New Destination to Kuldiha- an interesting Bird watching spot in West Bengal, India

Debabrata Das, Atmaja Avirupa Das

Ecology Laboratory, Lalgarh Govt. College, Lalgarh, Paschim Medinipur-721 516 (Formerly Darjeeling Govt. College, Darjeeling and Jhargram Raj College, Jhargram) Vidyasagar Sishu Niketan, Sepoy Bazar, Paschim Medinipur-721 102

Abstract- Birds are unique creatures of god for their potential importance in ecologically diverse habitats as they directly and indirectly act and play a crucial role for productivity of ecosystem; they play a vital role to balance the ecosystem also. In this communication a new spot of Paschim Medinipur has been placed for rapid dispersion of interest to the bird watchers and nature lovers. It also helpful to do work in research and extension for new generation learners who believe realistic meaning of birding through amusement which could be a realm about birds and their interactions in the ecosystem. Some migratory as well as indigenous birds have been studied as preliminary one. Hope that ornithologists and zoologists will come soon to high light the spot well being for further study and research on different aspects of birds as the spot is small but diverse as well as not remote because the communication is very good.

Keywords- Kuldiha-Bird conservatory, Peoples' participation-Role of Govt-Our duty

I. INTRODUCTION

Birds are the best gift of the nature as they stood high position for their genius value. The uniqueness is due to their colour, behaviour, role in the ecosystem including indirect significance. The amazing entities make the environment clean, green and eco-friendly as there are so many evidences on the diverse mutuality befitted component in the environment. We know better that a bird plays a role for different activities, the best known as owl that significantly controls the pests (rats and mice) to protect paddy, wheat and other important crops in our periphery. So, if we protect birds automatically they will protect pests over the globe. Crows and vultures collect dead carcases and clean the environment pollution free. The impact of the birds in the environment not only economical but it gives us valuable episode regarding charming and removes the monotony from baby to old aged persons. Good example is mini zoo, zoo, botanic garden, sanctuary and specific bird watching site or birding field. Our environment is our but the impact is more distant from other who gives us various activities by singing, chirpings and to make a melodious knowledge time to time even seasonally diverse situations. Therefore each and every sate nay country

,

selected some birds as their state or national birds. We always awake up in the dawn from bed through chirping sounds made by our neighbours and stop to play and back to home in the dusk. So, a component and the plea of their conservation is essential to protect the environment eco-friendly.

Kuldiha is a village under Salboni block in Paschim Medinipur District of West Bengal, India. The village is situated on the metallic road Midnapore-Bhadutala to Lalgarh of Binpur-I Community Development block. It is flooded by a large number of vegetation but no patch of sal (Shorea robusta) dominated forest nearby though situated in between Bhadutal forest in one hand and other Jhitka of Lalgarh. The remaining sides are distantly covered by paddy field and some water bodies. It is a site with big bushy Tamarind (Tamarindus sp.) tree and Ficus tree. Forest species like Kusum (Schleichera sp.), Kelikadam (Myrtagyna sp.), Challa (Holoptelia sp.) etc. are found with locally available tree species like Palmyra palm and date palm. Bamboos are found as thicket which boosts a large number of water fowls like white breasted water hen and purple moorhen. Common Myna, Parakeet, Rock pigeon, Heron including pond heron are common though bat is found during winter to summer. During monsoon to post monsoon huge migratory birds like Open bill storks are available. Little Cormorant, Night heron, Indian Roller, King fisher, Sparrow, Scaly Munia, Dove, Mourning Dove, and Starling are available when there are sufficient available food found in the field. A fresh water reservoir is a permanent water resource that attracts large number of birds time to time. Therefore, it may be a new horizon for birding that love birds and love environment.

A report in Aanadabazar Patrika, West Bengal (Beng.-Version) broadcasts a report that Kuldiha now protecting birds by the special activity i.e. non-usage of pesticide and acting as a non-pesticide Village. The gathering of birds is due to supply of food items and grains to the birds daily as per the suggestions made by local people headed by Sri Budheswar Mahato. But the fact is that villagers are applying and using dangerous pesticides in their cultivated field every day to get better production argued by local shopkeepers. At the same time they opined that no disturbances caused by local people as well as by others to make the environment eco-friendly and keeping the bird's insitu environment. The other cause of conservation of these birds is due to presence of naturally settled big trees, ponds and also local peoples participation to flourish bird diversity and ecosystem pristine. Our opinion supported the same arguments and rejected the report of AnandaBazar Patrika's report through a critical study and monitoring regularly like Kendua of Jamboni Block under proposed Jhargram District, West Bengal, India. Keeping the theme in mind the present report has been made to broadcasts the natural habitat as New destination of birding and develop a eco-tourism centre in near future in West Bengal. We can introduce 'A home stay concept' to promote birding and develop economy without hampering the natural beauty and natural resource to protect the environment clean, green and eco-friendly. In this way we can conserve the real habitats of birds and their veg. and nonveg. Resources of food.

INTRODUCTION

Birds are ready visitors that visit frequently from place to place even from continent to continent. A good number of birds visit different sites due to change of environment particularly for their feed and reproduction. As the site is not homogenous for their easy life period so they need movement from one place to other. A good example of Birds of migratory kind in our West Bengal is Storks and Siberian Cranes even and in Lake Chilka of Odisha a large number of Pelicans and Flamingos. They come to thrive there for a temporary period to hatch eggs and carry a good number of offspring during their back journey. Whatever true for those mentioned above other always move from the local area regionally for their nesting, roosting and for acquisition of feed. The supply of feed from natural reservoir is not plenty so they search their ready or new habitat to collect their needful one. For roosting and nesting they take a shelter for their own which is protected from any kind of enemy in the said habitat. Big trees, shrubberies, jungle, garden shrubs, river bank, stone caves, rock caves, monuments, barrage, rail station premises (Shed, rail crashed), forests, margin of lakes, temple and church, old buildings are the habitat for bird nesting and roosting. They come out during dawn and come back in dusk. Round the day they move here and there and collect their daily feed and carry valuable things to make their nests. Some birds are so common that they harbour in buildings and in cottage of men and collect food grains from villagers' premises. Good examples are pigeon (Rock pigeon) and Sparrows (House). Common dove (Spotted dove or ground dove) found nearer to locality and move nearby round the day and roosting on shed of buildings and in the branches of trees. Passerine birds like blue magpie robin, tailor bird are commonly found in the locality from dawn to dusk. Indian Cuckoos (Kokil) are nicely

,

sings and move faster from one habitat to another habitat. Jungle babblers are common and are found in a group which collect insects from the environment. Birds are useful to human beings. A good example is the Crows (Corvus splendens) who pick the dirty bio-garbage that are fallen on the road, dust bins, drains or dirty places as it find their feeds and also clean our environment. It is a cleaver bird. Birds are also intelligent. A good example is the weaver birds once built its nest then they keep fire flies inside the nest, which lighted the nest. Cuckoos are very cleaver but lazy. They do not build their nest but lays their eggs in the nests of Crows which looks same.

II. AREA UNDER STUDY

The area was at Kuldiha Village under Salboni Block of Paschim Medinipur District, West Bengal, India. Nearby agricultural land, ponds, canals, trenches, top of the huts, houses, , cemented pillers, holes of trees and crop fields were taken to study and record the ecology including behaviour study of the birds. Study was conducted with local people for socio-structure of their daily-activities and even the scenario of cultivation practice. Study at forest was also conducted to know the migratory behaviour of some forest species including interactions of bird species for roosting and nesting.

III. MATERIALS AND METHODS

Method of bird studying was divided in to 6 aspects but first three aspects used were to study the birds of Kuldiha in west Bengal and to record the behaviour in natural habitats. Photographs were taken from field by ordinary digital Canon and Nikon Cameras. Altimeter, Abenys Level, Temperature meter, GPS, Lux meter, Tape, and Stand of Camera including Binoculars were carried out in field during bird watching. Generally dawn and dusk were selected for each day visit in field with local map of the area though more or less regular watching of birds was made to know the situation thereby. General list of the plants and about the pattern of vegetation record floras were consulted. A check list has also been prepared about the common birds available in West Bengal. Some Bird sanctuaries of West Bengal and local preservation plots were selected to study and record the photography day by day to make an inference. All the characters from field and from the photographs were taken from some common books on birds and treatise made by Zoological Survey of India (ZSI) published time to time. Interesting micro bird habitats were marked for general study of watching and roosting of bird including nesting. Some net work resource was also studied well to know better about the bird watching. These are: (i) British trust for Ornithology, (ii) Royal Society for the Protection of Birds, (iii) American Birding Association and

(iv) Cornell laboratory of Ornithology at Ithaca, New York, North America. Other literature and resource was consulted was Wildlife Rescue & Rehabilitation centre (WRRC), Bangalore, India.

IV. RESULTS AND DISCUSSION

In the present study some common birds were watched regularly but specific study was conducted on the basis of relationship of birds with an old Tamarind and a Ficus tree. Study revealed 40 birds were present in the surrounding of Kuldiha (Fig. 1-16) with 70 plant species for the interactions of the same. The study also revealed that 20 common birds visited regularly at Kuldiha from nearby to the Tamarind and Ficus tree for roosting, sitting and touching (Table 1) it. All the birds presented in the table were our neighbouring birds but not of migratory kind. Sunbirds, doves, kingfisher and crows were important because they act as pollinating agent, settlement of weeds, and scavenger birds respectively. More or less all birds were important in the ecosystem for dispersal of fruits and seeds and onset of plants to grow vegetation and keep environment sound.

SL. No.	English name	Bengali Name	Scientific Name
1.	Common Myna	Shalik	Acredotheres tristis
2.	Pond Heron	Koch Bok	Ardeola grayii
3.	Greater Flameback	Kaththokra	Chysocolaptes lucidus
4.	Yellow bellied Sunbird	Holde Moutusi	Cinnyris jugularis
5.	Oriental magpie robin	Doyel	Copsychus saularis
6.	Crow	Kak	Corvus splendens
7.	Drongo	Finge	Dicrurus macrocercus
8.	Asian Koel	Kokil	Eudynamys scolopacea
9.	Blue-Throated barbet	Bara Basanta Bouri	Megalaima asiatica
10.	Coppersmith Barbet	Basanta Bouri	Megalaima haemacephala
11.	Green bee-eater	Banspati	Meropos orientalis
12.	Purple Sun bird	Moutusi	Nectariana asiatica
13.	Black-hooded oriole	Halde boni	Oriolus xanthornus
14.	Tailor bird	Tuntuni/Durga tuntuni	Orthotomus sutorius
15.	Red-vented bulbul	Bulbuli	Pycnonotus cafer
16.	Red-whiskered Bulbul	Bulbuli	Pycnonotus jocosus
17.	Spotted dove	Ghugu	Streptopelia chinensis
18.	Asian Pied Starling	Gue Shalik	Sturnus contra
19.	Chestnut-tailed Starling	Not Known	Sturnus malabaricus
20.	Jungle Babler	Chatare/Stabhai	Turdoides striatus

Table1. List of common birds in and around Kuldiha on a single Tamarind and Ficus tree

V. CONCLUSION

We should be very logical to conserve the biodiversity and to protect our environment. We should not create any illegal behaviour to disturb the environment and their components specially flora and fauna. We should be very realistic to access the environment and can provide some time to see the natural beauty and ecosystem component to enhance our knowledge and refresh mind. As the environmental studies included in the general degree course syllabus under Indian Universities so teachers should include field or project study on birds and surroundings that may be included as bird watching and study rather than research on the eco-habitats specially on Kuldiha as a local habitat. Effects of chemical pesticides and insecticides on birds may be studied to access the real status of the environment and to draw a conclusion on birds and the local environment. Social study should also be included in near future to develop the people's participation. Hope that Government will take some initiatives to protect the eco-habitat and conserve the nature.

ACKNOWLEDGEMENTS

We acknowledge to our Indian pioneer Ornithologists Late Salim Moizuddin Abdul Ali (12.11.1896 to 20.06.1987) and pioneer of Indian Ornithology Sri Humayun Abdul Ali, Cousin of Dr. Salim Ali and Bird man of India for their amazing work in the field from which we took kith and kin interest. The second author is very much interested to study the Ornithophily in connection with the study of birds since childhood. We convey our deep and sincere thanks to some foresters, researchers, students and local people whose indirectly helped us better to develop manuscript. Our friend Dr. Biswajit Maity of Physics Department, Govt. General Degree College, Kharagpur-II, Midnapore helped much regarding capturing of photos in field even to use binocular, Lux meter and GPS in field. We thank to Dr. Mrinal Kanti Sathpathy, Retired Office Staff, Block Development Office, Salboni, Midnapore for his valuable suggestions and drive special interest. We are thankful to Smt. Pampi Ghosh, Assistant professor, Seva Bharati Mahavidyalaya Kapgari, Paschim Medinipur who helped us in different ways during field visit. We convey our thanks to the Librarian of Vidyasagar University for permission to consult library.

Fig. 3-4 Open bill stork, Gliding

PHOTOPLATES OF SOME BIRDS OF KULDIHA



Fig. 1-2 Night heron on Tamirind tree (Tamarindis sp.),



Fig. 5 Mourning dove,



- Fig. 6 Spotted dove,



Fig. 7 Scaly breasted Munia, Fig. 8 White breasted Kingfisher or white throated Kingfisher (State bird of West Bengal)



Fig. 9 White breasted hen,

Fig. 10 Crow,

Fig. 11 Blue magpie robin

Fig. 12 Parakeet



Fig. 13 Asian starling,



Fig. 14 Common Myna, Fig. 15 Harichacha or Lejjhola, Fig. 16 Indian Roller

REFERENCES

- Ali, S. 1996. The Book of Indian Birds, (Third Edition-Hard Cover), Salim Ali Centenary Edition, Oxford University Press, India.
- [2] Ali, S. 1997. The Book of Indian Birds, 12th Revised Enlarged Centenary Edition, Bombay natural History Society, Oxford University Press, India.
- [3] Hazmierczak, K. 2008. A Field Guide to the Birds of the Indian Sub-continent (Paper Back), Illustrated by Ber Van Perlo, Oriental Bird Club, A & C Black Pub. Ltd.
- [4] Inskipp, C; Richard, G and Inskipp, T. 2011. Birds of the Indian Sub-Continent (Paper Back), OUP India.
- [5] Ali, S and Dillon Ripley, S. 2013. Hand Book of the Birds of India and Pakistan, Vol. I-10, Oxford University Press India, 3121 pp.
- [6] Arnold, N. 2015. Collins Field Guide: Birds of India (Hard Cover), Herper Collins Publications.
- [7] Cox, J.1999. Bird Watching Basics, The Florida Fish and Wildlife Conservation Commission.
- [8] von Saltza, K; Slingshy, P and Hundertmark, C. 2016. Denver FieldOrnithologists (DFO) Field Trip Leader Manual, DFO Field Trip Leader Development Committee, (Edt. Kay niyo).
- [9] Pearson, D; Moore, M and Kazilek, C. J. 2005. Ask a Biologist's- Beginning Birders' Guide, pp.1-10; http://askabiologist.asu.edu
- [10] Ambasht, R. S., Singh, M. P. and Sharma, E. 1984. An environment study of soil and water conservation through herbaceous plants, National Academy of Science Letters, 6 (5): 143.

- [11] Anonymous. 1997. Flora of West Bengal, Vol.-I, BSI, Kolkata, Flora of India, Series-2.
- [12] Anonymous. 2005. Medicinal Plant Resources of South West Bengal, Vol.-I, Research Wing, Directorate of Forests, Govt. of West Bengal.
- [13] Anonymous. 2010. Medicinal Plant Resources of South West Bengal, Vol.-II, Research Wing, Directorate of Forests, Govt. of West Bengal.
- [14] Bentham, G and Hooker, J. D (1862-1883). Genera Plantarum. London: Reeve & Co.1-3.
- [15] Bestelmeyer, B.T., Trujillo, D.A., Tugel, A. J., and Havstad, K. M. 2006. A Multi-Scale classification of Vegetation dynamics in arid lands: What is the right scale for models, monitoring, and restoration?, Journal of Arid Environments, 65: 296-318.
- [16] Das, A. A. and Das, D. 2016. Preliminary Studies on Common Birds of West Bengal with Special Reference to Vegetation Spectrum, India , IOSR-JESTFT, 10 (11): 12-34.
- [17] Das, D. 2014. Community study of plants species in coastal areas of Mohana and old Digha of Purba Medinipur District with special reference to Ecosustenance, Indian Journal of Applied and Pure Biology, 29 (2): 255-266.
- [18] Das, D. 2007. Study of Vegetation Ecology of Forests of South West Bengal with special reference to Non-Timber Forest Produce (NTFPs) Productivity, Ph. D Thesis awarded from Vidyasagar University, West Bengal, 2007, (Work From CNH, Botanical Survey of India, Shibpore, Howrah, West Bengal).
- [19] Das, D. 2009. Ecological status of plants in sacred groves of southwest Bengal (Midnapore, Bankura and

Purulia District) of West Bengal, Final UGC-Project Report, 2009, PSW-160/06-07(ERO) dated 19.02.2007.

- [20] Das, D. 2015. Final Project Report on 'Ecological studies of Vegetation in coastal areas of Purba Medinipur under stress for sustenance of life', UGC-Project report (No. PSW-087/11-12 (ERO), Kolkata, dated 23.04.2013.
- [21] Das, D. 2016. Ecological Studies on Jhitka Forest Under Medinipur Forest Division, IJSART, 2 (12): 296-302.
- [22] Das, D and Das, M. 2014. Vegetation Ecology of Coastal belt of Khejuri area of Purba Medinipur District with special reference to Hijli Coast, West Bengal, India, IOSR-Jour of Pharmacy,4(2): 2319-4219.
- [23] Das, D and Ghosh, P. 2014. Ecological Studies of Ecosystem Health Indicators at Nayagram of Paschim Medinipur District in Lateritic forests of Southwest Bengal, India, IOSR-Journal of Environmental Science, Toxicology and Food Technology,2014, 8 (6): 48-63.
- [24] Das, D. 2016. Eco-tourism and Eco-degradation in Darjeeling Himalaya, West Bengal, Abstract and Full Length Paper in a seminar-Variation and prospects of Eco-Tourism at Darjeeling and Dooars, 20th December, 2016, funded by Higher Education Department, Govt. of W.B., at Gorubathan Govt. College, Darjeeling.
- [25] Dash, M.C. and Das, S.P. 2010. Fundamentals of Ecology, Third Edition, The McGrew-Hill Companies, Tata McGrew-Hill Education Private Limited, New Delhi., 2010, pp.1-562.
- [26] De, D. K. 2002. Grass Flora of Medinipur District, Ph.Dthesis, Vidyasagar University, West Bengal. 2002.
- [27] Gripson, S. 2011. Restoration Ecology, Jones & Bartlett Learning, USA, pp-387.
- [28] Groom, M. J., Mmeffe, G. K., Vcarroll, C. R. and Contributors. 2006. Principles of Conservation Biology, Third Edition, Sinauer Associates, Inc. Publishers, USA. pp.-793.

,

- [29] Haines, H. H. (1921-25). The Botany of Bihar and Orissa, Vol. I-IV, BSI, Calcutta.
- [30] Holland, M. M., Risser, P. G. and Naiman, R. J. 1991. Ecotones: The role of land scape boundaries in the management and restoration of changing environments, Chapman & Hall., New Delhi.
- [31] Hooker, J. D. 1892-1897. Hooker, J. D. Flora of British India, Vol. 1-VII, 1892-1897, BSI, Calcutta.
- [32] Jorgensen, S.E., Xu, fu-liu and Costanza, R. 2010. Hand Book of Ecological Indicators for Assessment of Ecosystem Health, Second Edition, CRC Press, New-York, pp.-484.
- [33] Maji , S. and Sikdar, J. K. 1984. Sedges and grasses of Midnapore district, West Bengal. J Econ Taxon Bot. 4 (1): 233-254.
- [34] Mishra, R. 1968. Ecology Work Book, Oxford and IBH Publishing Company, New Delhi.
- [35] Mitsch, W.J. and Gosselink, J. G. 1993. The role of riparian corridors in maintaining regional Bio-diversity, Ecol. Appl. 3: 209-212.
- [36] Popradit, A., Srisatit, T., Kiratiprayoon, S., Yoshimura, J., Ishida, A., Shiyomi, M., Murayama, T., Chantaranothai, P., Outtaranakorm, S; and Phromma, I. 2015. Anthropogenic effects on a tropical forest according to the distance from human Settlements, Scientific Reports, 5-14689: pp. 1-10 doi.: 10.1038/srep14689.
- [37] Prain, D. 1963. Bengal Plants, Vol.-I-II, (Revised Edn.), BSI, Calcutta.
- [38] Rao, R. R. and Sharma, B. D. 1990. A Manual for Herbarium Collections, BSI, Brabourne Road, 1990, Kolkata-1.
- [39] Raunkiaer, C. 1934. The-life forms of plants and statistical plant Geograph y, Oxford University Press, Oxford.