

2729. 大阪府立能勢高等学校

マレーシア「経済発展と自然破壊」～エビ養殖によるマングローブ林の破壊とマングローブの植林～

Shrimp Cultivation and Mangrove Forest Destruction



(1)

Japan a Major Shrimp Importer
One third of the shrimp produced in the world are imported to Japan



(2)

Shrimp Farms



Shrimp Nursery Ponds in Malaysia

(3)

Clearing of mangroves
To build a new shrimp pond, mangrove forests are cleared



(4)

Virus Outbreak



(5)

Our Research Objectives

- ① How did the production of shrimp ponds spread, and what is the present scale?
- ② How is the actual shrimp production done and how are these shipped?
- ③ What is the current situation of the mangrove forests?
- ④ What kind of environmental measures are taken?

(6)

Research tour to Malaysia


We visited Malaysia from October 29th to November 4th. We did an investigation to learn about shrimp farming in Perak province.





(7)

Perak, Malaysia
Ponds of shrimp farming

Size of each pond is about 50m × 50m




Water is drawn from the sea and stirred

Abandoned ponds

(8)

These ponds are constructed after clearing mangrove forests




New ponds were being constructed when we visited

(9)

We interviewed the owner of the ponds.

What we learned from the interview

- The biggest problem of shrimp farming is diseases of shrimp.
- Once a disease break out, it spread throughout the region.
- They get a big loss and some abandon the ponds to make new ones



This causes another mangrove destruction.

(10)

We visited Putra Malaysia University (UPM)



Discussion with UPM students who are majoring agriculture



Lecture by Prof. Adbulah on shrimp farming and mangrove destruction

(11)

What we can do for sustainable shrimp farming

- Develop inland-based highly-intensive aquaculture systems.
- Advantages:
 - Reduce pressure to clear mangrove forests
 - Better control of pond waste (effluent)
 - Better biosecurity



(12)

マレーシアの沿岸部ではエビの養殖が進みマングローブの森が破壊されている。住民は生きるためにエビの養殖場開発を進めている。しかし外部者はマングローブの森を保全すべきと住民に環境保護を訴える。「どちらが正しいのか。」マレーシアで養殖されているエビのほとんどは日本をはじめとする先進国への輸出用である。「われわれはこの問題に対してただ手をこまねいているだけでよいのだろうか。」地域課題を考える。