

CONSERVATION PLAN

1.0 Introduction

Conservation Plan for the Indian Peafowl which is found in the buffer zone of the Adani copper refinery project at Mundra is discussed below:

1.1 Peafowl –Conservation (Peacock)



INDIAN PEAFOWL

1.2 Description

The Indian Peafowl is the largest pheasant occurring in the subcontinent. The species was first named and described by Linnaeus in 1758 and the name *Pavo cristatus* is still in use now. The male peacock is predominantly blue with a fan-like crest of spatula-tipped wire-like feathers and is best known for the long train made up of elongated upper-tail covert feathers which bear colorful eye spots. These stiff and elongated feathers are raised into a fan and quivered in a display during courtship. The female lacks the train, has a greenish lower neck and a duller brown plumage. The Indian Peafowl is found mainly on the ground in open forest or on land under cultivation where they forage for berries, grains but will also prey on snakes, lizards and small rodents. The scientific classification of this species is given below with its distribution in India.

1.3 Identification Features of Indian Peafowl

Peafowl has a splendid glossy green long tail feathers that may be more than 60 percent of the birds total body length. These features have blue, golden green and copper coloured ocelli (eyes). The long tail feathers are used for courtship displays. The feathers are arched into magnificent fan shaped form across the back of the bird and almost touching the ground on both sides. Females do have graceful tail feathers. They have fan like crest with whitish face and throat, chestnut brown crown and hind neck, metallic green upper breast and mantle, white belly and brown back rump and tail. Their primaries feathers are dark brown.

1.4 Importance of the Species

The peafowl is prominent in the mythology and folklore of the Indian people. The Hindus consider the bird to be sacred because of its association with Lord Krishna who used to wear its feather as crown (Mor Mokut). It is also associated with the God Kartikeya, son of the Lord Shiva and Parvati and brother of Lord Ganesha. It is the "Vaahan" (transport) of Lord Kartikeya. This long and close association with humans has proven the peafowl's adaptability to human altered landscapes. In villages where it is protected it becomes quite tame, but is very shy and secretive where hunted. In the buffer area of mine site peacock is generally protected by the local people.

1.5 Ecology and Behavior

Peafowl forages on the ground in small groups, known as musters that usually have a cock and 3 to 5 hens. After the breeding season, the flock tends to be made up only of females and young. They are found in the open early in the mornings and tend to stay in cover during the heat of the day. They are fond of dust-bathing and at dusk, groups walk in single file to a waterhole to drink. When disturbed, they usually escape by running and rarely take to flight.

Peafowl produces loud calls, especially in the breeding season. They may call at night when alarmed and neighboring birds may call in a relay like series. Nearly seven different call variants have been identified in the peacocks apart from six alarm calls that are commonly produced by both sexes. Peafowl roosts in groups during the night on tall trees but sometimes make use of rocks, buildings or pylons. Birds arrive at dusk and call frequently taking their position on the roost trees. Due to this habit of congregating at the roost, many population studies are made at these sites.

1.6 Threats

The peafowl is under threat from various quarters that include the demand for feathers and wild meat, conflict with farmers during cropping season, increased use of chemical fertilizers and pesticides coupled with habitat degradation. An adult peacock has about 200 tail feathers, which it sheds from August onwards; fully developed new feathers appear in February. The fallen feathers are collected and sold in local markets and the birds are also reportedly killed to increase the revenue returns. Other threats include habitat loss due to encroachment for agriculture, developmental activities, poisoning for countering crop damage, egg consumption and fat usage for medicinal purpose and direct killing for meat.

1.7 Conservation and Present Status

The Indian Peafowl is listed as least concern species in the red list of the International Union for Conservation of Nature (IUCN), as assessed by the Bird Life International in the year 2012, owing to its widespread distribution, occurrence of locally abundant populations and protection from the people on religious grounds.

In India, it is given highest protection by including it in the Schedule-I of the Wildlife (Protection) Act, 1972. Although the train feathers of the Indian Peafowl are traded for various reasons, it is not included on any Appendix of the Convention on International Trade of Endangered Species perhaps on the claim that their feathers are naturally fallen ones during annual molt of the males.

1.8 Objectives of the Peacock Conservation Plan (PCP)

- Develop dense tree plantation of highly branching canopy that provide roosting habitat for the peacocks; Captive shelter belts and water holes with appropriate check dams to conserve moisture during blistering heat of summer climes when temperature will be around 40°C.
- Providing the floral habitat that is conducive for foraging species of Peafowl like insects and reptiles which Peafowl feed on; ample grass land habitat should be promoted as "Peafowl" mostly forages on insects, apart from fruits.
- Reduce the habitat loss, promoting captive shelter belt of green belt especially will provide ample roosting space for the birds and shade, apart from forage;
- Also restricting the use of pesticides and fertilizers in the buffer zone will be helpful for the conservation of peafowl; promoting organic means of agricultural practices in the buffer zone will be beneficial for the "Peafowl" which will be much safe devoid of chemical fertilizers and pesticides.
- Sufficient water troughs and large saucer like pans are ideal for water conservation measures in summer months.
- Promoting awareness among Adani copper refinery plant group employees and adjoining villages, populace about the 'Peacock Conservation' in the area, will aid in improving the conservation initiatives.
- Conducting Vanyaprani Saptah- week celebrations to promote awareness about "Peafowl" conservation in the study area in Mundra and near Navinal.
- The glaring lights should be avoided in during the night in the vicinity of the "Peafowl"
- Appropriate "Captive Shelterbelt reduces impacts on habitat loss; especially loss of the roosting habitat and also provides foraging habit and habitat for the "Peafowl".
- To envisage to reduce the mortality of the birds and loss of eggs and chicks to direct and in-direct impacts; and
- The nesting and roosting sites should be protected from feral animals like dogs, cats which prey on the birds and eggs and the juvenile chicks as the gestation of the Indian Peafowl varies from 28 days to 30 days.
- Promotion of the organic farming is beneficial for Indian Peafowl conservation
- Indian Peafowl is protected across pan India as it is listed in Schedule-I of the Wildlife (Protection) Act, 1972.

1.9 Tentative Budget

The tentative budget for peacock conservation is given in **Table-1**.

TABLE-1
TENTATIVE BUDGET FOR PEACOCK CONSERVATION

Sr. No.	Item	Estimated Expenditure (Rs.in Lakhs)
Conservation of Soil and Water		
1	Watershed improvement & Improvement of existing water resources	5.00
Improvement of Pasture Development		
2	Pasture development	5.00
3	Control of grazing	5.00
4	Weed control	5.00
5	Creation of conservation awareness	5.00
6	Planting of trees for Indian Peafowl Roosting	5.00
7	Fire protection and mitigation and control of forest fires in Mundra creek and Navinal Area	5.00
8	Improvement of Watch Towers	5.00
Grand Total		40.00