

## EVALUATION OF MICRO-FRAGMENTATION AS A CORAL REEF RESTORATION METHOD

Continuous stress from anthropogenic sources has resulted in severe and widespread degradation of coral reefs over the years, prompting the development of various active reef restoration approaches beyond the traditionally employed conservation practices. However, many challenges currently beset the practice despite its widespread application in coastal settlements all over the Philippines and elsewhere. Consequently, the development of other restoration methods is needed. Micro-fragmentation is a method that involves planting multiple "micro-fragments" (i.e., fragments  $< 5 \text{ cm}^2$ ) in an array to cover large areas of reef substrate faster than traditional coral transplantation approaches. Using this method, other growth forms (i.e., massive corals) normally excluded in transplantation approaches would be included, as well as possibly obtaining more material from few resources, thereby showing great potential as a restoration method. The research will evaluate the potential of micro-fragmentation as a method for increasing coral cover by evaluating the growth and survival of three different hard coral species on artificial surfaces under normal environmental conditions and by comparing micro-fragmentation's cost-effectiveness with that of other restoration methods.