ECONOMIC VALUE OF VECTOR-BORNE DENGUE FEVER MITIGATION IN CHERAS, MALAYSIA

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ECONOMIC VALUE OF VECTOR-BORNE DENGUE FEVER MITIGATION IN CHERAS, MALAYSIA

By

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Abstract of the thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master Science

ECONOMIC VALUE OF VECTOR-BORNE DENGUE FEVER MITIGATION IN CHERAS, MALAYSIA

By

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October 2011

Chair: Professor Khalid Abdul Rahim, PhD

Faculty: Economics and Management

Rapid industrial and economic development in Malaysia over the last two decades has brought about development, creating prevalence of vector-borne diseases, such like dengue fever. Dengue fever has increased dramatically in Malaysia from less than 1000 cases in 1973 to 41486 cases in 2009. Latest Press Release of Dengue Fever & Chikungunya Situation in Malaysia Week 49/2010 (5 - 11 Dec 2010) from Director General of Health Malaysia reported that there is total 44,641 dengue cases reported and 132 people die from dengue fever. Selangor state reported as the highest which is 15,862 dengue cases 44 dead cases reported in Week 49/2010 mainly because dengue often occurs in urban and semi urban area. Furthermore, there is no effective vaccine or drug treatment for dengue fever. Hence, the adverse health effects should not be overlooked.

The prime aim of this study is to estimate monetary value of the externalities (non-market values) associated with vector borne dengue fever mitigation. Therefore this study will assess the economic value using the contingent valuation method (CVM). A pilot test is conducted to determine the bids of the payment card by eliciting the
willingness to pay (WTP) using the open-ended questionnaire then ranked the WTP of these valid samples and selected 20th, 40th, 60th, and 80th percentiles to be the designated bids in the real survey. A face-to-face interview approach was being conduct in this paper. The respondent’s WTP is investigated in the survey using the open-ended payment card approach, and the results show that Selangor’s households would pay RM4.16 per month per household (RM49.92 per year per household) for immediate efforts to mitigate rise in dengue fever epidemics. Therefore for the entire society of Selangor’s households, the economic value is RM49.7 million (US$13.08 million) per year. These findings show that the respondents are concerned with the dengue fever epidemic. In other words, people are willing to pay significant money to avoid the increase in dengue fever cases. The figure above can be used as a fundamental for the local government to compute the medical treatment cost for dengue fever which is rising rapidly. In addition, government could use such a budget for mitigation and adaptation strategy to reduce the prevalence of vector-borne diseases, such like dengue fever.
NILAI EKONOMI MITIGASI TERHADAP PENYAKIT BAWAAN VEKTOR DEMAN DENGGI DI CHERAS, MALAYSIA

Oleh

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IV
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I offer this work to my Mum (Mrs. Yeow Nyok Hun) and Dad (Mr. Tee Bon Pa) and would like to thank for their supports all the time.
I certify that a Thesis Examination Committee has met on 20 October 2011 to conduct the final examination of Tee Chee Hoong on his thesis entitled “Economic Value Of Vector-Borne Dengue Fever Mitigation in Cheras, Malaysia” in accordance with Universities and Universities College Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master Science.

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VIII
DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

TEE CHEE HOONG

Date: 20 October 2011
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