



# CURRENT AFFAIRS

# **ECOLOGY & ENVIRONMENT**

2<sup>nd</sup> December- 7<sup>th</sup> December







# 1. **Operation 'Clean Art'**

#### Why in News?

The Uttar Pradesh Police launched Operation Clean Art to check the illegal factories that were making paint brushes with mongoose hair.

• For many years, mongoose hair has been used to make the cheapest available painting brushes in the country.

#### Mongoose

- The Indian Grey mongoose is listed in **Schedule II** of the Wildlife Protection Act, 1972; other 5 species are listed in Schedule- IV.
- IUCN Status: Least Concerned.
- There are **six species** of mongoose found in **India**:
  - Indian grey mongoose
  - Small Indian mongoose
  - Ruddy mongoose
  - Crab-eating mongoose
  - Stripe-necked mongoose
  - Brown mongoose

# **Ecological impact**

• Mongoose is a good predator of snakes and rodents, found in varied geographies; its killing can disturb the food chain of environment.

# 2. <u>Dnyanganga Wildlife Sanctuary</u>

#### Why in News?

A tiger travelled more than 1,300 km from Tipeshwar Wildlife Sanctuary to the Dnyanganga Wildlife Sanctuary.

- This is the longest distance covered by any tiger in the country, without a single case of man-animal conflict.
- This instance indicates that Tipeshwar is a potential source area and tigers need more space in the landscape.
  - Moreover, tigers may have to cover much longer distances in the pursuit of its new territory and mates, much beyond our traditional understanding.
- As part of tiger monitoring and dispersal studies, the tiger was radiocollared by the team of Wildlife Institute of India (WII), Dehradun. This was done to monitor the dispersal pattern of the adults which are normally in the process of exploring new areas to set up their territory.

# Dnyanganga Wildlife Sanctuary

- The Dnyanganga Sanctuary is situated in the Buldhana district of Maharashtra.
- It is a part of the Melghat Tiger Reserve in Maharashtra.
- It is located near the Dnyanganga River which is a tributary of the Tapti River.





#### **Tipeshwar wildlife sanctuary**

- It is located in Yavatmal district of Maharashtra.
- Rivers that flow through the sanctuary:
  - o Purna
  - Krishna
  - Bhima
  - Tapti.
- It is also popularly known as Green Oasis of Maharashtra.

# 3. <u>Clownfish</u>

#### Why in News?

The clownfish cannot be expected to adapt to a rapidly changing environment, as it does not have the genetic capacity to do so, according to a report in the journal Ecology Letters.

#### About Clownfish

- Clownfish, also known as anemonefish, are some of the most iconic marine fish in the world.
- Clownfish are found in tropical and subtropical areas of the Pacific and Indian Oceans.
- The greatest diversity of clownfish is found close to Papua New Guinea and the Great Barrier Reef in Australia.
- Clownfish breed only in sea anemones, sharing a symbiotic bond. The anemone benefits because clownfish defend the anemone from other fish.
- Threats:
  - Clownfish typically live at the bottom of shallow seas in sheltered reefs or in shallow lagoons.
  - It is this habitat that is under threat.
  - The anemones, like coral reefs in general, are under direct threat from the impacts of climate change.
    - The anemones share another symbiotic bond, with algae.
    - Under stress in warming waters, the algae leave the anemones.
    - If the algae stay away too long, the anemone starve to death.
    - Which leaves the clownfish without a home.

# Symbiotic Relationship

- A symbiotic relationship is a relationship between two (or more) organisms, which may or may not benefit one or both. The organisms may be of the same or of different species.
- It is different from regular interactions between species, because in a symbiotic relationship, the two species in the relationship live together.
- Symbiotic relationships can be obligate or facultative. Obligate symbiosis is when two organisms are in a symbiotic relationship because they can't





survive without each other. Facultative symbiosis is when the species live together by choice.

# 4. <u>Carbon Market</u>

# Why in News?

Carbon market is a major contentious issue at the United Nations Framework Convention on Climate Change(UNFCCC) **Conference of Parties 25 (CoP 25)**.

- CoP 25 is being held in Madrid (Spain) and issue of carbon market is dividing the developed and developing world.
- Carbon markets is an unfinished agenda from UNFCCC Conference of Parties (CoP 24), 2018, in **Katowice, Poland.**

# Background

- Under the Paris Agreement, every country has to take action to fight climate change.
- These actions need not necessarily be in the form of reduction in greenhouse gas emissions, which can constrain economic growth.
  - Only the developed countries have included absolute emission cuts in their action plans.
  - India, for example, decided to reduce its emissions per unit of GDP.
- It is to deal with situations like these that the carbon market mechanism is conceived.

# What is Carbon Market?

- Carbon markets allow for **buying and selling of carbon emissions** with the objective of reducing global emissions.
- It can potentially deliver emissions reductions over and above what countries are doing on their own.
  - For example, if a developed country is unable to meet its reduction target, it can provide money or technology to the brick kiln in India, and then claim the reduction of emission as its own.
  - Alternatively, the kiln can make the investment, and then offer on sale the emission reduction, called carbon credits.
- Carbon markets also existed under the **Kyoto Protocol**, which is being replaced by the Paris Agreement in 2020.
  - The **Kyoto Protocol** is an international agreement linked to the UNFCCC, which commits its Parties by setting internationally binding emission reduction targets.
  - The **first commitment period** under the Kyoto Protocol was from **2008-2012.**





- The **Doha Amendment** to the Kyoto Protocol, adopted in Qatar in December 2012, includes a second commitment period from **2013 to 2020.**
- The market mechanisms being proposed under the Paris Agreement are supposed to have more effective checks and balances, and monitoring and verification processes.

# **Contentious Issue**

- Carbon credits earned but not sold:
  - Strong disagreement continues about whether carbon credits created under the Kyoto Protocol can carry over to the Paris Agreement markets.
  - Developed countries are opposing it on the ground that the rules and verification procedures under the Kyoto Protocol were not very robust; they want the new mechanism to start with a clean slate.

# • Double Counting:

- The new mechanism envisages carbon credits as commodities that can be traded multiple times among countries or private parties.
- Transparency Issues:
  - The developing countries argue that the country that reduced emissions should be able to show it even after selling the credits, and that adjustments should be made only for subsequent transfers, if any.

# Way Forward

- Carbon markets are not essential to the implementation of the Paris Agreement.
- But with the world doing far less than what is required to prevent catastrophic impacts of climate change, the markets can be an important tool to close the action gap.



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