

# THE CORE IAS

# Target 2018 &19

## Environment : BASIC & Current

**Basic Start Date: 10th to 22 April**

**Current Environment: 5th May (3days Class)**

**Classes: In Both Hindi & English Medium**

### 1.BASIC CONCEPTS

#### 1.ECOLOGY & Its Component

- Biotic
- Abiotic
- Energy

#### 2. Biotic Factors & Interaction with Environment

- Amensalism
- Predation
- Parasitism
- Competition
- Commensalism
- Mutualism

#### 3. Ecological Principles & Properties

- Homeostasis
- Hierarchy Principle

#### 4. Ecosystem Dynamism

- Ecological Production & Productivity
- Food Chain
- Food Web
- Ecological Pyramid
- Energy Flow
- Sere
- Bio Accumulation
- Bio Magnification
- Biological Succession
- Ecological Services

#### 5. Bio geochemical cycle

- Nitrogen
- Carbon
- Phosphorus
- Sulphur

## 2. Biodiversity

### 1. Definition

### **2. Biodiversity**

Levels Of Biodiversity

- Genetic,
- Species
- Ecological

Measurement of Biodiversity

- Alpha
- Beta
- Gama diversity

3. Distribution: Terrestrial, Marine

### **4. Types of Species**

- Keystone Species
- Indicator Species
- Umbrella Species
- Indigenous Species
- Edge Species
- Invasive Alien Species

### **5. Threat to biodiversity**

### **6. Other Concepts**

- Concept of Ecotone
- Edge Effect
- Biodiversity Conservation (In Situ, Ex Situ)
- Bio Prospecting & Bio Piracy
- CBD (Cartagena & Nagoya)

- CBD Law 2002, TKDL

### 7. Various Indian Laws (1960 to 2006)

- Prevention of Cruelty to animal act
- Wildlife act 1972
- Water act 1974
- Air act 1981
- EPA 1986
- Biodiversity act
- Forest Right act 2006

### 8. Bio Diverse Area

- Biosphere Reserve
- Man & Biosphere Reserve
- Biodiversity Hot Spot
- World Heritage sites
- IUCN & Red Data Book

### 9. India Conservation Effort

- Project Tiger 1973
- Project Elephant 1992
- Project Hangul
- Vulture Conservation
- Crocodile Conservation
- Snow Leopard
- One Horn Rhino
- Ganges Dolphin

**Current of Biodiversity (July 2017 to May 2018\*)**

1. Hydrothermal vent &Life
2. Eco Bridges in Telangana
3. Sacred grooved
4. Oriental white ibis: Chilka: NT
5. Mouse Deer Reintroduced For First Time In Telangana Forest
6. Black-hooded Oriole
7. Yellow-throated Bulbul
8. Malabar Pit Viber
9. Aquatic Rhabdops
10. CHILKA & FISHING
11. Irrawaddy dolphins
12. Greater flamingos
13. Goliath grouper fish
14. Gymnoth oraxpseudotile: Eel species
15. Turtle
  - Batagur Species
  - Hawksbill
  - Black Soft Shell
  - Green Turle
  - Turtle Sanctuary
  - Turtle Conservation Fund
16. Survey in Arabian Sea Region
  - Pondicherry shark, the red sea torpedo and the tentacle butterfly
17. SAW FISH
18. Tawny lark
19. Vechoor
20. Nilgiri: White Tiger
21. Bonnet macaques
22. Grey Pelicans
23. Ichthyosaur
24. Parasite Flowering plant: Gleadowia konyakianorum
25. Pongo tapanuliensis,
26. Musa Paramjitiana
27. Tyrannomyrmex
28. Odorrana arunachalensis
29. New species of gecko
30. Chiru
31. Luciferase: Plants Glow in Dark
32. Schaller's Wood Scorpion
33. Drypeteskalamii
34. Indian Emerald Dragonfly
35. Blackbuck Conservation Reserve
36. Elephant
37. Rhinos
38. Tiger Census
39. Tea plantations decrease bat diversity
40. Palm Oil Crisis
41. EARTH OVERSHOOT DAY

- 42. Scrub typhus
- 43. Permaculture/ Zero Budget Farming
- 44. Balasm species in Himalaya
- 45. Carnivorous plants
- 46. Ratten Hotspot in WG
- 47. Fauna Survey: In KWS
  - Fishing Cat (*Prionailurusviverrinus*)
- 48. Biodiversity Under Alien Attack
- 49. Invasive species and imbalance

### **SCHEME**

- 1.** Ecosystems Service Improvement Project
- 2.** Vaan Island Restoration
- 3.** Parali Island
- 4.** Sahara Forest Project:
- 5.** Gharial Exchange Programme
- 6.** B4' – the 'Brahmaputra Biodiversity and Biology Boat'
- 7.** Wetland (Conservation And Management) Rules 2017
- 8.** National Wildlife Action Plan
- 9.** Daft Forest Policy 2018
- 10.** SFR 2017
- 11.** Bamboo Ceases To Be A Tree, Freed Of Forest Act
- 12.** EcAMSat Mission
- 13.** Assam- Wildlife Protection
- 14.** Farmer managed natural regeneration (FMNR)
  - Wadi

## **3. Environment Pollution**

- 1. Type :
  - Primary & Secondary
  - Qualitative & Quantitative,
  - Biodegradable & Non Biodegradable
- 2. AIR POLLUTION
  - Sources
  - Control Measures
  - Smog
  - Fly Ash
  - India Indexes (AQI, NAQI , CEPI etc)
  - Ozone Layer
    - CBDR & RC
    - Montreal to Kigali
    - ODS
- CFC
- HFC
- HFC 22
- Article 5 Group 1
- Article 5 Group 2
- Non Article 5 Countries
- Acid Rain
- Freezing Year
- Baseline Year
- 3. Water Pollution
  - Point Sources & Non Point Sources
  - Eutrophication
  - Red Algal Bloom
  - Dead Zones

- Pollution Check ( BoD & CoD)
- Ocean Acidification
- 4. Noise Pollution
- 5. E-Waste
- 6. Solid Waste
- 7. Land degradation
- 8. Biodiesel
  - 1<sup>st</sup> Generation
  - 2<sup>nd</sup> Generation
  - 3<sup>rd</sup> Generation
  - 4<sup>th</sup> Generation
  - BS Standard
  - Methanol & Ethanol

### **Current of Pollution Chapter (July 2017 to May 2018\*)**

1. Aerosol & Indian Monsoon
2. Delhi Pollution & Arabian Desert
3. Green Climate Fund
4. Of plant species few and far between
5. Centre for Marine Living Resources and Ecology
6. Integrated Coastal and Marine Area Management Project Directorate (ICMAM PD)
7. Concrete may help curb air pollution
8. Micro plastic/microbeads
9. Firecracker Ban: Petroleum and Explosives Safety Organisation
10. Co Sensor
11. Plastic & Sea
12. LC3 Technology
13. Sulphur Di oxide Taking Over China
14. pet-coke Ban
15. Global E-Waste Monitor – 2017
16. Permafrost Hg& Release

### **SCHEMES**

1. NMEEE & FAME
2. Himachal Pradesh: Country's First Electric Bus Service Launched
3. Annual Carbon Emission Saving
  - PET
  - BEE
  - EESL
  - Energy Efficiency Certificates (ESCert) launched
  - Energy Conservation Building Code
4. New National Policy On Biofuels And Pradhan Mantri Ji- Van Yojana
5. India's first energy-efficient railway station
6. Star rating for Garbage free cities
7. ECO-NIWAS
  - Green Building Initiative in India
8. National Clean Air Programme
  - Clean Air Campaign
9. GOBAR-DHAN
10. Floating treatment wetland
11. Green Good Deeds" campaign:
12. Wood is Good Campaign
  - Forest plus

## **4.CLIMATE CHANGE & INTERNATIONAL PROTOCOL**

### **1.BASIC CONCEPT**

- Global Warming
- Green House Effect
- Green House Gas
- Carbon Emission
- Green House gas Potential
- Impact of Climate Change
- Carbon Capture / Carbon Sequestration: Geoengineering
  - Green Carbon, Blue Carbon
- Carbon Credit
- Carbon Offsetting

### **Current (July 2017 to May 2018\*)**

1. Negative Emission
2. Soil Sequestration and Climate change
3. Soil Organic Carbon
4. Biochar
5. El nino
6. Melting of Antarctic Iceberg
7. Black Carbon
8. Environmental Kuznets Curve Hypothesis
9. Palaeocene-Eocene Thermal Maximum
10. Climate Change Performance Index
11. EmissionGap Report
12. 1 Gigaton Coalition:
13. World Scientists' Warning to Humanity: A Second Notice, published in Bio Science.
14. Warsaw International Mechanism for Loss and Damage
15. Green Mobility?
16. GREEN SKILL DEVELOPMENT PROGRAMME

### **2. CLIMATE CHANGE & International Effort: 1972 to 2017**

- 1972 Conference
- WCC
- 1987 : World Commission on Environment and Development (Our Common Future)
- 1988: IPCC
  - National Green House Gas Inventories Programme

- 1992 (United Nations Conference on Environment and Development)
  - UNCBD
  - UNFCCC
  - UNCBD
  - Agenda 21
  - Rio Declaration
  - Forest Principle
  - Commission on sustainable Development
  - GEF
- Green International 1997 Kyoto (General Assembly Special Session on the Environment)
  - LULUCF
  - CDM
  - JI
  - AAU
  - Certified emission reduction
  - Emission reduction unit
  - Annex Countries, Non Annex Countries
  - Annex A, Annex B
- 2001 Marakesh Accord
  - Adaptation Fund
  - Mitigation Fund
  - Special Climate Change Fund
  - Least Developed Countries Fund
- 2017
- 2002 (World Summit on Sustainable Development)
- 2005 Kyoto Enforcement
- 2008 REDD
  - Forest Investment Program
  - BioCarbon Fund Initiative for Sustainable Forest Landscapes
  - Forest Carbon Partnership Facility
- Readiness Fund and the Carbon Fund
- 2010 GCF
- 2012 (UN Conference on Sustainable Development ): Report **The future we want"**
- 2013 (Warsea International Mechanism)
- 2015
  - Paris Summit
  - INDC
- 2016
  - Corsia
  - London on Shipping
  - Marrakesh
  - Climate Vulnerable Forum
  - Under2s, Coalition
  - *2050 Pathway Platform*
  - U.N. Conference On Housing And Sustainable Urban Development

**Current****1.Bonn Conference**

- Talanoa Dialogue
- Bonn zone & Bula Zone

**2.Bonn Challenge**

➤ *Global Partnership on Forest Landscape Restoration*

**3.UNCCD & 10 year Plan****4. Project called 'SUNRISE'****5.BUSINESS & CLIMATE SUMMIT 2017****6. High-level Political Forum on Sustainable Development****7.2<sup>nd</sup> Commitment Period & India****8.ISA****9.Krill & Marine Diversity of Antarctica****10. Under2 Coalition****11. SEED VAULT****3. Other Protocol & Convention**

- Basel
- Stockholm
- Aarhus Convention
- Espoo Convention
- Convention on LongRange Transboundary Air Pollution (CLRTAP)
- Ramsar
  - Montreux
  - Changwon declaration

**Current**

1. Global Wildlife Summit
2. Bamako Convention
3. Ballest Water Convention
4. Sustainable Development Impact Summit
5. Social Good Summit
6. Minmata Convention

**4. Other Environmental Institution****World**

- |                          |                                 |
|--------------------------|---------------------------------|
| ➤ IUCN                   | ➤ GEF                           |
| ➤ WWF                    | ➤ ITTO                          |
| ➤ UNEP                   | ➤ Global Green Growth Institute |
| ➤ IMO                    | ➤ Arctic Council UNESCO         |
| ➤ FAO                    | ➤ MFF                           |
| ➤ WCS                    | ➤ Snow Leopard                  |
| ➤ Wetland International  | ➤ TURTALE                       |
| ➤ Birdlife International | ➤ ALLIANCE SURVIVA              |

- Coalition against Wildlife Trafficking (CAWT)
- The Economics of Ecosystems and Biodiversity
- TRAFFIC
- CA|TS

**Current**

- Global Footprint Network
- Natural Capital Coalition's Natural Capital Protocol.
- Bishkek Declaration
- Geo Lab
- Global Tiger Forum
- Global Snow Leopard & Ecosystem Protection Program
- Young Champions of the Earth
- Asian Waterbird Census
- Transport Decarbonisation Alliance?
- Mission Innovation
- Certificate of recommendation from CITES
- Ballast Water Convention
- Bunkar Convention
- PROJECT BLUE FLAG & FEE
- Flyway Partnership:
- UN Environment Management Group
- Conservation of Antarctic Marine Living Resources

**INDIAN INSTITUTIONS**

- |                                                                                                                                                                                                                                                  |                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>➤ BNHS</li> <li>➤ Birderspics</li> <li>➤ NGT</li> <li>➤ Other Covered with Indian Laws</li> <li>➤ EESL</li> <li>➤ TERI (lightning a Billion Lives, Urban Service Environmental Rating System))</li> </ul> | <ul style="list-style-type: none"> <li>➤ BEE</li> <li>➤ National Afforestation and Eco development Board</li> <li>➤ CAMPA</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|

1. Madras Crocodile Bank Trust
2. Environment Pollution Control Authority
3. Salim Ali Centre for Ornithology and Natural History
4. SAFER
5. 'Sustainable Rooftop Implementation for Solar Transfiguration of India (SRISTI)'.
6. Sikkim allows people to forge fraternal ties with trees
7. Mangalajodi Ecotourism Trust
8. World Sustainable Development Summit 2018
9. First large scale CO2-injected project in Asia
10. India to host World Environment Day 2018:

**5.MISC**

- NAPCC
- Namami Gange

- Eco Mark
- Bee Rating
- Ganga Action Plan

- NGRB
- GRIHA
- LEED

**Protect area in News (July 2017 to May 2018\*)**

- 1.Kanger valley
- 2.Bhitarkanika
- 3.Periyar National Park
- 4.. Gahirmatha Marine Sanctuary
- 5.Coringa
6. Kole Wetland
7. Nalbana Bird Sanctuary
8. Chilla–Motichurcorridor
- 9.Trishna Wildlife Sanctuary and Bison National Park.
10. Satkosia Tiger Reserve
11. Talley Valley Wildlife Sanctuary
12. Cotigao Wildlife Sanctuary
13. Ghodazari
14. Nayachar Island'
15. Kapra Lake
16. Atapaka Bird Sanctuary
17. Polynya
18. Buxa tiger reserve
- 19.Mukandara Tiger Reserve
20. Seshachalam Forest
21. Similipal
22. Dhenkanal
- 23.,Chandaka Wildlife Sanctuary,

**\*This Current is Till February: Will be updated till 10th May**

**CLASSES CAN ALSO BE ATTENDED ONLY FOR CURRENT**

**CURRENT Based MODULE@ 1000\* Per Module: Class Starting from 11<sup>th</sup> May**

- 700+ Questions Discussion
- Current Mapping
- Schemes
- YEAR BOOK
- ECONOMIC SURVEY
- Sc & TECh
- International Organisation
- Polity
- Culture

**THE CORE IAS**  
[\(www.gshindi.com\)](http://www.gshindi.com)

**MAINS** *Answer Writing*

उत्तर लेखन एक कला हैं,  
जो भीड़ में रहकर नहीं सीख सकते  
(Specially for Hindi Medium)

500+ Questions from THE HINDU Editorial  
100+ Current Issue with Traditional  
Batches Going on...

Add. : 2nd Floor, Chamber No. 3 Batra Cinema Complex  
Dr. Mukherjee Nagar, Delhi-09

**8800141518**

**THE CORE IAS**  
[\(www.gshindi.com\)](http://www.gshindi.com)

**CRASH COURSE-Geography Optional**

**PAPER - 2** **Only in  
25 Days**

Preparation in Question - Answer Format  
Come & See the Reality of Paper-2 with Current Update

बढ़े शिक्षकों से पढ़ चुके विद्यार्थी विशेष रूप से आमंत्रित

Add. : 2nd Floor, Chamber No. 3 Batra Cinema Complex  
Dr. Mukherjee Nagar, Delhi-09

**8800141518**