

# **Plastiglomerates [UPSC Notes]**

Brazilian researchers have found plastic rocks on remote islands. This is an important development from the <u>IAS exam</u> geography and environment perspectives. Know more about plastiglomerates in this article.

## Plastiglomerates

- The rocks are in the composite form of rock and plastic. plastic has melted and has become intertwined with rocks.
- The rocks were found on an island which is located 1,140 km from the southeastern state of Espirito Santo.
- This finding shows the extent of plastic menace and evidence of humans' growing influence over the earth's geological cycles.
- The geology of the volcanic island of Trindade Brazil is unique and has fascinated scientists for years.
- Researchers have called the discovery "terrifying" as it shows the extent and new form of
  plastic pollution.

The name plastiglomerates: The kind of plastics are in the rocks called "plastiglomerates" as they are made of a mixture of sedimentary granules and other debris held together by plastic.

## Plastiglomerates Associated Concerns

### Sources of marine plastic pollution:

- All oceans are one, so plastic waste making its way to the ocean can reach any part of the ocean and stay for thousands of years as it is not biodegradable.
- The extent of plastic waste is gone to a level that is making way to earth geology and changing it.
- The researchers have identified that the main source is pollution of plastic fishing nets, a common debris on Trinidade Island's beaches.
- The plastic nets are carried by the marine currents and accumulate on the beach. When temperature is high, the debris of plastic entangled in rocks melts and becomes one with rocks on the beach.
- It cools down and forms as rock with natural rock.

### **About Diversity of Trindade island:**

- The volcanic island is home to diverse flora and fauna.
- It is one of the world's most important conservation spots for green turtles, or Chelonia mydas,



- Thousands of these turtles arrive at the beach to lay eggs in what is called Aribadda.
- The island has no human population. The only human inhabitants on Trindade are members of the Brazilian navy.
- Brazilian navy members maintain a base on the island and protect the nesting turtles.
- The place where we plastic rocks are found is near to the conservation site where green turtles lay their eggs, which is very alarming.

