



Tips and tricks

# Makalah Akademia

POLLUTION ON FISHERIES AND TOURISM IN KUALA SEPETANG, TAIPING

By

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Kuala Sepetang is a coastal town located in Larut, Matang and Selama District in northwestern Perak, Malaysia.

It is also popularly known by English-speaking locals as Port Weld after a former Governor, Frederick Weld. It is a thriving fishing village, and the main jumping-off point to the river mouth community of Kuala Sangga, which is a Chinese fishing community at the river mouth which specializes in fish breeding in cages, more formerly known as cage culture.

In Kuala Sepetang, there have been several environmental difficulties related to the water quality. Because everyone is focused on making Kuala Sepetang a popular tourist destination in Taiping, the situation is made worse by the local people' lack of information regarding water quality.

The issues that effect the water quality in Kuala Sepetang:

• Poor management about the pollution



Mangrove forest deforestation.



 The demand from businesses and domestic consumers (charcoal).

### Factors:



- 1. Oil Spills which occur at Kuala Sepetang river. The oil spills came from routine shipping, dumping and runoffs.
- 2. The river and canal are used for transporting chopped mangrove wood from forests to the charcoal factory, Khay Hor Holdings Sdn. Bhd., in Kuala Sepetang.
- 3. Fish Farming Activities such as the digging of channels to supply water to the aquaculture ponds, the removal of vegetation into the ponds, the use of chemicals and feed nutrients to maintain the health of the fish, cockles, or shrimps.
- Uncontrolled Human Activities such as indiscriminate trash dumping and poor sanitation practice.

#### Effects:





## 1. Oil spills.

Can affect marine wildlife.

Emulsification may occur because the oil cannot dissolve in the water and instead produces a thick slick on the water's surface.

This can decrease the total amount of dissolved oxygen in the water and places stress on the growth of aquatic life.





# 2. Charcoal factory

Decrease the mangrove forest.

The mangrove forest will no longer be attractive to the tourism sector.

The elimination of the mangrove forest will also cause the marine life ecosystem there to be disrupted and will increase the loss of the attractiveness of the "farming cage" there.





# 3. Fish farming.

Effect fisheries industry.

The chemicals from farming activities, and the resultant organic waste from food, can leach into the surrounding water and cause contamination.

## 4. Uncontrolled human activities.

The daily waste is full of pathogens including bacteria, viruses, and protozoa as well as nutrients like nitrogen and phosphate.

An increase in nutrients can lead to eutrophication, which is an excessive growth of marine organism and decay.

Excessive nutrients and organics in the water can affected fish.

#### Recommendation.

Generally, the most dominant water quality issue is eutrophication. Eutrophication occurs when a water body receives an excessive amount of nutrients, particularly phosphorus and nitrogen. As an outcome, an overgrowth of algae. When algae die, oxygen decreases in water as a result this lack oxygen causes the death of aquatic life like fish.

What can we do to reduce this eutrophication process?

- By building an aquaponic system at a safer site that is near the fishing village in Kuala sepetang.
- Aquaponic is a combination of aquaculture and hydroponic systems.
- The Aquaponic system would be an advantage to the farmers in Kuala Sepetang as they can reuse the resources that they considered a waste.
- In fact, by utilizing aquaponics systems, the problems of fish population depletion, chemical usage, and production of healthy fishes can be solved.

#### Conclusion.

In conclusion, aquaponic alone is not enough as improvement of the local villagersunderstanding and behaviors is a main key to prevent poor water quality. The locals should be exposed to the awareness of how to prevent water pollution. By stopping indiscriminant rubbish dumping and poor sanitation practices, this will improve the declining of poor water quality and make the fish industry as well as tourism thrive.

## Reference:

Zhi Ling RL, Andrew T, Huat LL, Sen TS (2017) Kuala Sepetang Estuary: Current use and Long-Term Sustainability.