

**ECOLOGICAL RISK ASSESSMENT AND SOCIO-ECONOMIC
IMPACT OF FISH PEN INDUSTRY IN BACOOR BAY AT
BARANGAY WAKAS II KAWIT, CAVITE**



**An Undergraduate Research
Presented to
the Biological Sciences Department
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ABSTRACT

Chanos chanos or bangus under Order Gonorynchiformes was the lone cultured fish in the fish pens in the area. On the other hand, the wild fishes usually caught in Bacoor Bay by the fisher folks in Kawit Cavite were under five Orders such as: Clupeiformes, Cypriniformes, Mugiliformes, Perciformes and Pleuronectiformes. A total of twenty-three (23) species of cultured and wild fishes were identified during the collection. Order Perciformes had the most abundant species identified. Based from the interview with the fisher folks of Brgy. Wakas II Kawit, Cavite, disregarding the season, *Liza macrolepsis* was the species most commonly caught by them while *Therapon puta*, *Gerres filamentosus*, *Pentaptrion longimanus*, *Caranx tille*, *Pomadasys maculatus* and *Pomadasys hasta* started to decline as the pollution of the bay increased and after pens were established in their fishing area.

Ecological Risk Assessment was used in order to assess the impact of Fish Pen Industry to the environment. The physico-chemical parameters that posed high-risk condition to the Bacoor Bay were TSS, DO and nitrate. They may have caused harm to cultured and wild fishes in the area. On the other hand, temperature, salinity, pH, BOD, and TDS posed a low risk condition having an RQ value of less than 1, both during dry and wet seasons. It indicated that the presence of the Industry in the Bay at present, did not serve as a threat on the bay.

Socio-economic Impact Assessment was used to determine the impact of Fish Pen Industry to the socio-economic status of people at Brgy. Wakas II Kawit, Cavite. The Industry was not really a good help to the community especially to the fishermen, rather; it ruined more their livelihood. The fish pens established in the coastal area of Bacoor Bay predominantly owned by businessmen and corporations outside the municipality had resulted to benefit for few but a great detriment to many.