

**ALLOCATIVE EFFICIENCY AND EQUITY OF MALARIA CONTROL PROGRAM
IN YUNNAN PROVINCE, CHINA**

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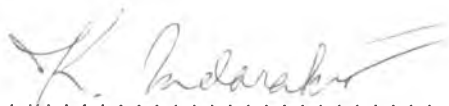
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This study consists of two parts, model building and application. In the first part a model using data from different regions and the whole province of Yunnan, China, at county level has been presented to show the relationship between malaria incidence rate, malaria control activities, environmental and social economic factors. The results show that preventive medicine and mosquito control activities have negative effects on malaria transmission. Other factors such as rainfall, temperature, mobile populations and proportion of farmer population can also affect malaria incidence rate, they have positive effect on malaria transmission. The proxy of variable GCP per capita may not be good in this model, or it has no effect on malaria incidence rate. The model cannot reflect the effect of surveillance and anti-relapse therapy activities using data from four regions and whole province.

Based on the coefficients of determinants of preventive medicine and mosquito control activities in the models and the incidence rate, the marginal effect in four regions was calculated. After analysis of allocative efficiency and equity, we can get direction as to where and into which activity to input more resources. The result of allocative efficiency analysis showed that if there are more resources they should be invested in mosquito control activities. The results of allocative equity analysis show that in the south east and south west region more resources are needed.

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Contents

	Page
Abstract	ii
Acknowledgments	iii
Contents	iv
List of Tables	v
List of Figures	vi
Chapter 1 Introduction and Objectives	
1.1 Background and Rationale	1
1.2 Research Questions	6
1.3 Objectives	6
1.3.1 General Objectives	6
1.3.2 Specific Objectives	6
Chapter 2 Literature Review	
2.1 Social Economic Factors of Malaria Transmission	7
2.2 Malaria Control Measures	8
2.3 Study of Cost-effectiveness on Decision Rule	9
2.4 Analysis of Allocative Efficiency and Equity	11
Chapter 3 Research Methodology	
3.1 Malaria Spreading Cycle and Control activities in Yunnan Province	14
3.2 Study Framework	17
3.3 Malaria Transmission and Its Determinants	18
3.3.1 The Indicator of Malaria Transmission	18
3.3.2 Malaria Control Activities	18
3.3.3 Environmental Factors	20
3.3.4 Economic Income	21

3.3.5 The Proportion of Farmers.....	21
3.3.6 Mobile Population.....	21
3.4 Multivariate Model.....	22
3.5 Data Collection and Calculation.....	24
3.5.1 Data Available in Malaria Case Reporting System...24	
3.5.2 Data Available in the statistical year book.....27	
3.6 Analysis of Allocative Efficiency and Equity.....	29
3.6.1 Analysis of Allocative Efficiency.....	30
3.6.2 Analysis of Allocative Equity.....	33

Chapter 4 Results and Discussion

4.1 Building and Interpreting the Multivariate Model.....	37
4.1.1 Regression Analysis of the Model.....	37
4.1.2 Preventive Medicine.....	37
4.1.3 Mosquito Control.....	39
4.1.4 Surveillance.....	40
4.1.5 Anti-relapse Therapy.....	40
4.1.6 Rainfall and Temperature.....	42
4.1.7 Mobile Population.....	42
4.1.8 Economic Income.....	42
4.1.9 The Proportion of Farmers.....	43
4.1.10 Conclusion of the Regression Analysis.....	43
4.2 The Result of Analysis of Allocative Efficiency and Equity.....	43
4.2.1 Analysis of Allocative Efficiency.....	45
4.2.2 Analysis of Allocative Equity.....	48

Chapter 5 Conclusions of the Study

5.1 Conclusions of the Study.....	51
5.2 Recommendation of the Study.....	52
5.3 Limitation of the Study.....	53

References.....	54
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Appendix.....	57
Curriculum Vitae.....	61

List of Tables

Table	Page
3.1 The Profile of Malaria in Yunnan Province from 1980-1994	15
3.2 The List of Variables , Unit and Definitions.....	24
4.1 Results of Regression Analysis(Dependent Variable = logINC).....	38
4.2 Results of Regression Aalysis(Provincial Model Dependent Variable = logINC).....	39
4.3 The Marginal Effects of Preventive Medicine and Mosquito Control in Four Reigons From 1993-1995	44
4.4 Coefficient Variance and Covariance of a1 and a2	45
4.5 The Result of Comparison of Coefficients(a1 and a2)	46
4.6 The Result of Comparison of ME by Regions.....	48

List of Figures

Figure	Page
3.1 Malaria Spreading Cycle and Control Activities in Yunnan Province.....	15
3.2 Malaria Incidence Rate from Jan 1995 to Dec 1996 ..	16
3.3 Study Framework.....	18
3.4 The Optimal Utility Status	28