



Creative Design and Story by:

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For a S1 2019 ENE 3609 Class Assignment

Idea Inspired and Developed by Dr Poovarasi Balan,





Pak Ali, a fisherman, overlooks his serene village. The seas are calm, his daily catches are bountiful, and life is good. Many years of hard work has brought him here and he is happy.



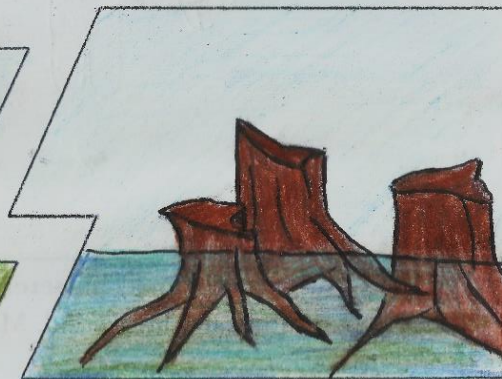
Dredges are equipment used to remove sand from a location to be deposited another. The dredger is a trailer hopper suction dredger that sucks sand from the sea floor using suction pumps and rainbows the sand out later.

Soon after, a land reclamation company begins the construction of an artificial island. The sand piles higher and higher every day and Pak Ali is eventually forced to move elsewhere.



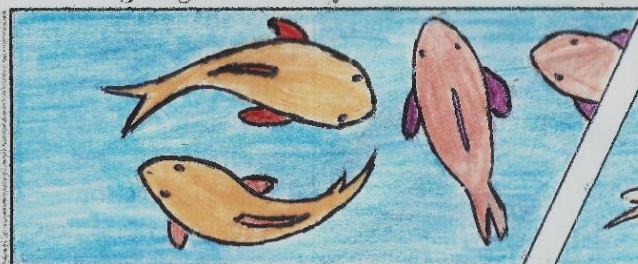
However, even as days go by, Pak Ali sees the dreadful effects of the land reclamation activities that have spread far and wide causing much harm to the ecosystem.

BEFORE



AFTER

The mangrove forest that once served as a barrier to protect the soil from erosion has been cut down. How will the sea creatures survive? How will the villagers get their daily needs of wood for fire?



BEFORE

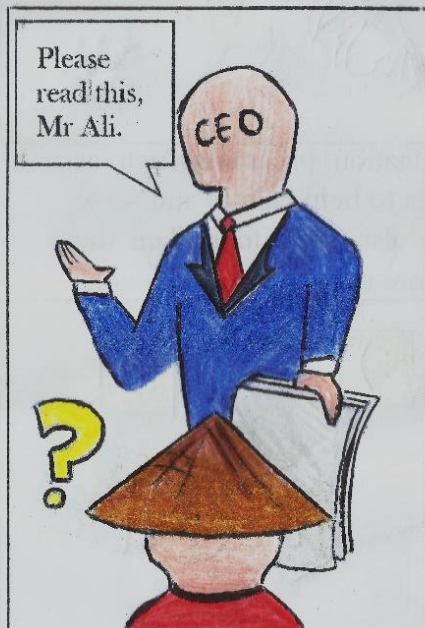


AFTER

The places with the best fishes to catch soon became harder and harder to find. Fishes are dying from the dirty environment and decent catches are harder to come by.

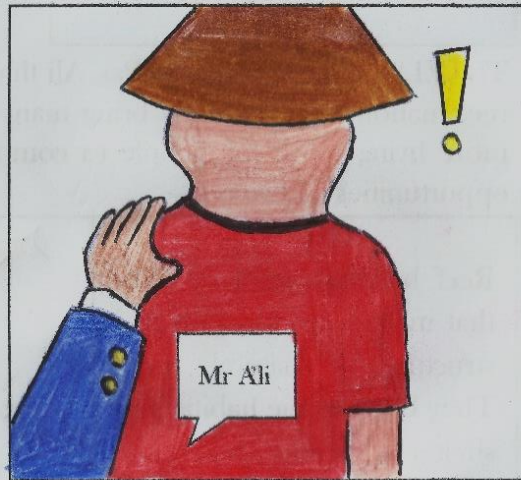


Pak Ali becomes very upset with his current situation. How will he live his life now?

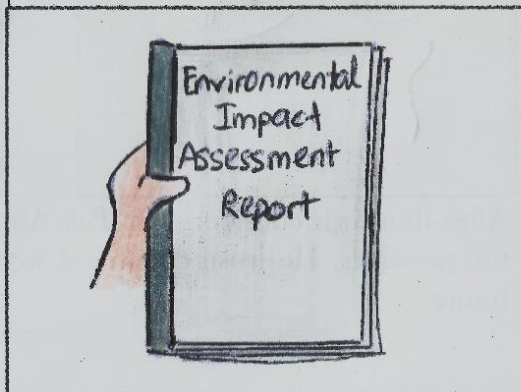


The CEO of the land reclamation company approaches Pak Ali to hand him a document. What could it be?

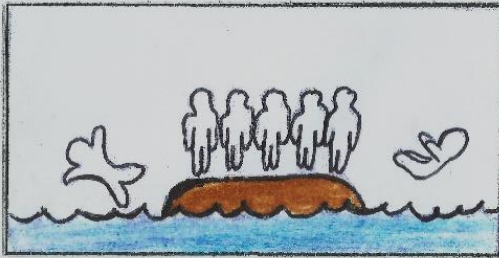
Until suddenly...



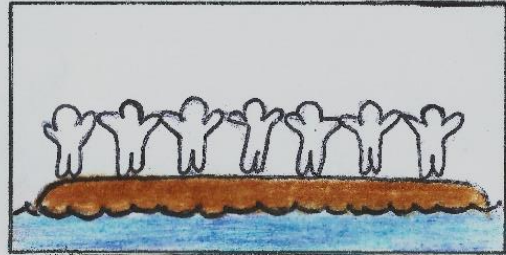
An Environmental Impact Assessment (EIA) report is a document that studies the impacts of a project to the society and the environment. It identifies all the good and bad effects of the project and explains mitigation methods the company will do.



BEFORE



AFTER

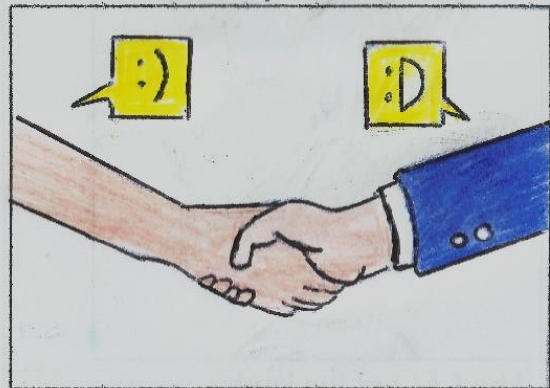


The EIA report explains to Pak Ali that despite the negative effects, the land reclamation activities does bring many advantages to society. For example, more living space for people to combat against overpopulation, better job opportunities and so on.

Reef balls are artificial reefs that imitate the function and structure of natural reefs. They become the habitat and shelter of various species like seaweed, coral and fishes.



The company would also carry out rehabilitation programs such as constructing and inserting reef balls into the sea to help culture and serve as a new home for the sea creatures. They also plant to replant the mangrove forest they cut down in order to restore its beauty and functions



After thorough consideration, Pak Ali decided that the advantages outweigh the negatives. He trusts them and works together for a better and happier future.