

## **Geological Work of Sea**

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- > Spit- A spit is an extended stretch of beach material that projects out to sea and is joined to the mainland at one end. Spits are formed where the prevailing wind blows at an angle to the coastline, resulting in longshore drift.
- Tombolo- A tombolo is formed when a spit connects the mainland coast to an island. A spit is a feature that is formed through deposition of material at coastlines. The process of longshore drift occurs and this moves material along the coastline.

Material is pushed up onto beaches at an angle when the swash brings it onto the coastline at a 45 degree angle. The backwash takes it back out towards the sea at a right angle to the coast.

Through this process material is constantly moved along the coastline. When the coastline changes direction or there is a river estuary the process of longshore drift continues. This causes material to be deposited in a long thin strip that is not attached to the coast and is known as a spit. If this feature moves in the direction of island and connects it to the mainland then it becomes a tombolo.

## **Coral Reefs**

Coral reefs protect coastlines from storms and erosion, provide jobs for local communities, and offer opportunities for recreation. They are also are a source of food and new medicines.



## **Types of Coral Reefs**

- 1. Fringing Reefs- Fringing reefs grow near the coastline around islands and continents. They are separated from the shore by narrow, shallow lagoons. Fringing reefs are the most common type of reef.
- 2. Barrier Reefs- Barrier reefs are extensive linear reef complexes that parallel a shore, and are separated from it by lagoon. This is the largest (in size, not distribution) of the three reefs. It extends as a broken, irregular ring around the coast or an island, running almost parallel to it. Example- Great Barrier Reef off the NE coast of Australia is the world's largest example of this reef type.
- 3. Atolls- An atoll is a roughly circular (annular) oceanic reef system surrounding a large (and often deep) central lagoon.

The lagoon has a depth 80-150 metres and may be joined with sea water through a number of channels cutting across the reef.

Atolls are located at great distances from deep see platforms, where the submarine features may help in formation of atolls, such as a submerged island or a volcanic cone which may reach a level suitable for coral growth.

Atolls are far more common in the Pacific than any other ocean. The Fiji atoll and the Funafuti atoll in the Ellice/Island are well known examples of atolls. A large 'number of atolls also occur in the Lakshadweep Islands.

In the South Pacific, most atolls occur in mid-ocean. Examples of this reef type are common in French Polynesia, the Caroline and Marshall Islands, Micronesia, and the Cook Islands. The Indian Ocean also contains numerous atoll formations. Examples are found in the Maldives and Chagos island groups, the Seychelles, and in the Cocos Island group.



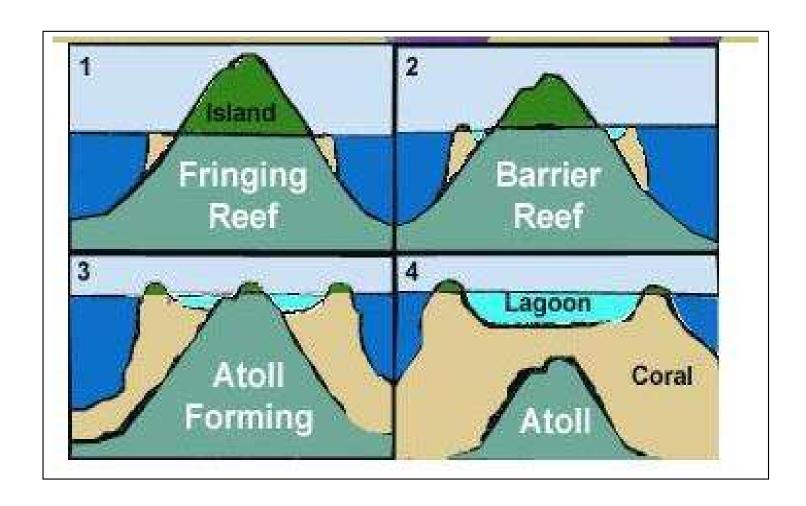


Fig- Types of Coral Reefs and Their Formation

(Source- https://www.pmfias.com/coral-reef-fringing-reefs-barrier-reefs-atolls)