



अहो है हरियाली ।
कहो है खुशहाली ॥



भारतीय वन्यजीव संस्थान
Wildlife Institute of India



GBIF

Development of an EIA Biodiversity Data Publishing Framework

India Pilot Project

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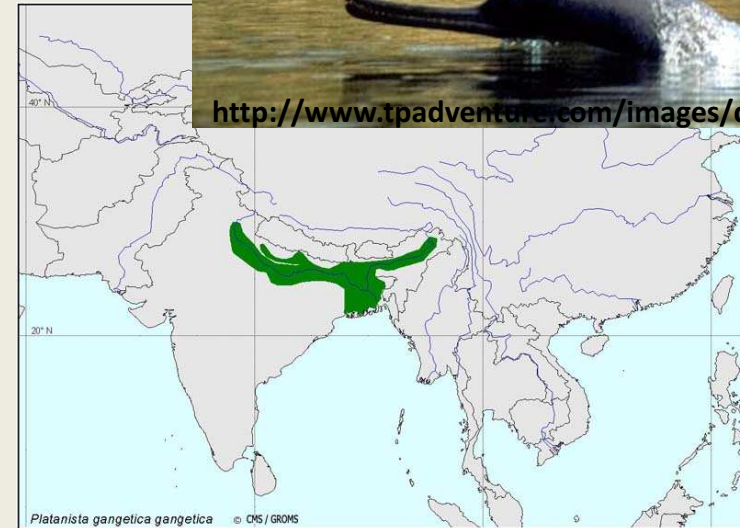
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The Context.....

- ❖ Environmental Impact Assessment (EIA) generates biodiversity records with every project
- ❖ Many of these records and information on RET species can be new and valuable for strengthening biodiversity conservation

New distribution record of Gangetic Dolphin



A new finding on distribution of Baers Pochard



The Context

- ❖ The mobilization of EIA related biodiversity data by India is a step towards the implementation of the mandate of the Convention on Biological Diversity (CBD) ...*make EIA data freely available for improved decision making (Decision VIII/11)*
- ❖ Also a step towards adopting the recommendation in the 2006 CBD Impact Assessment voluntary guidelines*link biodiversity assessment to EIA processes at national and global levels.*

India Pilot Project Objectives

- ❖ Collect biodiversity data from EIA reports and develop web based facility for long-term archival and accessibility through IndBIF and GBIF portals
- ❖ Roll-out of EIA biodiversity data archival, and publishing facilities in India
- ❖ Develop EIA best practices and document lesson-learned
- ❖ Establish 'EIA biodiversity data publishing facilities in the region.

FORM -ONE– First layer of information on biodiversity sought in EIA

- ✓ Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value.
- ✓ Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests.
- ✓ Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration.
- Inland, coastal, marine or underground waters.
- State, National boundaries.
- Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas.
- Areas occupied by sensitive man-made land uses (*hospitals, schools, places of worship, community facilities*).
- ✓ Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals).
- Areas already subjected to pollution or environmental damage.
- Areas susceptible to natural hazard which could cause the project to present environmental problems (*earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions*)

Type of biodiversity data found in EIAs

- All data within 10 km radius of project sites
- Spatial data of the project site
- Inventories of resources
- Checklists of flora and fauna
- Records of distribution, abundance
- Existing and potential threats to a biodiversity resource, species and habitats
- Ecological corridors and migration routes
- Ecological models

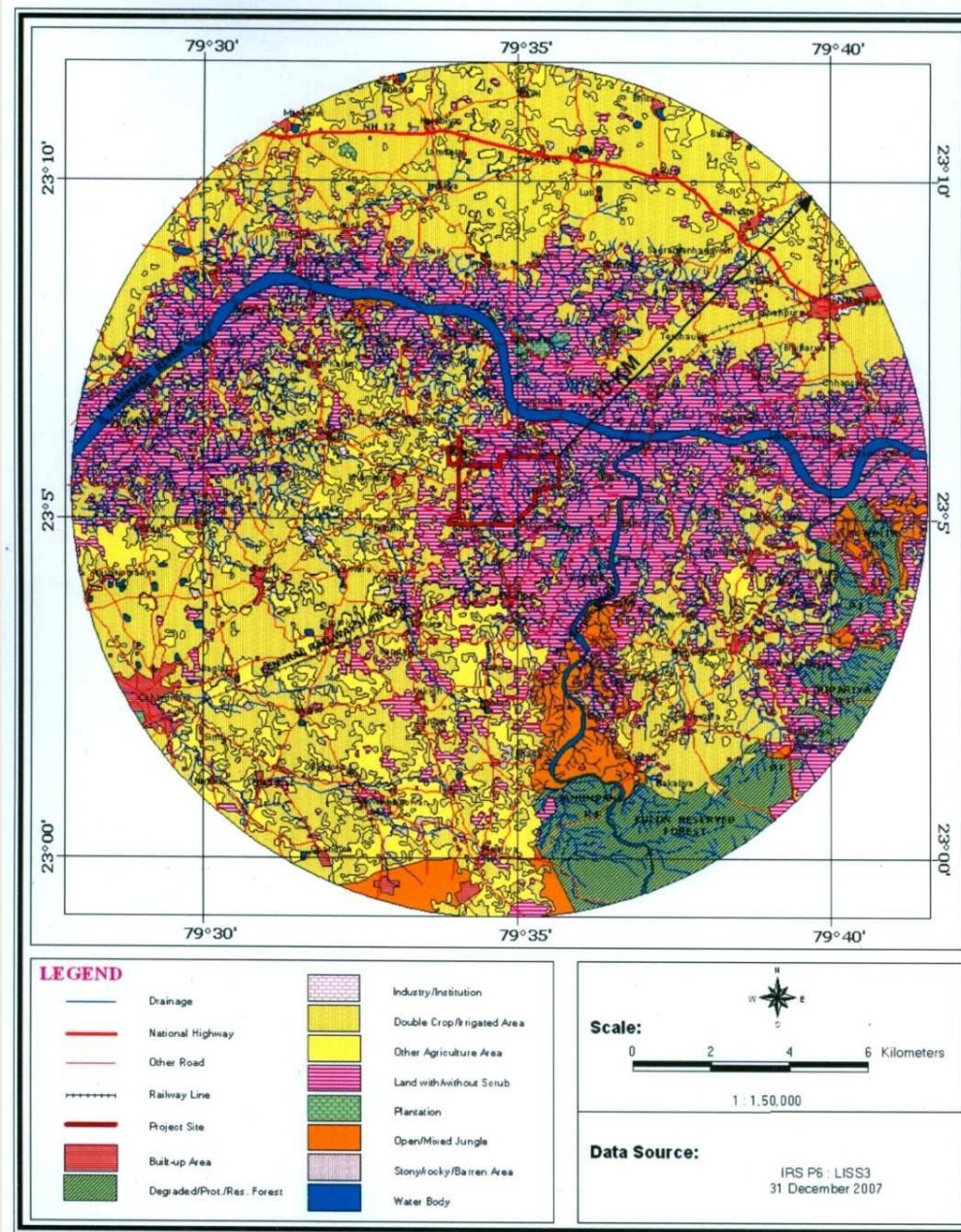


FIGURE-3.2.2
LAND USE PATTERN BASED ON SATELLITE DATA

Landuse maps

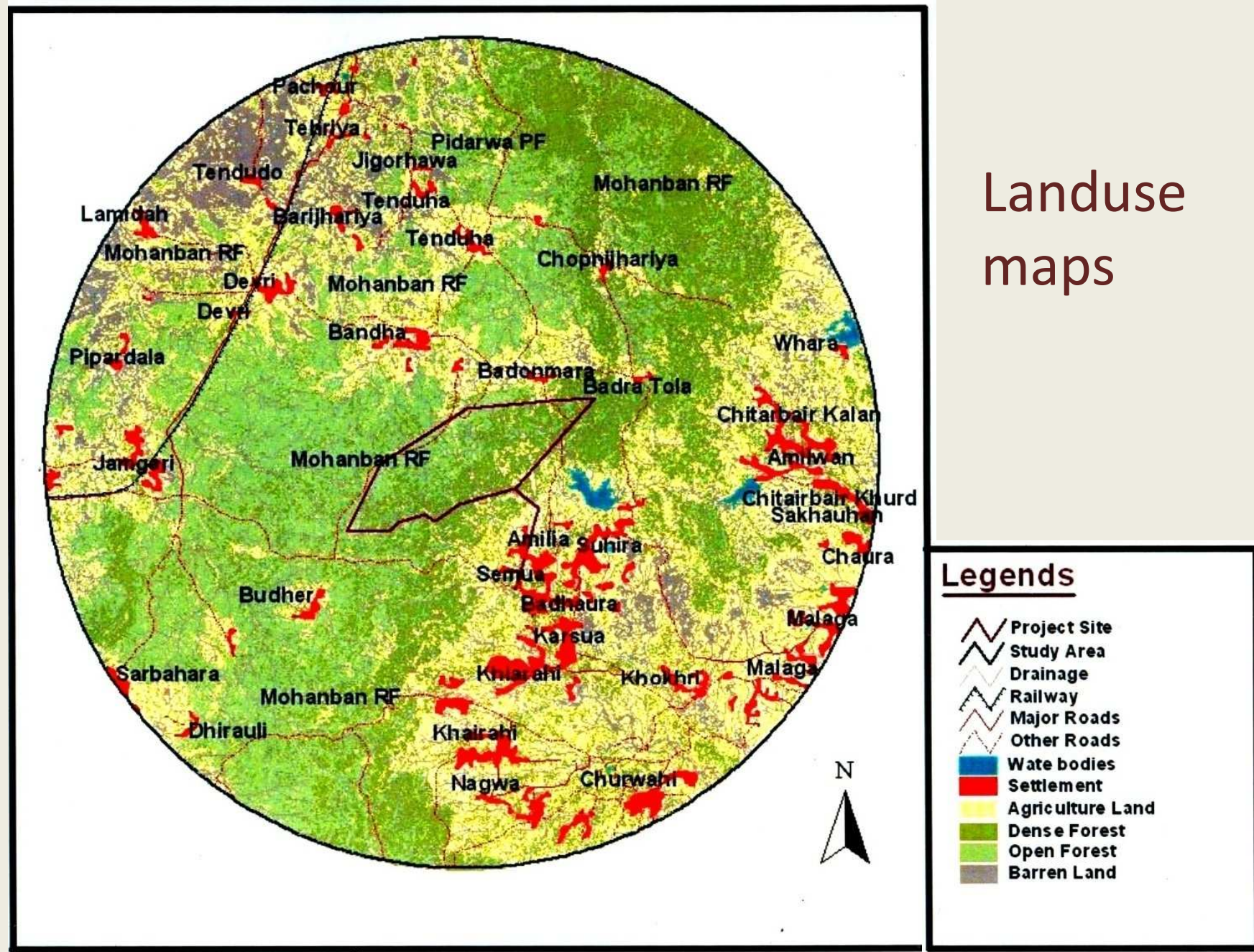


TABLE 3.30: AVIFAUNA

English name	Scientific name	English name	Scientific name
Painted francolin	<i>Francolinus pictus</i>	Spotted Dove	<i>Streptopelia chinensis</i>
Grey Francolin	<i>Francolinus pondicerianus</i>	White Breasted Waterhen	<i>Amaurornis phoenicurus</i>
Rain Quail	<i>Coturnix coromandelica</i>	Common coot	<i>Fulica atra</i>
Jungle Bush Quail	<i>Perdicula asiatica</i>	Wood Sandpiper	<i>Tringa glareola</i>
Small Buttonquail	<i>Turnix coromandelica</i>	Small Pratincole	<i>Glareola Lactea</i>
Tellow Legged Buttonquail	<i>Turnix tanki</i>	Pallid Harrier	<i>Circus macrourus</i>
Barred Buttonquail	<i>Turnix suscitator</i>	Steppe Eagle	<i>Aquila nipalensis</i>
Indian Peafowl	<i>Pavo cristatus</i>	Tawny Eagle	<i>Aquila rapax</i>
Lesser Whistling Duck	<i>Dendocygna javanica</i>	Bonellis Eagle	<i>Hieraaetus facciatus</i>
Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>	Red necked Falcon	<i>Falco chicquera</i>
Spot Billed Duck	<i>Anas poecilorhycha</i>	Little Grebe	<i>Tachybaptu ruficollis</i>
Eursian Wigeon	<i>Anaspenelope</i>	Intermediate Egret	<i>Mesophoyx intermedia</i>
Mallard	<i>Anas platyrhynchos</i>	Cattle Egret	<i>Bubulcus ibis</i>
Common Teal	<i>Anascrecca</i>	Bay backed shrike	<i>Lanius vittatus</i>
Garganey	<i>Anas wuerquedula</i>	House crow	<i>Corvus splendens</i>
Eurasian wryneck	<i>Indicator xanthonotus</i>	Large Billed Crow	<i>Corvus macrorhynchos</i>
Yello crowned woodpecker	<i>Dendrocopos mahrattensis</i>	Black Hooded Oriole	<i>Oriolus tenuirostris</i>
Brown capped pygmy woodpecker	<i>Dendrocopos nanus</i>	Small Minivet	<i>Pericrocotus divaricatus</i>
Streak throated woodpecker	<i>Picus xanthopygaeus</i>	White Browed fantail	<i>Rhipidura aureola</i>
Black Rumped Flameback	<i>Dinopium benghalense</i>	Black Drong	<i>Dicrurus macrocercus</i>
White Naped Woodpecker	<i>Chrysocolaptes festivus</i>	Greater Drongo Racket tailed	<i>Dicrurus paradiseus</i>
Brown Headed Barbet	<i>Megalaima zeylanica</i>	Asian brown Flycatcher	<i>Muscicapa dauurica</i>
Coppersmith Barbet	<i>Megalaima haemacephala</i>	Oriental Magpie Robin	<i>Copsychus saularis</i>

Benefits of the India Pilot Project

- Build biodiversity records outside Pas
- Review biodiversity trends over time and provide guidance for appropriate actions
- Generate a reliable baseline for monitoring
- Help overcome data deficiency
- Would lead to future EIAs becoming less time consuming

Outcome of the project

For Resource managers and biodiversity experts

- Incorporation of biodiversity data into the national datasets for reuse

For EIA practitioners

- Building a culture of promoting data sharing

For Regulatory agency

- Ensure generating good quality data liable for checks by others in subsequent EIAs

For EIA reviewers

- Lead to improvement in EIAs based on quality data
- Facilitate good environmental decision-making

Key Challenges

- ❖ The challenge involved collation of information from a very large number of reports with inconsistent formats and variability in focus, scale and quality of information
- ❖ Mobilization of data from paper formats to digital formats- huge effort
- ❖ Mechanisms for creating one central repository of EIA data still need to be evolved
- ❖ Inadequate coordination between various data holders at the country level
- ❖ Problem of mindset with respect to data sharing (To share or not share and when to share?)

Thank you all