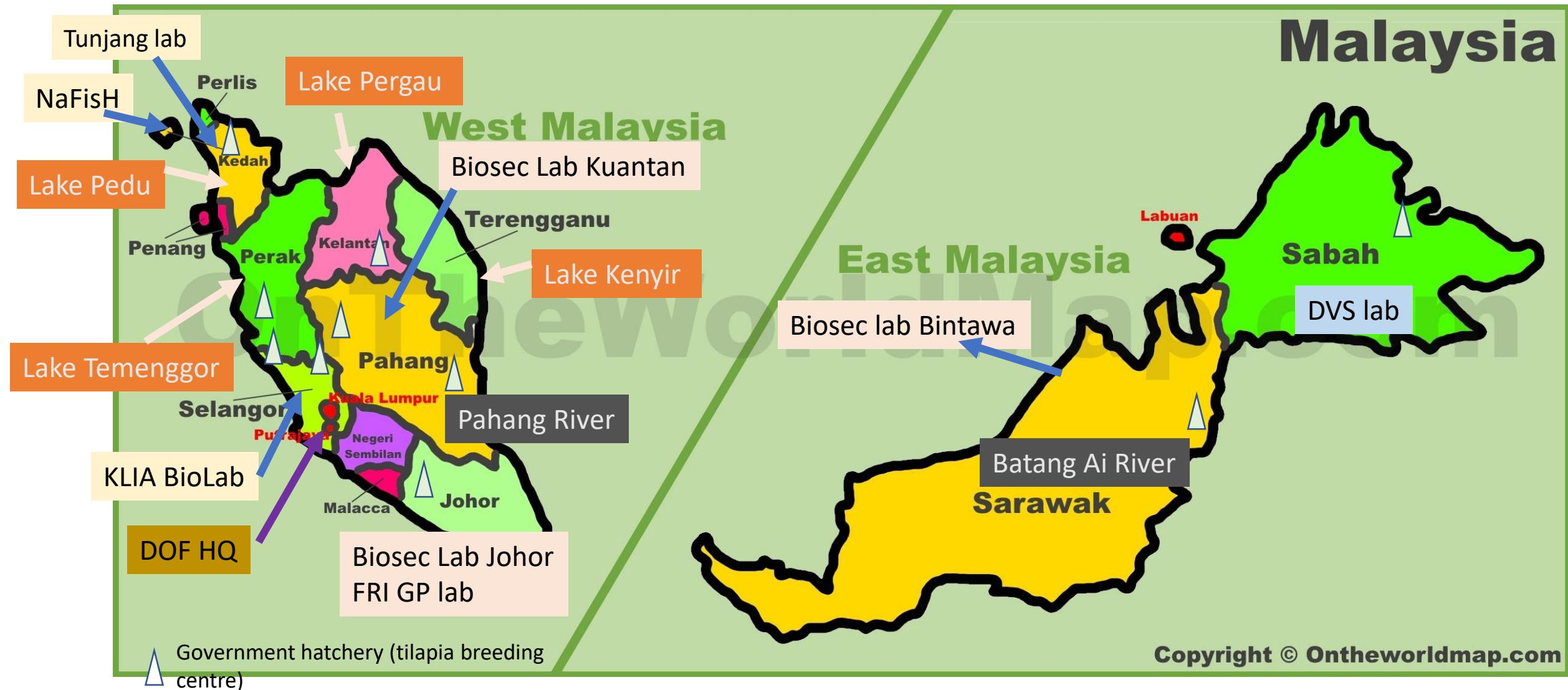


Malaysia

National action plan elements

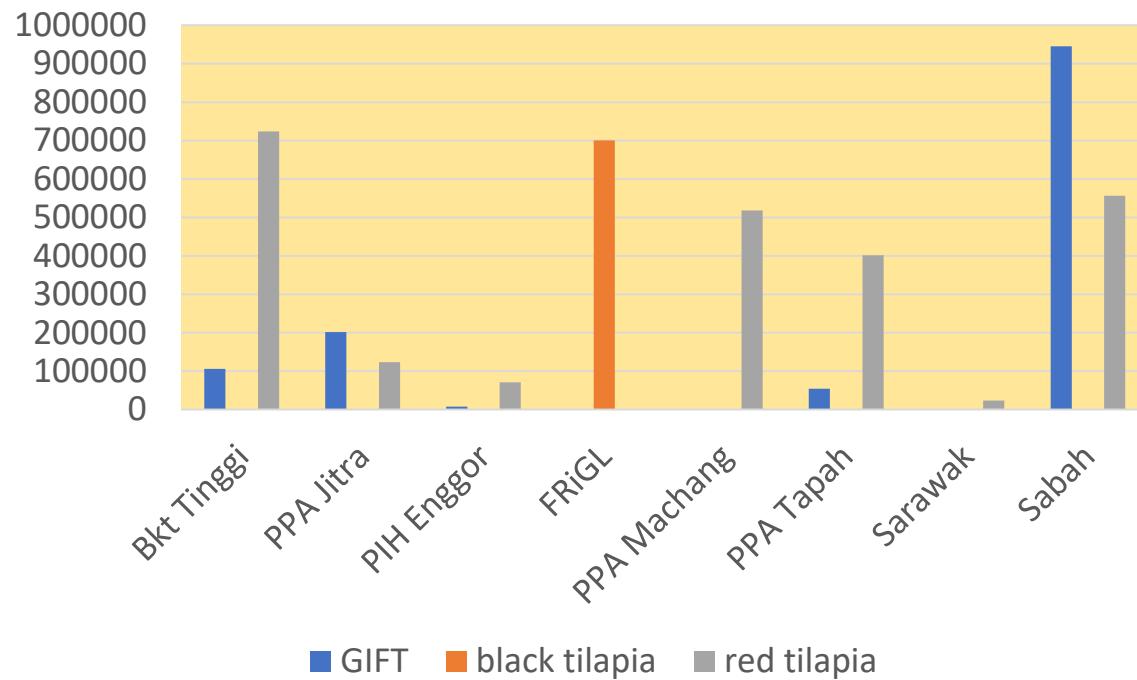


Location of the government hatcheries, tilapia culture sites, diagnostic labs



Industry overview

Fry production of tilapia from government owned hatcheries, 2016



Culture systems – cage, earthen ponds, tanks system

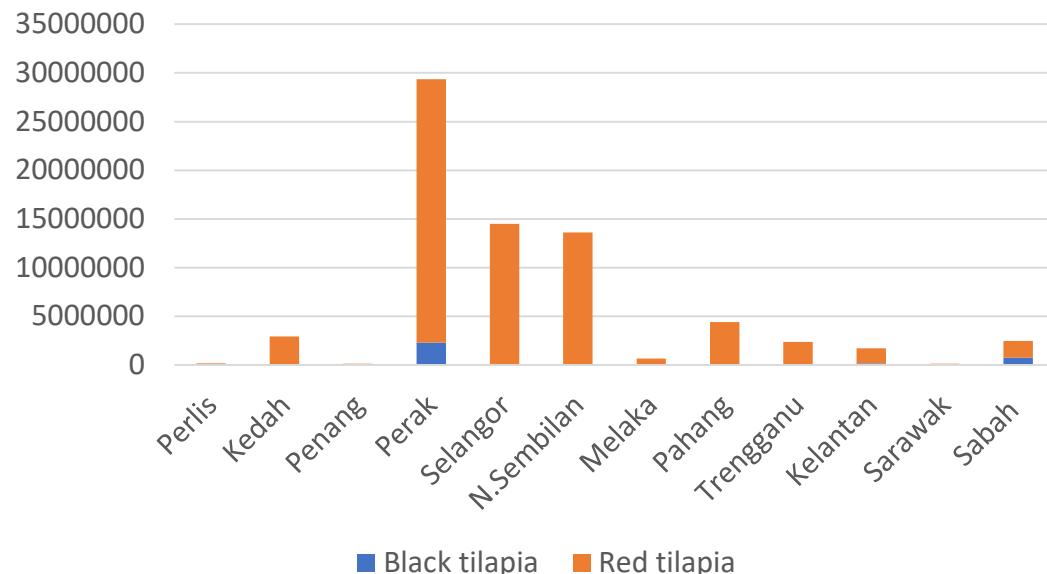
13 Gov. hatcheries, 8 tilapia, 150 private hatch

Wild in lakes, dam, ex mining pool, local consumption

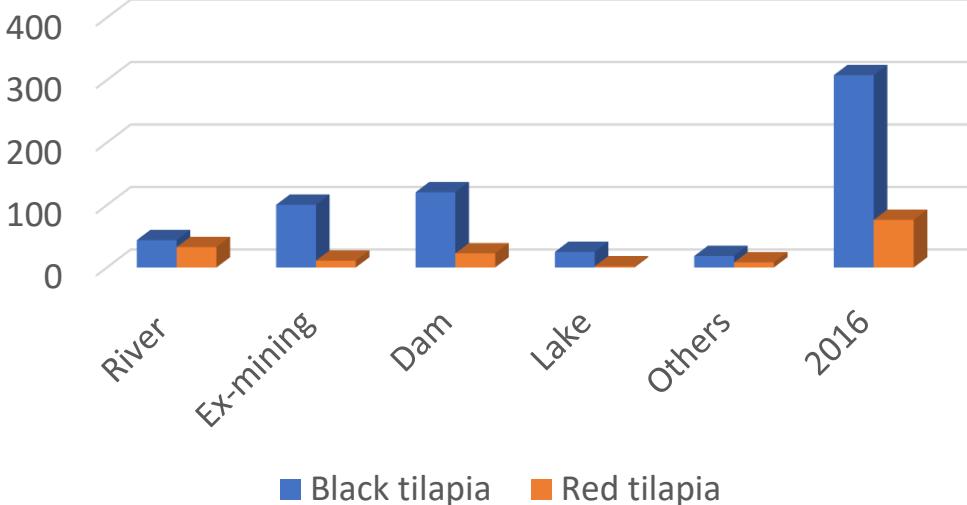
Average production per year = 20,000 – 30,000 MT (2011 – 2015)

Fry importation : 3 – 4 mil in values /year

Production of fry from private hatcheries 2016

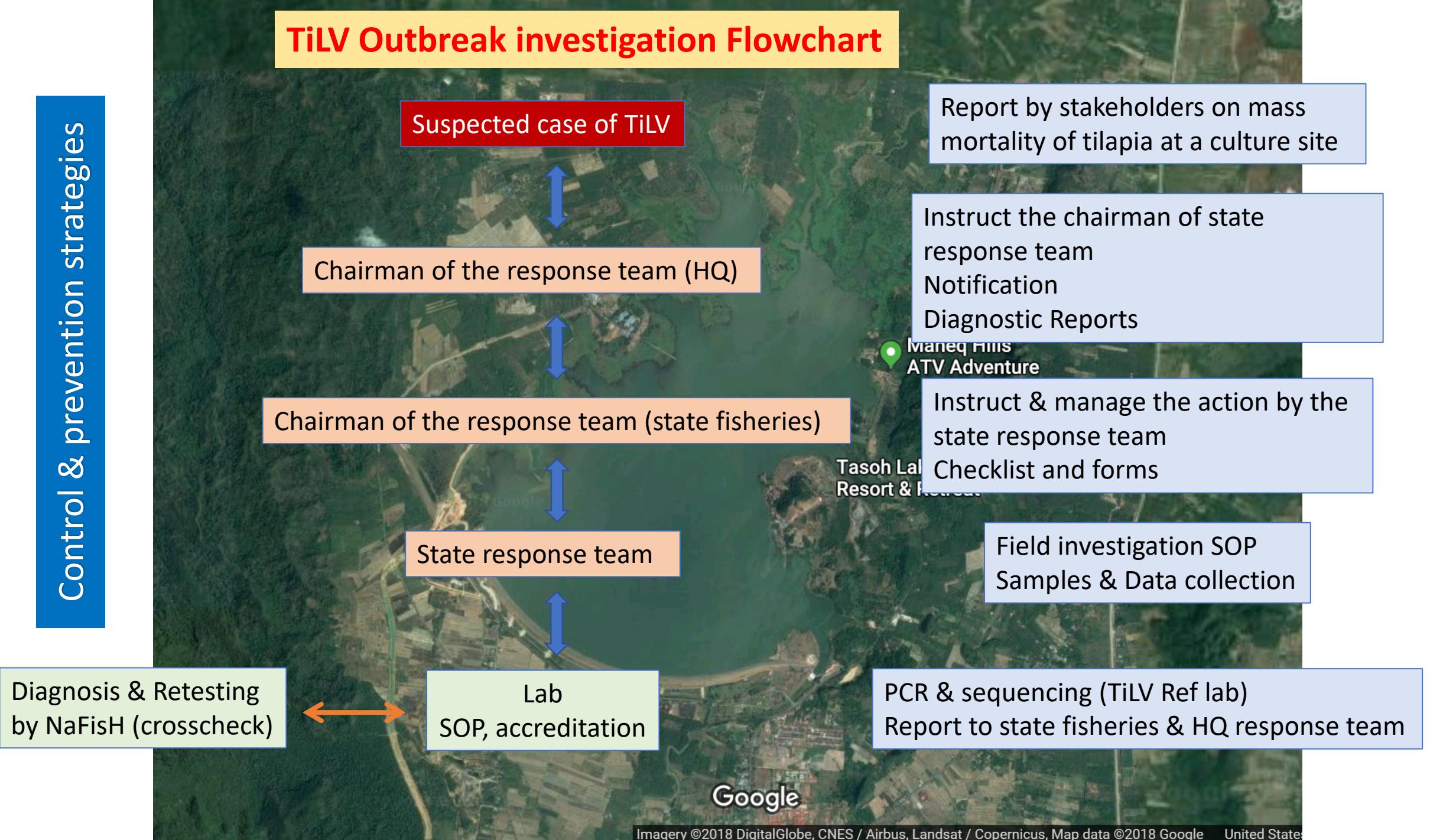


Wildcatch (MT) 2016

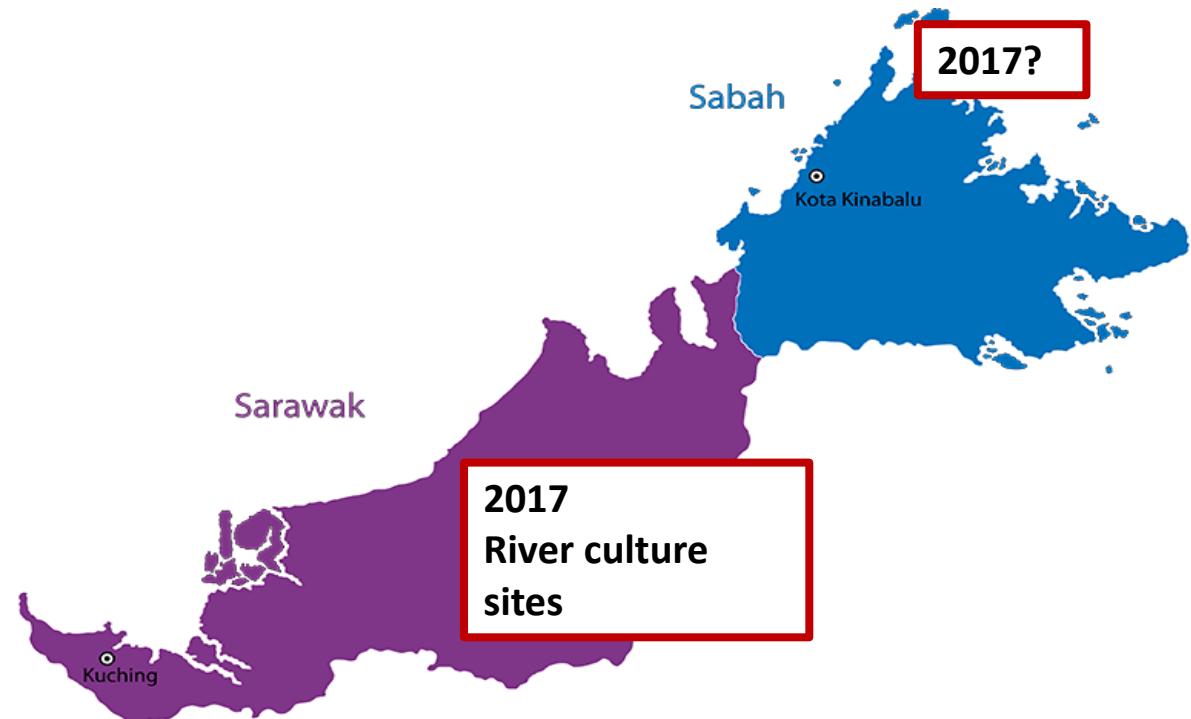
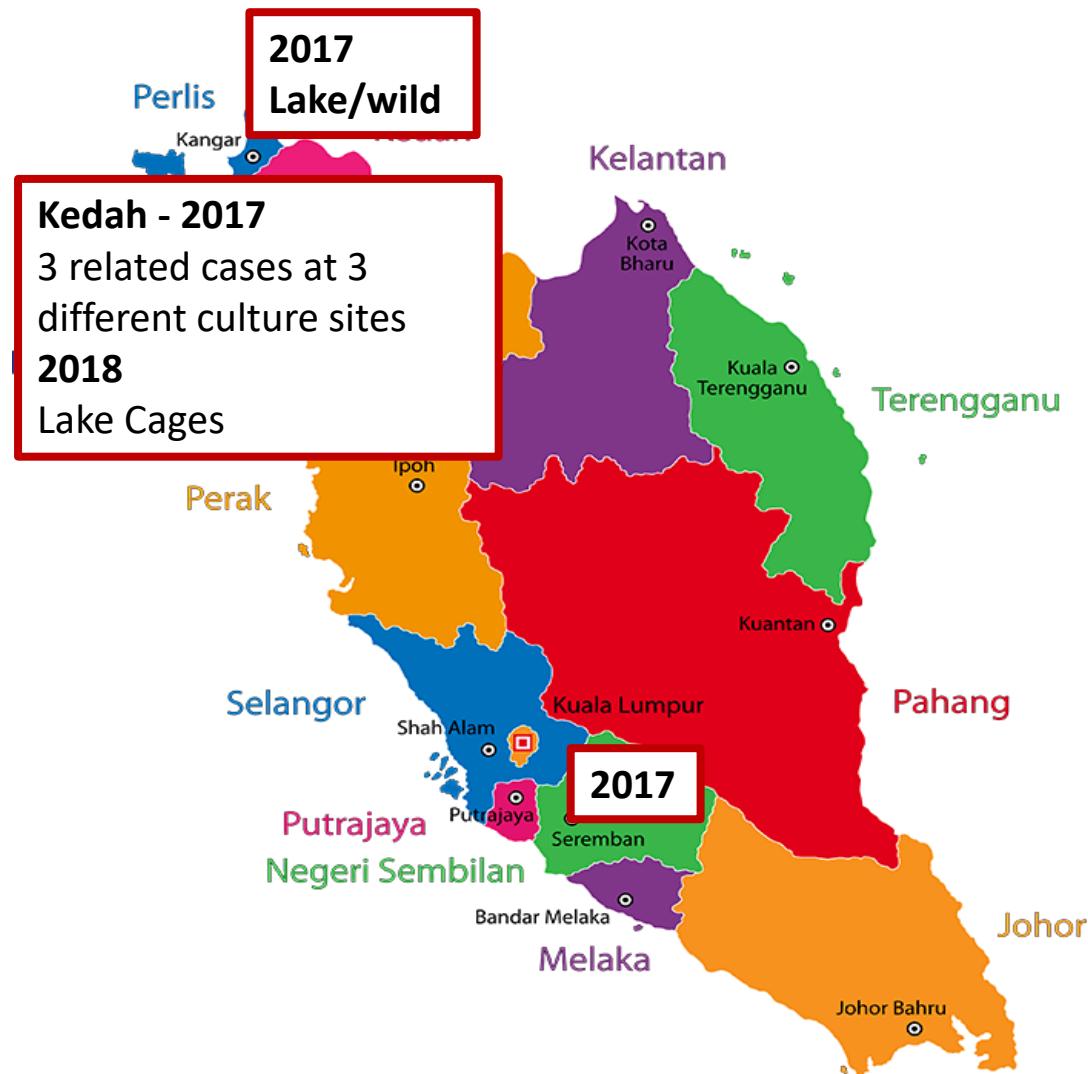


Control & prevention strategies

TiLV Outbreak investigation Flowchart



TiLV reports in Malaysia (NaFish/Biosecurity Division Database)



Surveillance strategy

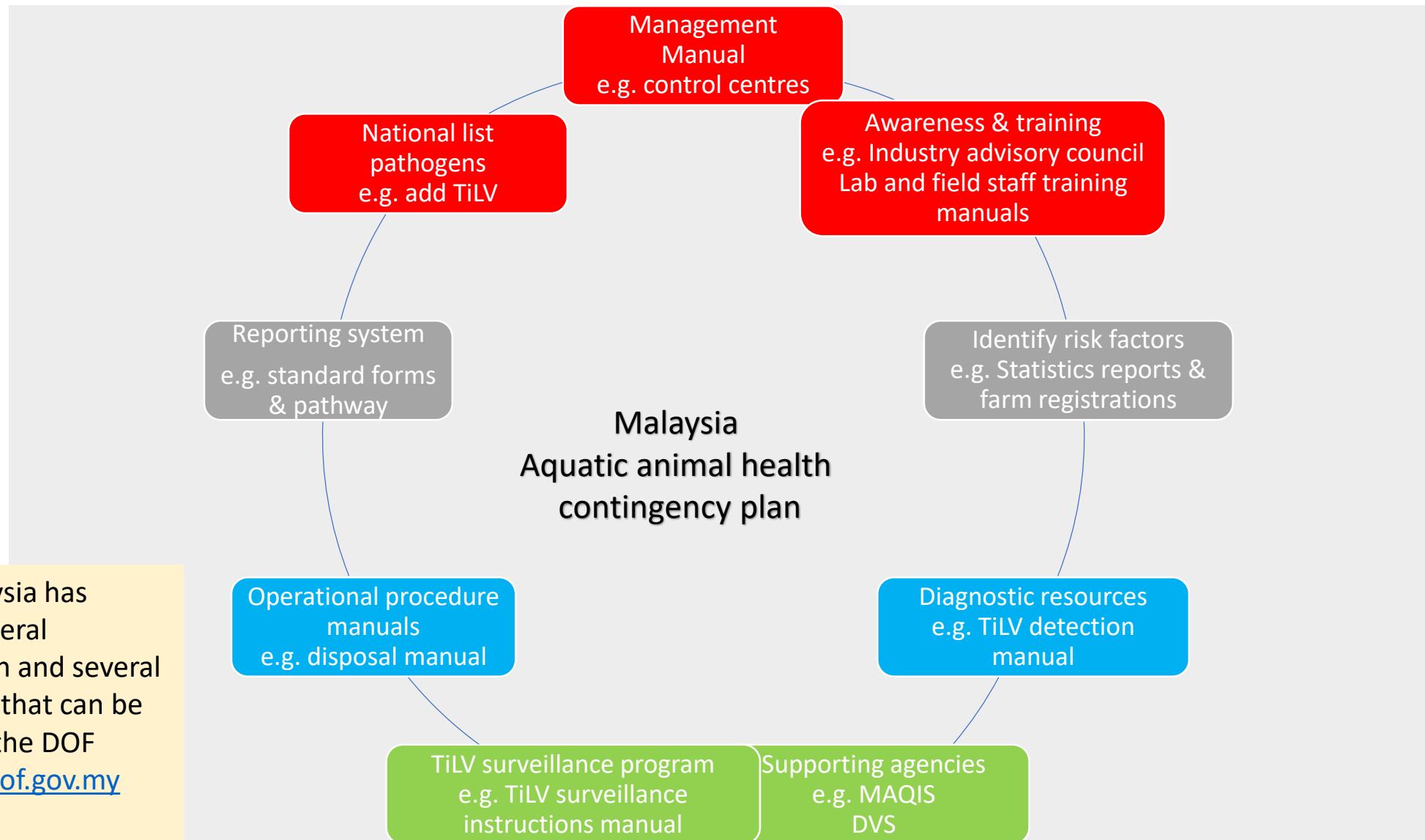
1. Objective : prevalence & possible risk factors in
2. All the susceptible species of tilapia (young, adults stages and broodstocks) in hatchery and wild population.
3. Throughout year in wild and every quarterly at hatcheries
4. Develop the correct case definition
5. Samples randomized designed in wild and hatchery ponds at unit level
6. Testing all the samples with molecular techniques, histopathology, and other relevant test (if possible)



Sampling cost	Per trip
daily allowance /average per person	45
lodging	100
chemicals (alcohol)	90
viral transport media	50
bacterial media	10
buffered formalin	10
other consumables	100
car rentals	300
Lab cost	Per sample
PCR	50
histopathology	20
bacteriology	30
cell culture isolation	100
Total cost/day/trip	RM905

RM1 = USD4.2

EMERGENCY PREPAREDNESS ELEMENTS



What needs to be done

- Review and approve rules and regulations to effectively contain and mitigate the outbreak of TiLV
- Review and add in the TiLV as a national disease list pathogen
- Conduct surveillance starting at the hatchery level to know the true status of TiLV in the country for control and prevention strategies and for reporting
- Increase number of trained staff at field and at lab, local and international level
- Review the SOP for live movement of tilapia locally and internationally
- Increase awareness of TiLV at all levels
- Simulation exercise



TERIMA KASIH
謝謝

