WHAT IS « COASTAL EROSION »

- Erosion is the process where soft shorelines (sand, gravel or cobble) disappear and land is lost.
- Erosion can damage houses and gardens if they are too close to the sea.
- Erosion occurs as a natural part of the coastal environment due to cyclic climatic conditions. It can also be man-made.

3 natural movements of coastal sand and soil

- **“Accretion”** (note coconut seedlings) extra sand is continually deposited on the beach.
- **“Dynamic Equilibrium”** (beach remains the same) sand which is washed onto the beach is about equal to the amount of sand washed away.
- **“Erosion”** (beach is being lost) sand is being continually lost from the beach. Note fallen mature palms.

« COASTAL EROSION » IS NATURAL BUT CAN ALSO BE INFLUENCED BY HUMAN ACTIVITY

- CYCLONE, TSUNAMI can produce huge storm surges which can cause huge movements of sand and coral.
- Different seasonal wind patterns can create large swells, tides that influence shifting sand movement around an island.
- Earthquakes can cause uplift or submersion of land.
- The hot season and weather can cause sea level to rise, very slowly (3 mm/yr globally; 6 mm/yr for Vanuatu)

Activities contributing to increasing coastal erosion

- Building on the beach (buildings cannot last)
- Building seawalls across a beach (disrupts sand movement Affects neighbors)
- Beach sand and coral mining beside villages
- Cutting coastal trees and plants (If you cut old trees, there will be nothing to hold the sand)

Activities that help prevent increasing coastal erosion

- Replanting of coastal species E.g mangrove, tamanu, Sea oak, pandanus...
- Respect and protect our reefs they produce sand and coral and protect our beaches

DON'T MIX COMMUNITY CHANGE WITH CLIMATE CHANGE

OH NO, I AM BUILDING MY NEW CONCRETE HOUSE HERE. BUT THE SEA IS ALSO GETTING CLOSER AND CLOSER TO MY DOORSTEP. MUST BE CLIMATE CHANGE.

OUR WORLD IS CHANGING, THINGS AIN'T THE WAY THEY USED TO BE.

IF THEY TOOK SAND FROM FURTHER UP THE POINT IT WOULD BE BETTER. WHEN THEY ALWAYS TAKE IT FROM IN FRONT OF THEIR HOUSES THE BEACH WILL SOON BE LOST. WHEN THEY CUT DOWN TREES AND PLANTS BY THE SEA ALSO, THEY WILL BE NOTHING LEFT TO HOLD THE SAND. THE SAND WILL SOON DISAPPEAR.

If they don’t collect sand back in the same area it’s not the same is it? Going to happen, they’ve done it before, much hard to change. If they don’t have a place to live in anymore?

HOW TO REDUCE THE EFFECTS OF « COASTAL EROSION »

- activities contributing to increasing coastal erosion
- activities that help prevent increasing coastal erosion

This island is uninhabited Over a 20 year period the island lost approx. 70m of eastern coastline ("erosion") And gained 100m of southern coastline ("accretion").