

Manutsanun Neamsri 2012: The Willingness to Pay to Reduce Health Risk in Chemical Substance Application of Pomelo Farmers in Phichit Province. Master of Economics, Major Field: Economics, Department of Economics. Thesis Advisor: Assistant Professor Kanokwan Chancharoenchai, Ph.D. 127 pages.

This study aimed to evaluate the value of statistical life and the factors affecting the willingness to pay to reduce the risk from the use of agricultural chemicals in case of pomelo farmers. Based on the economic concepts to explain human decision making under various constraints to meet their own needs as well as possibility to ill or die related to toxic absorption. This study was to evaluate willingness to pay for avoid the possibility of illness from chemical substance associated with Contingent Valuation Method (CVM), by using a closed-ended questions to bid twice for measuring WTP by censored logistic regression in the life regression model from 217 respondents.

The results showed that the willingness to pay for the value of statistical life, pomelo growers in Phichit Province, the mean and median value of willingness to pay were 752.56 and 612.40 per household per year, respectively. The total value of willingness to pay to reduce health risk is approximated 191,274 baht per household per year. The factors affecting the willingness to pay to reduction potential health risks from chemical substance include the gender, total income level per household per year, The level of health. The chemicals used quantity, and the perception about chemicals used and danger.

This study suggests that the value of statistical life and the agricultural chemicals use associated with actual costs and benefits significantly determined the cost of using agricultural chemicals. Moreover, the project associated with a haft possibility of decremental risk from toxic absorption should less than 191,274 baht per household per year. The farmers who have high perception and more understanding of agricultural chemicals, willing to pay more in line with health care costs. Consequently, the greater awareness and understanding of health risk caused by agricultural chemicals are other keys of success of reducing the use of chemical as shown by the positive relation with the concern on chemical use.

---

Student's signature

---

Thesis Advisor's signature