EROSION PROBLEMS & SOLUTIONS.

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Since the islands of Lakshadweep have evolved due to the activities of coral polyps which continue to live, the islands should be growing as long as the corals live. The erosion is caused by the improper behavior of man in the environment. Because he is the most important link in an ecosystem, man can even destroy the planet earth. So proper behavior and activities of man is a very important factor in safe-guarding the islands of Lakshadweep.

The islanders are indigenous and they have behaved properly and guarded the island-their home in the past. "For centuries the local people learnt to live in complete harmony with nature. They have done nothing to harm nature. They have thrived on coconut and fish, never destroying coconut and never spearing, dynamiting or even trawling for fish. They did not even add milk to their tea because the availability was poor (Rajeev Talwar Kuruchetra 9/1996)"

The islanders have lived with nature. But some reports submitted by the scientists in 1986 blamed the local people for the removal of coral boulders from the reef due to which erosion set in. It was the Public Works department who initiated this work and tempted the islanders to do so. The islanders were acting accordingly to their instinct. They have no scientific knowledge. When they saw the activities of the government they initiated and learnt to destroy the reef.

A heap of rubble collected from a demolished government building by Public Works development testifies the statement.

According to the old island regulation. The intertidal region and this adjacent few feet of land should belong to the government. Nobody should collect anything from this region, reef, lagoon or shore without proper permission. This law was in force before the Lakshadweep administration took over. After that such a law did not exist people resorted to the easy way of removing coral bounders, shingles and sand from the above regions as they like and this caused erosion. Huge portion of land is already washed away and the sea is encroaching every year. Wind and waves remove sand and the bowls of the coconut trees are exposed. Consequently the trees are uprooted. Every year a row of coconut trees is taken away due to the repeated activities of the monsoon and the sea is encroaching. Proper measures to prevent this have to be taken before sea finds its way i nto the fresh water lens. If the fresh water starts to flow into the sea, it will create severe problems. Sea water can flow into the islands during high tide just as it is happening in the low lying areas in the mainland in delta regions. The water lens will be spoiled and only brackish water will be available in the islands.

Dumping of huge granites or tetrapods on the shore can cause further erosion during a cyclone. Even though tetrapods may arrest erosion temporarily it is strange that a suggestion to dump tetrapods on the beautiful shore has been made in the reports of the scientists. They have failed to investigate into the problem and give proper solution to it. The scientist have not even taken into consideration the destruction caused by the tetrapods

and granites to the habitat of the numerous creatures that thrive in the beautiful shores of Lakshadweep. We must understand that the destruction to the habitat of creatures could cause harm to the fragile ecosystem of the islands. The dumping of such materials in the shore is not in keeping with the natural process of the development of these islands. The shore is composed of coral sand and the weight of the material dumped in shore will cause them sink and more granites will have to be placed. Ultimately the granites will stand like a precipitous wall without a gardiant this creating for their e rosion.

Instead of adopting artificial measure to prevent the erosion the natural methods should be followed. The cause of erosion could be found out by proper monitoring of the shore. Wind blow up the sand from the dry intertidal zone. This could be prevented by growing ipomoea. Waves and current shift the sand and this could be prevented by putting jetties at required distance.

A look at Kadmat will reveal that the wind has done havoc in some parts of the island because of mans wrong activities. The sand that accumulates on the shore on the western beach is blown up by the strong winds. The height of the island at the eroding shore is increasing year by year. Due to this the land is becoming higher instead of widening. Too much height is not good for a coral island made up of coral soil. This has happened because natural development of the island was hindered by human intervention and wrong activities.

"The sand is white like sugar. You lift your foot and it will fall down because it is dry, crushed coral sand cooled by the lens below" (Rajeev Talwar Kurshestra 9/96). This is the condition of the sand on these heights. This would not permit effective cultivation because it is too high from the water lens and the sand does not retain water. It is a pity that buildings have been constructed and trees planted in such heights without proper levelling of these mounts to the required height. There is no control on the building and planting activities. People build houses and plant coconuts as they like and the island has suffered . If the sand that is accumulating continuously on the intertidal zone is prevented from being blown up by the wind action, the islands would have grown much wider now to provide space for the increasing population. To prevent the flying of sand from the beach, proper type of sand-binding creepers have to be grown on the shore near the intertidal region. Ipomoea biloba is ideal for the purpose. Spnifex and Tpomoea grow on the shore by nature. Spnifex is not suitable because it creates sand dunes and it pricks the feet of man and he destroys it. Man must find suitable type of plants and grow in the region. We have to think of natural methods of preventing erosion, not the artificial methods of dumping tetrapods and granites on the beautiful shore of the coral island. We must remember that we are destroying the habitat of myriad of creatures that helped building up of the islands in its premordial state before man reached and even today continue to contribute to the process of island building. Man on the other hand is destroying the island. This can be compared to the world at large and the destruction caused by the so called Homo Sapiens. So it will be clear that the control of the behavior of man is more essential than that of the control of erosion and this could be achieved only by proper education.