

CONSEQUENCES OF POPULATION CHANGES ON
COMPULSORY EDUCATION IN THAILAND: 1986-1996

by

Niwat Klinngam

A dissertation submitted in partial
fulfillment of the requirements for the degree of
Doctor of Philosophy

1987

CONSEQUENCES OF POPULATION CHANGES ON
COMPULSORY EDUCATION IN THAILAND: 1986-1996

by

Niwat Klinngam

A dissertation submitted in partial
fulfillment of the requirements for the degree of
Doctor of Philosophy in Development Administration
(Population and Development)
The National Institute of Development Administration
August 1987

We approved the dissertation of Niwat Klinngam as satisfying the requirements for the degree of Doctor of Philosophy.

Date August 17, 1987

Borriboon Thitakamol.....

(Asst. Prof. Dr. Borriboon Thitakamol)

Date August 17, 1987

Suchart Prasith-rathsint.....

(Prof. Dr. Suchart Prasith-rathsint)

Date August 17, 1987

Kannikar Sookasame.....

(Asso. Prof. Dr. Kannikar Sookasame)

Date August 17, 1987

Wuttithep Indhapanya.....

(Asst. Prof. Dr. Wuttithep Indhapanya)

Date August 17, 1987

Anumongkol Sirivedhin.....

(Asso. Prof. Dr. Anumongkol Sirivedhin)

Dean

School of Applied Statistics

ABSTRACT

Consequences of Population Changes on Compulsory Education in Thailand: 1986-1996

by

Niwat Klinngam

The main purpose of this study was to investigate the consequences of population changes on educational and manpower planning as well as on the financial need for compulsory education in Thailand during 1986-1996. To attain the purpose, the structural model to forecast the numbers of pupil enrollment in compulsory education for seven regions was firstly proposed and computerized. The related parameters in the model for each region were then separately estimated and forecasted.

Having simulated the forecasted parameters in the computerized model, the followings were found:

(1) The numbers of pupils at first enrollment were fluctuated correspondingly to the changes of population in each region. That is the numbers of pupil enrollment of Bangkok and Vicinity region and the Southern region gradually increased whereas those of the Upper Central region and the Northeastern region gradually declined. Astonishingly, those of the Eastern region, and the Western region gradually increased during the first ten years after that they gradually declined. Unsimilarly, those of the Northern region seemed to be constant during the

first ten years before that they increased at a certain year and soon after they remained constant again.

(2) Similarly, when the pupil/teacher ratio was taken into account and the projected numbers of teacher requirement was calculated, it was shown that most patterns of teacher requirement were also fluctuated as likely as those of population changes. The Northeastern region required the most teachers for compulsory education. Meanwhile the Northern region, the Southern region respectively. On the contrary, the Upper Central region had got excessive teachers for long time whereas the Eastern region, the Western region and the Bangkok and Vicinity region got surplus teachers at the last few years of the forecast.

(3) Simultaneously, the public financial needs for compulsory education of the Bangkok and Vicinity region and the Southern region were gradually increased during the year of forecast whereas those of the Upper Central region the Western region and the Eastern region was gradually declined. Having compared the financial needs among region, it was shown that the total budget for compulsory education of the Northeastern region was the highest (277,723 million baht per year). Meanwhile the lower ones were the Northern region (235,646 million), the Bangkok and Vicinity region (158,878 million), the Western region (82,208 million), the Upper Central region (61,055 million) and the Eastern region (50,296 million) respectively.

ACKNOWLEDGEMENTS

I especially wish to express my deep appreciation to my advisors Assistant Professor Dr. Borriboon Thitakamol, Professor Dr. Suchart Prasit-rathasint and Assistant Professor Dr. Kannikar Sookasame and rest of my dissertation committee for their invaluable encouragement, advice, criticisms and generous assistance. I as well wish to thank many individuals and organizations, in particular the Office of the National Education Commission and Petchaburi Primary Education Authority, which have contributed in numerous data for this thesis.

Finally I am most grateful to my parents for their encouragement and moral support. Special thanks to my wife, Mrs. Wantana Klinngam who undertook the family burdens during my study and to my children, Wanniwat, Niwan and Wanita Klinngam, for their patience. Inevitably, I would like to thank my classmates, Miss Amporn Thongluang, Mrs. Atchara Nawachinda, Mrs. Chuta Manatpaiboon, Miss Chupensri Wongphuttra, Mrs. Kusol Soonthornthadha, Miss Nawarat Suwannaphong, Mrs. Nuntawan Antarasen, Mrs. Suwimol Angkavanich, Miss Uraiwan Kanungsukkasame and Mrs. Wimolrudee Wansorn, who have made my experience more meaningful.

Niwat Klinngam