, a variety of illegal activities typically associated with the reserve, wildlife health (e.g. epidemics, immunization of livestock) regeneration and change in vegetation, visitors and their activities, offence cases, ex-gratia payments etc. Details of number of research projects in the last 3 years, institutions involved, salient outcomes may be collected and used in awarding scores.

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic inventory or maintenance schedule.	Poor		1. DFO Report 2. Field Visit	1. The funds are in place for maintenance of infrastructure but are not adequate 2. The systematic inventories are prepared, but some agency has to chip in for funding. 3. No portion of tourism revenue is being ploughed back.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair			
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good	✓		
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good			

6. Outcomes

6.1 Are populations of threatened species especially key faunal species declining, stable or increasing?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threatened/ endangered species populations declining.	Poor		1. DFO Report 2. Field Visit	1. The PA is mainly breeding and rehabilitation area for Chitals. 70 Chitals were translocated to Buxa Tiger Reserve in 2012-13. 2. The number of Chitals are increasing and at present 151 are in the PA. 3. The Bird fauna and wetland fauna, flora are not explored systematically.
Some threatened/ endangered species populations increasing, most others stable.	Fair			
Most threatened/ endangered species populations increasing, most others stable.	Good	✓		
All threatened/ endangered species populations either increasing or stable.	Very good			

* This needs to practically relate to the natural ecosystem potential rather than being driven merely by numbers and visibility. The assessment score may be elaborated under remarks. Comments on the population trends may be made under Remarks.

6.2 Have the threats to the site being reduced/ minimized or is there an increase?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats to the Site have not abated but have enhanced.	Poor		1. DFO report 2. Field Visit	While poaching and illicit felling of trees are kept in check, collection of MFP and medicinal plants and grazing etc do threaten the conservation of the sanctuary.
Some threats to the Site have abated, others continue their presence	Fair			
Most threats to the Site have abated. The few remaining are vigorously being addressed	Good	✓		
All threats to the Site have been effectively contained and an efficient system is in place to deal with any emerging situation	Very good			

6.3 Are the expectations of visitors generally met or exceeded?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Expectations of visitors generally not met.	Poor		1. DFO report 2. Field Visit 3. Observation of visitor register	Visitors are generally happy with tourism infrastructures available in the sanctuary. There should be guides to take tourists along the bird watching trail. This would very much help the education and awareness program.
Expectations of many visitors are met.	Fair			
Expectations of most visitors are met.	Good	✓		
Good expectations of most visitors are met.	Very good			

* Is there any system of receiving/ analyzing visitor feedback?

6.4 Are local communities supportive of PA management?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Local communities are hostile.	Poor		1. DFO report 2. Field Visit	The interest of the local communities depending upon medicinal plant and MFP collection do come in conflict with the management objectives. Local communities employed in Eco Tourism are supportive of Sanctuary management..
Some are supportive.	Fair			
Most locals are supportive of PA management.	Good	✓		
All local communities supportive of PA management.	Very good			

* There could be many reasons for disenchantment. It could be real because of managerial neglect or the managerial efforts could be appropriate but there could be local elements/organizations who would like to keep the dis-affectation simmering for their own ulterior motives. Likewise success could be entirely because of the efforts of managers or they might be fortunate in striking partnerships with credible NGOs. Assessment may take the prevailing causes into account.

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	17.50	60.83%
2.	Planning	09	10	90	52.50	
3.	Inputs	05	10	50	25	
4.	Process	05	10	50	32.50	
5.	Outputs	04	10	40	25	
6.	Outcomes	04	10	40	30	
Total		30		300	182.5	

8. SENCHAL WILDLIFE SANCTUARY, WEST BENGAL

MEE Year (2016-17)

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 trees were cut down during protests in the 1980s demanding the Gorkha Hill Council. Old *Cryptomeria japonica* trees are also drying up and falling due to the wind. All such degraded areas are taken up for plantation with natural broad leaved species. During the MEE we visited 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.

Management Weaknesses

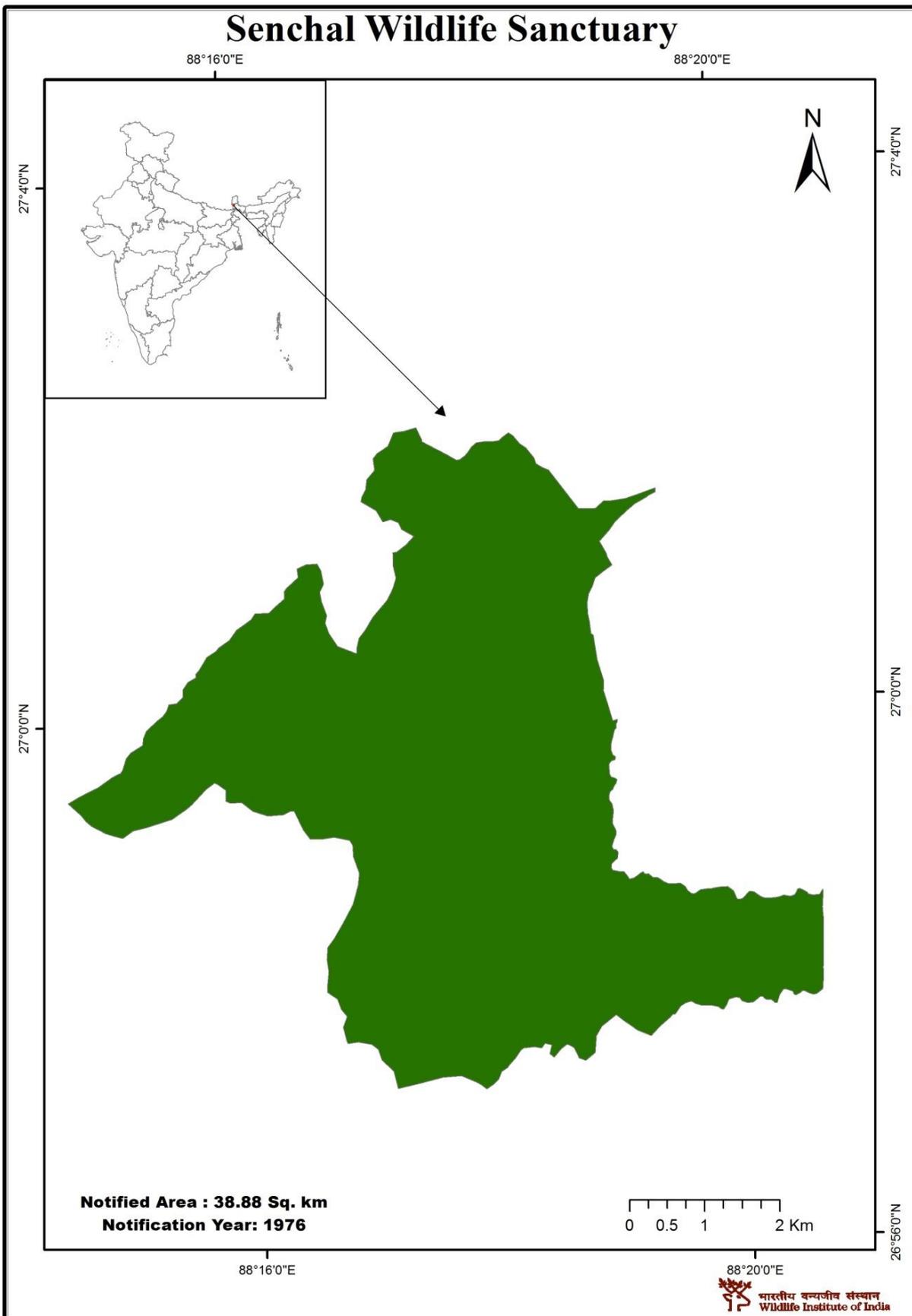
1. Villagers and many labourers in adjoining tea gardens depend on the forests for their fire wood requirements. Although a beginning has been made in providing LPG connections, we have still to go a long way.
2. Maling Bamboo (*Arundinaria maling*) has covered the degraded areas in the sanctuary and 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.

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 invest 2% of their budget in corporate social responsibility to find alternate livelihood options for EDC members. It was learnt that Cardamom and other aromatic plants are not damaged by wild animals. Ginger and Turmeric are other plants that suffer minimal 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.

Senchal Wildlife Sanctuary



1. Context

1.1 Are the values of the site well documented, assessed and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Values not systematically documented, assessed or monitored.	Poor		1. Management Plan (2012-13 to 21-22) approved by Chief Wildlife Warden, WB Dated 25/06/2012; 2. Interaction with concerned DFO and CF	1. Established in 1915 and oldest WLS in the country. 2. The sanctuary acts as wind barrier for Monsoon which causes high precipitation in the hills. 3. The sanctuary acts as giant rain water retainer and feeds to the streams which are the source for drinking water supply to Darjeeling Township. 4. The Sanctuary is home of Serow, Goral, leopard, Himalayan black Bear, Himalayan Newt and many important fauna and flora of Eastern Himalaya. 5. The sanctuary is part of Himalayan and north Bengal landscape.
Values generally identified but not systematically assessed and monitored.	Fair			
Most values systematically identified and assessed and monitored.	Good			
All values systematically identified and assessed and monitored.	Very good	✓		

*Values would also include geo-morphological, historico-cultural and faunal and floral species.

1.2 Are the threats to site values well documented and assessed?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threats not systematically documented or assessed.	Poor		1. Approved management Plan 2. Interaction with officials and staff 3. Field visits	1. Increase in urbanization of township, extension of cultivable land, increase in roads and traffic and population has impacted on the number of wildlife. 2. Seven Forest villages with cattle goats compete for fodder with wildlife. In addition, 18 villages, 5 tea gardens, 2 Cinchona plantations in adjoining to PA utilize the natural resources from the PA. 3. Lopping for fodder cause destruction of habitat. The PA has systematically identified all the threats and trying to mitigate them as per plan document.
Threats generally identified but not systematically assessed.	Fair			
Most threats systematically identified and assessed.	Good			
All threats systematically identified and assessed.	Very good	✓		

* This assessment should be based on number, nature and extent of threats. Threats within and outside PA should both be considered. Impacts, if any on the population abundance of key species may be indicated in the remarks.

1.3 Is the site free from human and biotic interference?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
The site has extensive human and biotic interference.	Poor		1. Approved management Plan 2. Interaction with officials and staff 3. Field visits	1. Seven forest villages in the sanctuary and two fixed demand holdings have approximately 6000 population depend on this PA. The other 18 villages and five tea gardens are also depending upon sanctuary. 2. The surrounding Darjeeling township also draws resources. 3. The extension of roads, buildings etc. has restricted the wildlife movement and number. The collection of MFP, medicinal plants and insects was recorded
The site has some human and biotic interference.	Fair	✓		
The site has little human and biotic interference.	Good			
The site has no human and biotic interference.	Very good			

*This assessment should be based on existence of human settlements/ villages; livestock grazing, cultivation, encroachments etc, resource extraction/ livelihood dependence of local communities and should reflect the overall interference due to all the above factors. Number and size of human settlements/ enclaved villages and their impacts on the site may be indicated in the Remarks.

2. Planning

2.1 Is the site properly identified (NP/WLS) and categorized (in terms of zonation) to achieve the objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not identified correctly or categorized.	Poor		1. Approved management Plan 2. Interaction with officials and staff 3. Field visits	1. The PA has identified the various zonation's--- Wilderness zone, habitat improvement zone and eco-tourism zones 2. The various management prescriptions have been provided in the plan document and are being implemented.
Site identified correctly but not categorized.	Fair			
Site identified correctly but not systematically categorized.	Good			
Site identified correctly and systematically categorized with proper zonation plans.	Very good	✓		

Management prescriptions for various zones (Core, Buffer, Tourism etc) may be carefully assessed.

2.2 Does the site have a comprehensive Management Plan?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No relevant Management Plan in place.	Poor		1.Management Plan (2012-13 to21-22) approved by Chief Wildlife Warden, WB Dated 25/06/2012;	1. The up to date Management Plan is available for the PA. 2. It follows the guidelines provided by WII. 3. The concern of stake holders are also addressed.
Management Plan exist but not comprehensive.	Fair			
Site has a comprehensive Management Plan.	Good			
Site has a comprehensive, science based Management Plan prepared through a participatory process.	Very good	✓		

Is the Management Plan consistent with WII Guidelines or not? The extent to which the concerns of the stakeholders, if any have been incorporated in the Management Plan may be commented upon.

2.3 Is the Management Plan routinely and systematically updated?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No process in place for systematic review and update of Management Plan.	Poor		1.The current Management Plan 2. Interaction with CF and DFO.	1. The current plan was prepared in 2012 and has not been updated. However, the officers are collecting data to update the plan.
Management Plan sometimes updated in adhoc manner.	Fair	✓		
Management Plan routinely and systematically updated.	Good			
Management Plan routinely, systematically and scientifically updated through a participatory process.	Very good			

2.4 Does the site safeguards the threatened biodiversity values?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Sites does not safeguard the threatened biodiversity values.	Poor		1.DFO's Report 2. Interaction with staff. 3. Field Visit	1. The habitat management by replacing Maling Bamboo with broad leaf plantations is being carried out and the performance is monitored and the finding is recorded in plantation journal. 2. The protection camps are in place and regular patrolling is carried out. 3. The water harvesting structures along with fringe area management is being carried out. 4. The regular monitoring of threatened wildlife species is being carried out and recorded in field observation register maintenance for the purpose. 5. Other Biodiversity vales like medicinal plants richness; rare and endangered fauna like Himalayan Newts, Beetles, Serow.etc are also protected and their status is monitored.
Sites safeguards a few threatened biodiversity values.	Fair			
Sites safeguards a large number of threatened biodiversity values.	Good	✓		
Sites safeguards all threatened biodiversity values.	Very good			

* Remarks need to elaborate on the kind of safeguards and how they work or are intended to work

2.10 Are stakeholders given an opportunity to participate in planning?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little, if any opportunity for stakeholder participation in planning.	Poor		1. management Plan 2. Interaction with Officers, Frontline Field staff, Eco-Development committee members.	1. The eco-development committee has the participation in planning. 2. The eco-tourism programme has also participation of stake holders 3. The other major stake holders like Tea Gardens, Tourism department and tour operators etc should also be roped in. Tea gardens laborers being dependent on the forests of the sanctuary, they must provide Corporate Social Responsibility fund for the maintenance and upkeep of the sanctuary., .
Stakeholders participate in some planning.	Fair			
Stakeholders participate in most planning processes.	Good	✓		
Stakeholders routinely and systematically participate in all planning processes.	Very good			

* The result of participation must show in the field and not merely reported as a routine exercise. Further, is there a system/scope of putting the draft Management Plan in Public Domain in place?

2.6 Are habitat restoration programme systematically planned and monitored?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Habitat restoration programme are entirely adhoc.	Poor		1.DFO Report 2.Field visits 3. Interaction with staff	1. The habitat restoration programme is a continuous process in the PA. Annually 40 hectare area occupied by Marang bamboo and Dhupi trees are taken up for plantation with broad leaved species. 2. The broad leaved species planted are also palatable to wild animals. 3. The local broad leaf plant nursery are established with local community.. 4. More area may be attempted annually for raising palatable species..
Limited planning and monitoring programme are in place for habitat restoration.	Fair			
Habitat restoration programme are generally well planned and monitored.	Good			
Habitat restoration programme are thoroughly planned and monitored.	Very good	✓		

* This assessment should be primarily based on habitat management programme in relation to habitats for species that are threatened (IUCN categories), are habitat specialists, subjected to seasonal movements, wide ranging with emphasis on the breeding and rearing habitat and may include factors such as food, water, shelter (all connotations).Habitat structure, composition, unique patches of vegetation and sensitive sites, sources of water and their distribution are integral. Corridors within buffer zone are critically important. For example, all riparian habitats. Have these been addressed? Is their a planning process in place? What is the extent of 'invasive species in the Site? Are there any measures to reduce/ remove them? Have these been successful?

2.7 Does the site has an effective protection strategy?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Site has no protection strategy.	Poor		1. DFO's Report 2. Field Visit 3. Interaction with staff.	1. There are patrolling camps in every beat. The foot patrolling is carried out to cover larger area of undulating terrain. 2. The patrolling schedule and movement registers are maintained. 3. The wildlife observation register is maintained and regular reporting is made to DFO.. 4. The regular meeting and interaction with civil and police authorities is carried out. 5. The number of staff is less as the state has not taken up recruitment of Forest Guard and Foresters for last ten years. Some more patrolling vehicles, monitoring equipment are required.
Site has an adhoc protection strategy.	Fair			
Site has a comprehensive protection strategy but is not very effective.	Good	✓		
Site has a comprehensive and very effective protection strategy.	Very good			

* This assessment takes *inter-alia* into account the nature of threats, the number and location of patrolling camps and foot and mobile patrolling, needs that relate to available manpower, terrain difficulties, practicability of area coverage, readiness to contain specific threats with necessary support and facilities. Is there any coordination with other wings of the Forest Department/ Police/ Customs etc? Are these effective?

2.8 Has the site been effective in the mitigation of human-wildlife conflicts?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Human-wildlife conflicts are rampant.	Poor		1. DFO Report 2. Field visit 3. Interaction with staff	1. The wildlife-human conflict is mainly due to crop depredation by wild boar and bear. cattle lifting by Leopard in upper part and depredation by Elephants in lower part of PA. 2. 22 kms of energized fencing was created but only 4 to 5 kms is effectively functioning. 3 There are 110.66 ha of crop damage, 196 house damage, 149 livestock damage, 5 persons killed and 04 injured from 2014-15 onwards. The compensation paid is Rs.2917107/- during this period.
Site has been able to mitigate few human-wildlife conflicts.	Fair	✓		
Site has been able to mitigate many human-wildlife conflicts.	Good			
Site has been able effective in mitigating all human-wildlife conflicts.	Very good			

* Judgment needs to consider staff training, capabilities, equipment, logistics, local attitude and politics (negatively aided and/or abetted), assistance of relevant agencies (e.g. police. Local administration, Local people themselves) PR, follow-up actions and monitoring. Details of compensation paid for human injury/ death and property damage in the last 3 year may be collected.

2.9 Is the site integrated into a wider ecological network landscape following the principles of the ecosystem approach?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Site not integrated into a wider network/ landscape.	Poor		Management Plan and field visit	1. The site is part of NE Himalayan landscape and is well integrated but landscape level conservation planning is yet to take a formal shape. The sanctuary is in continuity with the landscape from Nepal, Darjeeling, Kurseong, Sikkim, Jalpaiguri and Bhutan. The management plan and Working Plan of all these areas are required to be integrated.
Some limited attempts to integrate the site into a network/ landscape.	Fair	✓		
Site is generally quite well integrated into a network/ landscape.	Good			
Site is fully integrated into a wider network/ landscape.	Very good			

* Assessment needs to consider the scope of opportunities on the landscape scale that exist. Consider whether any attempts have been made and what are these? Have all the important corridors been identified? What actions are planned/implemented for their security? Have the Forest Working Plans and Forest Development Corporation Plans within the identified landscapes taken cognizance of such new requirement? What kind of relationship exists with the District Administration and other Line Departments? Does the Site get any funds from these agencies?

3. Inputs

3.1 Are personnel adequate, well organized and deployed with access to adequate resources in the site?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, personnel explicitly allocated for PA management.	Poor		1.DFO Report 2.Interaction with staff 3.Interaction with CF, Wildlife	1. Nearly 50% vacancy exists in front line staff and most of the work is carried out through casual laborers. 2. All the staff is exclusive for PA management. 3. Specialized trained staff should be appointed for camera trap documentation and data compilation.
Some personnel explicitly allocated for PA management but not systematically linked to management objectives.	Fair			
Some personnel explicitly allocated towards achievement of specific management objectives.	Good	✓		
Adequate personnel explicitly allocated towards achievement of specific management objectives.	Very good			

* This assessment should *inter-alia* be based on number of personnel allocated for attainment of PA objectives at the Range, Round, Beat and Patrolling camps levels or as relevant to the needs (sanctioned posts *vis- a- vis* existing personnel and needs beyond the sanctioned strengths. It is possible that posts have last been sanctioned several years back that do not now account for the current needs)

3.2 Are resources (vehicle, equipment, building etc.) adequate, well organised and managed with access to adequate resources?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Few, if any, resources explicitly allocated for PA management.	Poor		1. DFO Report	1. The transport for patrolling is inadequate. At present hired vehicles are used. 2. At present, only 5 camera traps, 5 field camera, 3 GPS and 3 serviceable arms are in the sanctuary. 3. More camera trap and monitoring equipments are needed for covering entire area. 3. The mobile phones to be provided to staff for better communication.
Some resources explicitly allocated for PA management but not systematically linked to management objectives.	Fair	✓	2. interaction with ROF and ADFO	
Some resources explicitly allocated towards achievement of specific management objectives.	Good			
Adequate resources explicitly allocated towards achievement of specific management objectives.	Very good			

* These form a variety of resources. These may be segregated into immovable (structures) and movable categories and each further may be considered under the essential and desirable categories. It is best to start with what are the minimum needs to attain each objective, what is available and manner of use/deployment. The proportions of the 'essentials' and 'desirables' along the importance gradient of objectives would serve as pointers for score categories. Specific remarks would be vitally important.

3.3 Are resources (human and financial) linked to priority actions and are funds released timely?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resource allocation is adhoc, funds are inadequate and seldom released in time and not utilized.	Poor		1. DFO report 2. Financial report and APOs	1. The central fund is received during February and March, which helps in booking all expenses incurred during the year. However payment to daily wages workers are made from the state share of funds, which is released during November. 2. The habitat management fund is inadequate as hardly 40 hectare plantation of broad leaved species is taken up annually. 3. Funding- -Rs. In Lakh 2013-14 to 2015-16 (Central and State)
Some specific allocation for management of priority action. Funds are inadequate and there is some delay in release, partially utilized.	Fair	✓		
Comprehensive planning and allocation that meets the most important objectives. Generally funds released with not much delay and mostly utilized.	Good			
Comprehensive planning and allocation of resources for attainment of most objectives. Funds generally released on-time and are fully utilized.	Very good			

YR	Central	State	Achievement
13-14	18.92	69.2	100%
14-15	11.98	179	100%
15-16	9.88	98.12	100%

*Obtain details of funds released by MoEF and their utilization by site in the last 3 years and indicate them under 'Remarks'. Also comment on the problems associated with funds and their mitigation.

3.4 What level of resources is provided by NGOs?

Assessment criteria*				
Condition*	Category*	(Tick ✓)	Reference document(s)	Remarks
NGOs contribute nothing for the management of the site.	Poor		1.DFO Report 2.Field interaction	1. WWF was involved in camera trapping in the PA. 2. ATREE is involved in village level survey and income generation activity. 3. The local NGOs are involved in census and awareness programme. 4. All these activities are on very small scale and also the approach is tentative.. No major initiative was found in research, species. augmentation etc.
NGOs make some contribution to management of the site but opportunities for collaboration are not systematically explored.	Fair			
NGOs contributions are systematically sought and negotiated for the management of some site level activities.	Good	✓		
NGOs contributions are systematically sought and negotiated for the management of many site level activities.	Very good			

Details of contributions(cash/kind) made by the NGOs in the last 3 years may be collected.

3.5 Does PA manager considers resources (human and financial) to be sufficient?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Resources insufficient for most tasks.	Poor		1. DFO Report 2. Interaction with CF. DFO,ADF, ROF and field staff	1. The state has not taken up recruitment of Forest Guard and Foresters for last ten years, as a result there are 50% vacancies.. 2. There should be more transport vehicles for patrolling in this difficult terrain. In addition, each beat requires two wheelers and all monitoring and communication equipment.
Resources sufficient for some tasks.	Fair	✓		
Resources sufficient for most tasks.	Good			
Resources are in excess for most tasks.	Very good			

4. Process

4.1 Does the site have trained manpower resources for effective PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Very few trained officers and frontline staff in the site.	Poor		1. DFO report and interaction in the field.	1. No field staff is properly trained in wildlife management. 2. The FG and Foresters are trained in state level training schools. 3. The training on camera trap and monitoring was provided locally.
Few trained officers and frontline staff, who are posted in the site.	Fair	✓		
A large number of trained officers and frontline staff are posted in the site.	Good			
All trained managers and frontline staff posted in the site.	Very good			

* Indicate % of trained staff in various categories. i.e. Higher Management: ACF/ DCF/ CF/ CCF; Frontline Staff: Range Officer; Beat Officer; Forest Guard; Casual Daily Labour (CDL); Others.

4.2 Is PA staff performance management linked to achievement of management objectives?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No linkage between staff performance management and management objectives.	Poor		1. DFO's report 2. Field visit 3. Management Plan prescription	1. The staff duties are assigned in accordance with the prescriptions in the Management Plan. The duty chart is available in the ranges and their performance is monitored regularly. 2. However, there is no incentive or reward mechanism for staff based on performance.
Some linkage between staff performance management and management objectives, but not consistently or systematically assessed.	Fair			
Performance management for most staff is directly linked to achievement of relevant management objectives.	Good	✓		
Performance management of all staff is directly linked to achievement of relevant management objectives.	Very good			

*Has the PA staff received award/ appreciation from any agency in the last 3 years?

4.3 Is there effective public participation in PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no public participation in PA management.	Poor		1. DFO's Report. 2. Interaction with villagers, NGOs and Tea Garden management	1. The villagers from 15 villages help the PA management in protection, information gathering and awareness creation. 2. The Darjeeling Hill council is also collaborating with PA in development work and tourism facilities. 3. The local NGO participate in census operation 4. The public issues relating to management of the sanctuary is handled at range level coordination committee.
Opportunistic public participation in some aspects of PA management.	Fair			
Systematic public participation in most aspects of PA management.	Good	✓		
Comprehensive and systematic public participation in all important aspects of PA management.	Very good			

* Participation would include Conservation & awareness programme, Census operations, Intelligence gathering, Forest fire control etc.

4.4 Is there a responsive system for handling complaints and comments about PA management?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic approach to handling complaints.	Poor		1. DFO's Report 2. Office documents. 3. Field visit	1. The complaint and suggestion boxes were found at RFO office. 2. The complaint register is also maintained. 3. Two RTI queries dated 18/4/16 and 16/8/16 were received and answered by PA Management 4. Both the ranges have range level coordination committee which takes care of the complaints and remedial action.
Complaints handling system operational but not responsive to individual issues and limited follow up provided.	Fair			
Coordinated system logs and responds effectively to most complaints.	Good			
All complaints systematically logged in coordinated system and timely response provided with minimal repeat complaints.	Very good	✓		

* Number of queries made and response thereof under the Right to Information (RTI), Act in the last 3 years may be compiled.

4.5 Does PA management address the livelihood issues of resource dependent communities especially of women?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No livelihood issues are addressed by PA management.	Poor		1. DFO Report 2. Eco-development Report 3. Eco-Tourism Report 4. Field Visit	1. The PA has spent Rs. 19.15 Lakh on various income generation and welfare activities in the villages through Eco-development initiatives in last three years. 2. The eco-tourism facilities at Chatakpur is excellent and has drawn nearly 3000 visitors. It is entirely managed by village community. 3. Under reciprocal commitment from the local population, stall feeding of cattle, not depending on PA for MFP collection, firewood, timber etc and resorting to organic farming. The other villages are eager to start such initiatives. 4. The PA has formed 31 EDC and 15 Women Self Help groups. 13 SHGs are active in organic farming, vegetable shop, poultry etc.
Few livelihood issues are addressed by PA management.	Fair			
Substantial livelihood issues are addressed by PA management.	Good			
Livelihood issues of resource dependent communities especially women are addressed effectively by PA managers.	Very good	✓		

5. Output

5.1 Is adequate information on PA management publicly available?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no information on PA management publicly available.	Poor		1.DFO's Report 2. Field Observation	1. The PA is on the web sites of West Bengal government Tourist Dept., Forest Department and eco-tourism depts... 2. The information is comprehensive and useful. 3. Proper signage is displayed at various places. 4. Brochures and booklets are available for distribution among visitors.
Publicly available information is general and has limited relevance to management accountability and the condition of public assets.	Fair			
Publicly available information provides detailed insight into major management issues for most PAs or groups of PAs.	Good	✓		
Comprehensive reports are routinely provided on management and condition of public assets in all PAs or groups of PAs.	Very good			

* Does the Site has a website? If yes, is it comprehensive, well-managed and periodically updated?

5.2 Are visitor services (tourism and interpretation) and facilities appropriate for the relevant protected area category?

Assessment criteria

Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Visitor services and facilities are at odds with relevant PA category and/or threaten PA values.	Poor		1. DFO Report 2. Field Visit	1. NIC is informative situated at Tiger hill. It is under renovation at the time of visit. 2. The FRH at Rambh has excellent tourist facility. 3. The Eco-tourism center, Chatakpur, comprising of 2 cottages with 2 rooms each are well furnished, secure and excellent place for tourist. In addition there are several Home stay facilities run by Chatakpur EDC and attracts more than 2000 visitors each year. The revenue sharing is 45% for Govt, 40% for payment towards development Charges and 15% for EDC. It is an excellent effort towards community oriented conservation initiative.
Visitor services and facilities generally accord with relevant PA category and don't threaten PA values.	Fair			
All visitor services and facilities accord with relevant PA category and most enhance PA values.	Good			
All visitor services and facilities accord with relevant PA category and enhance PA values.	Very good	✓		

* Include the existence and quality of visitor and interpretation centers, including skills and capabilities of personnel manning these, site related publications, films, videos; arrangements of stay (including places serving refreshments and food owned and managed by site), watch towers and hides including safety factors, vehicles assigned for visitors including riding elephants, if any and their deployment, drinking water, rest rooms, garbage disposal, attended and self guided services in the field, visitor feed back on the quality of wilderness experience. Details of numbers of visitors/ tourists(both domestic and overseas) coming in the last 3 years and the revenue earned may be compiled.

5.3 Are research/ monitoring related trends systematically evaluated and routinely reported and used to improve management?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Little or no systematic evaluation or routine reporting of trends.	Poor		1. DFO's Report 2. Office document review 3. Interaction with staff and field observation	1.A field study was conducted by Ms Upasana Rai, RS,PNHZ Park on feeding of Asiatic Black Bears(2008),in the PA. 2. The WWF conducted camera trap exercises in the PA. 2014-15. 3. The census reports are available. 4. Regular sighting register is maintained and reported. 5.The PA needs analysis and documentation on Himalayan Newt, Serow, and other wildlife 6. BNHS conducted the survey of Vultures; PNHZ conducted the survey of Red Panda, BSI conducted the flora study and IISE&RE, Bhopal conducted Pollination Biology study in PA.
Some evaluation and reporting undertaken but neither systematic nor routine.	Fair			
Systematic evaluation and routine reporting of management related trends undertaken.	Good	✓		
Systematic evaluation and comprehensive reporting of trends undertaken and attempts made at course corrections as relevant.	Very good			

* Not all site attract projects and researchers and with exceptions, little research takes place on the site own steam because of systemic limitations. However, monitoring of some critical issues is expected e.g. population of tiger, co-predators and prey with insights into their demography and distribution (some opportunistic sampling by sightings, signs and spatial distribution during assessment would be extremely useful in terms of expert impression and as a pulse), monitoring incidence of livestock grazing, fires, weeds, sources of water, a variety of illegal activities typically associated with the reserve, wildlife health (e.g. epidemics, immunization of livestock) regeneration and change in vegetation, visitors and their activities, offence cases, ex-gratia payments etc. Details of number of research projects in the last 3 years, institutions involved, salient outcomes may be collected and used in awarding scores.

5.4 Is there a systematic maintenance schedule and funds in place for management of infrastructure/assets?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
No systematic inventory or maintenance schedule.	Poor		1.DFO's Report	1. There is the systematic maintenance of infra-structure/ asset created register in the ranges. These are update regularly and submitted to higher authorities. 2. The plantations created are monitored and the performance is recorded in plantation journal. 3. The funds are inadequate for maintenance of all infra-structure created.
Inventory maintenance is adhoc and so is the maintenance schedule.	Fair		2. Infra-structure / asset register in Ranges.	
Systematic inventory provides the basis for maintenance schedule but funds are inadequately made available.	Good	✓	3. Plantation Journal	
Systematic inventory provides the basis for maintenance schedule and adequate funds are made available.	Very good			

6. Outcomes

6.1 Are populations of threatened species especially key faunal species declining, stable or increasing?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Threatened/ endangered species populations declining.	Poor		1. Census Report of Elephants	1. Although the terrain is very difficult and number of staff is less, the frequency of animal sighting by the staff has increased for the last 2-3 years after the Gorkha Land agitation has come down. 2. More camera trapping and field monitoring may be useful to analyze trends.
Some threatened/ endangered species populations increasing, most others stable.	Fair		2. DFO Report	
Most threatened/ endangered species populations increasing, most others stable.	Good	✓	3. Camera trap Report	
All threatened/ endangered species populations either increasing or stable.	Very good		4. Animal sighting register	

* This needs to practically relate to the natural ecosystem potential rather than being driven merely by numbers and visibility. The assessment score may be elaborated under remarks. Comments on the population trends may be made under Remarks.

6.2 Have the threats to the site being reduced/ minimized or is there an increase?

Assessment criteria				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks

Threats to the Site have not abated but have enhanced.	Poor		1. DFO's Report 2. Interaction with Field Staff 3. Interaction with villagers and other stake holders	1. The initiation of JFM and eco-development activities has resulted in better cooperation and mutual understanding between PA management and other stake holders. 2. The Eco-tourism initiative has resulted in good rapport between villages and PA management. 3. There is no grazing and firewood collection by the villages. 4. The conflict between management and villagers is reduced.
Some threats to the Site have abated, others continue their presence	Fair			
Most threats to the Site have abated. The few remaining are vigorously being addressed	Good	✓		
All threats to the Site have been effectively contained and an efficient system is in place to deal with any emerging situation	Very good			

6.3 Are the expectations of visitors generally met or exceeded?

Assessment criteria*				
Condition	Category*	(Tick ✓)	Reference document(s)	Remarks
Expectations of visitors generally not met.	Poor		1. DFO Report 2. Eco-tourism visitor Register 3. FRH visitor Register	1. The visitors have recorded favorable comments on the facilities 2. The Tiger Hill visited by all tourists coming to Darjeeling is Part of PA and is appreciated by the visitors.
Expectations of many visitors are met.	Fair			
Expectations of most visitors are met.	Good			
Good expectations of most visitors are met.	Very good	✓		

* Is there any system of receiving/ analyzing visitor feedback?

6.4 Are local communities supportive of PA management?

Assessment criteria*				
Condition	Category	(Tick ✓)	Reference document(s)	Remarks
Local communities are hostile.	Poor		1. DFO's Report. 2. Field Visit and interaction with village community.	1. The 7 forest villages are very much supportive to PA management. 2. The fringe area villages and tea gardens face Elephant depredation and conflict occurs. 3. But overall villagers are supportive and help the PA.
Some are supportive.	Fair			
Most locals are supportive of PA management.	Good	✓		
All local communities supportive of PA management.	Very good			

* There could be many reasons for disenchantment. It could be real because of managerial neglect or the managerial efforts could be appropriate but there could be local elements/organizations who would like to keep the dis-affectation simmering for their own ulterior motives. Likewise success could be entirely because of the efforts of managers or they might be fortunate in striking partnerships with credible NGOs. Assessment may take the prevailing causes into account.

MEE Score Card

Framework Element Number	Framework Element Name	Number of Questions (a)	Maximum Mark per question (b)	Total (a x b)	Marks obtained for the Element	Overall Score
1.	Context	03	10	30	25	75.83%
2.	Planning	09	10	90	67.5	
3.	Inputs	05	10	50	30	
4.	Process	05	10	50	40	
5.	Outputs	04	10	40	32.5	
6.	Outcomes	04	10	40	32.5	
Total		30		300	227.5	