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**SENATE**

P. S. Res. No. 428

APPROVED BY: 

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Introduced by Senator Manuel "Lito" M. Lapid

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**RESOLUTION**

**DIRECTING THE SENATE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES AND OTHER APPROPRIATE COMMITTEES IN THE SENATE TO CONDUCT AN INQUIRY, *IN AID OF LEGISLATION*, INTO THE VIABILITY AND COST-EFFECTIVENESS OF ADOPTING AND UTILIZING AVAILABLE ARTIFICIAL CORAL REEFS TECHNOLOGIES IN ORDER TO RECONSTRUCT AND REBUILD OUR DESTROYED CORAL REEFS, WITH THE END IN VIEW OF IMPROVING THE SUSTAINABILITY OF OUR AQUATIC AND MARINE ECOSYSTEM**

**WHEREAS**, Article 2, Section 16 of the 1987 Constitution provides that "the State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature";

**WHEREAS**, being archipelagic in nature, our marine ecosystem plays a significant role in our national economy. The country's marine ecosystem provides fish and other aquatic products and support other strategic economic activities such as transportation, recreation and ecotourism;

**WHEREAS**, our country's national coral reef area is estimated to be about 27,000 square kilometers and contributes at least 10 to 15 percent of total marine production. Our country's coral reefs are nurseries for sea life of an astonishing variety and abundance which provide livelihood for our fisherfolks and food for millions of Filipinos;

**WHEREAS**, studies reveal that the Philippine waters are considered as having nearly 70% of its coral reefs destroyed with only 5% in good condition and that it takes over one hundred years for these coral reefs to grow into substantial sizes, at a rate of one inch every five years;

**WHEREAS**, studies further reveal that the coral reefs located in the Philippines are in great danger. Fishermen are constantly practicing dangerous methods such as blast fishing and dynamite fishing which prove detrimental to our country's coral reefs, as well as the marine life in the surrounding areas;

**WHEREAS**, various technologies are now available all over the world that provide for the reconstruction and rebuilding of artificial coral reefs that will serve as catalysts or germinating point for the growth of new corals and sea grasses which will serve as the new breeding ground for our fisheries and aquatic resources;

**WHEREAS**, an artificial coral reef is a man-made underwater structure, typically built for the purpose of promoting marine life in areas of generally featureless bottom. Artificial coral reefs may also serve to improve hydrodynamics for surfing or to control beach erosion. Artificial reefs can be built in a number of different methods. Many reefs are built by deploying existing materials in order to create a reef. This can be done by sinking oil rigs (through the Rigs-to-Reefs program), scuttling ships, or by deploying rubble or construction debris;

**WHEREAS**, other artificial coral reefs are purpose built (e.g. the reef balls) from PVC and/or concrete. Historic or modern shipwrecks become unintended artificial reefs when preserved on the sea floor. Regardless of construction method, artificial reefs are generally designed to provide hard surfaces to which algae and invertebrates such as barnacles, corals, and oysters attach of which the accumulation of attached marine life in turn provides intricate structure and food for assemblages of fish;

**WHEREAS**, there is an urgent need on the part of the government to provide enabling mechanisms so we can adopt and apply these available artificial coral reef technologies in order to cost-effectively rebuild our destroyed coral reefs and provide a breeding ground for our fisheries and aquatic resources;

**WHEREAS**, there is also an urgent need on the part of the government to develop community-based management systems and increase public participation in coral reef resource management in order to enhance public knowledge on the importance of our coral reef and motivate people to actively participate in the management and sustainable use of coral reefs.

**NOW THEREFORE, BE IT RESOLVED, AS IT IS HEREBY RESOLVED**, that the Senate of the Philippines direct the Senate Committee on Environment and Natural Resources and other appropriate Committees in the Senate to conduct an inquiry, *In Aid of Legislation*, into the viability and cost-effectiveness of adopting and utilizing available artificial coral reefs technologies in order to reconstruct and rebuild our destroyed coral reefs, with the end in view of improving the sustainability of our aquatic and marine ecosystem.

**Adopted,**



**MANUEL "LITO" M. LAPID**  
Senator