วิจารณ์และแนะนำหนังสือ

ภาวณา เขมะรัตน์*

จากวารสารพัฒนบริหารศาสตร์ ปีที่ ฉบับที่ วิจารณ์และแนะนำหนังสือ ได้แนะนำวิทยานิพนธ์ระดับปริญญาเอกของคณะรัฐประศาสนศาสตร์ สถาบันบัณฑิตพัฒนบริหารศาสตร์ ในรูปบทคัดย่อเฉพาะปี 2536 และบรรณานุกรมทั้งหมดไปแล้ว ฉบับนี้จึงขอแนะนำวิทยานิพนธ์ระดับปริญญาเอกของคณะสถิติประยุกต์ สาขาประชากรและการพัฒนาซึ่งเป็นภาษาอังกฤษ ในรูปบทคัดย่อระหว่างปี 1991–1993 รวม 10 เรื่อง และตอนท้ายเป็นบรรณานุกรมวิทยานิพนธ์ทั้งหมด จำนวน 21 เรื่อง ตั้งแต่ปี 2530-ปัจจุบัน

Chanin Chareonkul. 1993. **An Assessment of the Quality of Life of the Thai Elderly: a Study of the Uses of Multi-Dimensional Indices.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 170 pp. Dr. Anek Hirunrakes, Chairman. (NID. HQ 1064. TS C362 T)

The proportion and numbers of the population aged 60 years and above in the overall population structure of Thailand are increasing in the midst of rapid socio-economic and cultural changes. These changes inevitably affect the well-being of the Thai elderly. This study aimed to identify significant domains of quality of life and the constituent factors, that are appropriate for elderly people in the Thai context. It was expected that this study would contribute to an increasing awareness of the existing and potential needs of this segment of the population and to a better understanding of how their needs may be measured and met.

The study presented a macro perspective of the quality of life of the Thai elderly and used multi dimentional indices for assessing the quality of life of the sample elderly.

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A survey was carried out during 6-25 May, 1993. There was a sample of 879 elderly included in this study and the response rate was 79.5 percent. The results of the study showed that female elderly reported more economic, psycho-social and health problems and less life satisfaction than male elderly. Using the LISREL model for analysis of factors affecting the quality of life of the elderly, the initially proposed model included 20 observed variables in measurement equations for five latent variables, namely: predisposing, enabling, risk, need, and quality of life variables. The first two variables were exogenous latent variables. The initial model was then modified to include 13 observable indicators with the same five latent variables. The Chi-squared value of the modified model dropped to 146.94 with 59 degrees of freedom from 1149 with 177 degrees of freedom in the initial model. Similarly, the Adjusted Goodness of Fit Index (AGF) increased from 0.869 to 0.982 and the root mean square residual reduced from 0.137 to 0.060. The total coefficient of determination for the modified model was 0.268.

The model suggested that the predisposing and enabling exogenous latent variables had little direct influence on the quality of life. Their effects were found to be mainly through the risk and need factors. The study also discussed the reasons that the age indicator of the predisposing factors was discarded in the modified model and the significance of living arrangement as one indicator of the enabling factor's positive influence on the quality of life of the elderly. Policy implications for measures to be taken to strengthen family and community-based services and the delivery of supportive services by all sectors involved were discussed. Further investigations were recommended to study cohort effects and quality of life, gender differentials in quality of life, and mechanisms for coping with stress among the elderly in the Thai cultural context.

Chounchom Charoenyooth. 1991. **Supply of and Demand for Professional Nurses in Thailand during 1988-2000.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 237 pp. Prof. Dr. Suchart Prasith-rathsint, Chairman. (NID. Ra 410.9.TSC 458 T)

This study is aimed at projecting the number of professional nurses produced and remaining in the labor force, annual demand for nurses during 1988-2000, nursing activities and factors influencing the premature loss of nurses from the labor force.

Projection techniques are used in demand and supply analysis. Factor Analysis, Discriminant Analysis, and Multiple Classification Analysis are used for finding factors influencing premature loss of professional nurses.

The results of the study are: the projected numbers of graduates in 2000 are 4672, 4872, 4842 and 5358 under the low (1.15 %), the medium (2.16%), and the high (5%) level of admission increment assumptions, respectively.

If the admission increment follows the low level assumption, the numbers of nurses remaining in the labor force in 2000 under the low (2.11 %) the medium (3.5%), and the high (5.87%) levels of nurse loss rate assumption will be 73,360, 65,377 and 54,146 respectively. Under the medium level of admission increment assumption, these numbers in 2000 for the three levels of loss rate assumption will increase to 73,846, 69,693 and 63,105 respectively, If the admission increment increase to the high level assumption, in 2000 the numbers of nurses will increase to 75,286, 71,108 and 64,487 under the three levels of loss rate assumption, respectively.

The demand for professional nurses based on the trend of nurses per 100,000 population in 2000 will be 70,103, 71,127 and 75,132 for the low, the medium, and the high level of population growth assumptions, respectively. Moreover, if one professional nurse is assigned to work at each health center nationwide, the demand for nurses in 2000 will increase to 71,349, 72,373 and 76,378 for the three levels of population growth assumption, respectively,

As for the labor market requirement for professional nurses, even if the nurse loss rate follows the high level assumption, a shortage will occur throughout the project ion period.

Regarding nursing activities, it is found that in 8 hours of work the nurses spent 2 hours 45 minutes on direct care, 3 hours 59 minutes on indirect care, and 1 hour 16 minutes on personal activity.

As for the factors affecting the nurses' intention to resign or transfer job, the determining factors are: problems of work performance which include policy and administrative problems, problems of working in shifts, problems concerning superordinates, and problems of work characteristics. Moreover, work experience, salary and numbers of beds in the ward also affect the nurses' intention to resign or transfer jobs.

Khaisang Rukvanich. 1992. **Labour Force Participation, Time Allocation and Quality of Life of the Aged in Bangkok Metropolis.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 189 pp. Prof. Dr.Suchart Prasit-rathsint, Chairman. (NID. HB 6283. TSK 526 T)

The study investigates factors affecting the labour force participation and desire to work of elderly Bangkok residents. In addition the study analyzes the activities and time utilization of the working and nonworking elderly and investigates the respondents' quality of life.

Multi-stage sampling was used to select a sample of 492 elderly respondents aged 60 years and over and living in the Bangkok Metropolitan Area. The sample can be considered to be representative of the elderly living in the Bangkok Metropolitan Area. Using a standardized questionnaire the respondents were asked questions about their work history, attitudes, and their socio-economic and demographic characteristics.

Both bivariate and multivariate statistical techniques were employed in analyzing the factors affecting the labour force participation and quality of life of the respondents. For labour force participation after the age of 60 four variables emerged as important predictors: main occupation at ages 55-60 years, responsibility for household expenses, desire to work and age. These same four variables were also significant predictors of current labour force participation. In addition, chronic illness and activity satisfaction were also important predictors of current work status. Two variables were significantly related to desire to work. These variables, current working status and attitude toward retirement, explained a substantial amount of the variance in desire to work.

The results of the analysis of time allocation indicate that the elderly are very active. Almost 80 percent of the elderly participate in housework, with little observable difference between the activity patterns of the working and nonworking elderly. The most time consuming activity was watching television, followed by attending religious activities, reading, listening to the radio and walking.

The analysis of the quality of life of the elderly revealed that self-fulfillment, financial position at the time of retirement and current health status were significantly related to quality of life. Most of the respondents in the sample reported levels of quality of life that were in the moderate range.

The results of the analysis indicate a number of areas where government policy should be directed. Increasing the opportunities for employment of the elderly, extending the official retirement age, encouragement of the private sector in providing employment to the elderly, and providing loans to the elderly to set up businesses are all areas in which the government could act. To improve the quality of life of the elderly more attention needs to be placed on improving health care and on revising the pension scheme so that it provides support for those in need.

Kusol Soonthorndhada. 1991. **A Study on Employment and Fertility of Female Migrant Workers in the Manufacturing Industry of Bangkok and Peripheral Areas.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 153 pp. Asso. Prof. Dr.Suwanlee Piampiti, Chairman. (NID. HD 5856. TSK 968 T)

The main objectives of this study were two-fold. First to study the general background characteristics, that is socio-economic, demographic, employment and migration, of female workers in the manufacturing industry. Secondly, to assess the determinants of female workers' fertility and to examine the effect of fertility on employment. The data used in this study were selected from married female workers in the survey of "Family Planning and Welfare Services for Female Workers in the Manufacturing Industry" conducted by Mahidol University in 1986-1987. The findings from the study revealed that the majority of these female workers were migrants from villages in the central and northern regions, of poor families. The average education of the female workers was about 6 years. Work was as daily wage labourers in the least skilled and low paid positions, in spite of working for more than ten years. As the urban household could no longer subsist on a single income, the income from female workers, which was about 3,400 baht per month, was an important contribution to the family. Female workers had small families with an average number

of about 1.6 children born and an expected family size of about 2.1 Nearly 40 percent of these workers were currently using the pill from private sources, followed by female sterilization from government sources.

The results from multivariate analysis of determinants of fertility showed that age, age square, duration of marriage, family planning method used, husband's income and migration status significantly affected cumulative fertility. Current fertility was significantly affected by age and parentage of living children before the current child, family planning methods used, child care choices, education of the women, and employment factors in terms of duration of work. Expectation of additional children was significantly affected by parentage of living children, child care choices, education of the women, age of the last child, child mortality and family planning method used. The policy implications suggested from this study were that the improvement of education programs, the extention of family planning programs and child care facilities for female workers, in or nearby the plant, by government, by the private sector or by joint venture with third parties, was necessary in order to improve socio-economic and health status and child wellbeing.

Sakda Supapong-pichate. 1993. **Population Growth, Economic and Social Development and Deforestation in Thailand.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 157 pp. Prof. Dr. Suchart Prasith-rathsint, Chairman. (NID.SD 418.3. T5 Sa 29 T)

This study attempted to investigate the relationships between deforestation, population growth, and social and economic development, Emphasis was placed on the study of demographic, economic and social factors affecting forest encroachment by agricultural households residing in the forest reserves.

In carrying out this research, two levels of data, provincial and household, were collected and analysed. Cross-sectional analysis of provincial data was performed. A multistage sampling was used to select a sample of 235 agricultural households in 6 sample villages in the North and the Northeast. The samples could be considered to be representative of the rural settlements encroaching on the forest reserves. Using

an interviewing questionnaire, the respondents were asked questions regarding their history of settlement and forest encroachment, as well as their socio-economic and demographic characteristics. A multivariate statistical technique was employed for the analysis of both the provincial and the household data.

Results from analysis of provincial data showed that provincial deforestation essentially involved, not only the availability of agricultural land in the provinces, but also some selected demographic, and socio-economic development characteristics of the provinces. The provincial deforestation rate was positively related to the agricultural gross provincial product, the percentage of the agricultural households in the province, the rates of migration to Bangkok, and the rates of migration between provinces. On the contrary, the rates were negatively related to the percentage of population who attained higher than the compulsory education. This confirmed that the growth of agricultural population and its movement, and increasing agricultural provincial product, contributed to the depletion of the forest resource.

Multivariate analysis of household data revealed that the extent to which agricultural households encroached on the forest reserves was positively associated with farm income, the present agricultural density, duration of forest encroachment in the region, and educational factors; while the distance from the previous domicile was negatively associated.

The analysis further revealed that the demand for additional farm land by the new settlement, and poverty, were the underlying causes of forest encroachment among the rural inhabitants. Although the present farm land holdings had increased, compared to those at first settlement, a high proportion of the respondents showed attitudes favouring further expansion of their holdings, which would inevitably result in the depletion of forest land.

The study concluded that the growth of the agricultural population and factors in its socio-economic development essentially involved the depletion and deterioration of forest land. It is therefore recommended that sustainable rural development and forest management should be planned and put into practice at the provincial level. Emphasis should be placed on the promotion of off-farm income generating activities, as well as the provision of educational services to

the communities to reduce the pressure on forest land. Family planning programs should also be effectively implemented, particularly in the remote forest reserve areas.

Saranya Bunnag. 1992. **Determinants of Residential Mobility in Bangkok Metropolis: A Longitudinal Study.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 194 pp. Asso. Prof. Dr. Suwanlee Piampiti, Chairman. (NID. HB 1954 Sa 71 T)

This study was designed to reveal: (a) residential expansion and population growth in Bangkok Metropolis during the five-year period of 1984-1988, (b) factors that influence selection of single houses, townhouses, and high-rise or tall buildings for residence, (c) factors that effect residential satisfaction, residential mobility expectation, and actual residential mobility of single house, townhouse, and tall building dwellers, (d) the associations between changes in the set of demographic variables, personal characteristics and residential conditions of the three groups of dwellers, and changes in the two residential mobility variables, satisfaction and residential mobility expection of the three groups of dwellers.

The units of analysis in this study are at two levels : (a) community level, consisting of secondary data only; and (b) individual level, consisting of primary data obtained from a longitudinal study involving two rounds of survey interviews of a sample of population of 600, The Round II survey used the same sample population interviewed in the Round I survey two years before.

Analysis of five years retrospective data revealed that the growth in Bangkok's population was primarily caused by residential mobility, in addition to a natural increase due to births. Furthermore, the residential mobility was found to be mainly interdistrict mobility within the limits of Bangkok, the trend was to move out of the inner parts of the city to suburban areas.

Contextual analysis of the collected data revealed that tall building, single house, and townhouse dwellers differ in terms of socioeconomic and demographic characteristics. Both residential satisfaction and residential mobility, the dependent variables, were found to be associated with residential characteristics, housing type,

neighborhood, cost of living, personal characteristics, and community conditions, the independent variables.

Residential satisfaction among single house dwellers was higher than residential satisfaction among townhouse or tall building dwellers.

Residential mobility expectation among single house dwellers was lower than residential mobility expectation among tall building or townhouse dwellers.

Actual residential mobility among tall building dwellers was higher than actual residential mobility among single house or townhouse dwellers.

The findings from this study lead to the following recommendations for reducing the rate of residential mobility among Bangkok's population.

Tall building types of housing should be erected in city centers, commercial areas, and communication centers where Bangkok's population works. This will help the city population to save on commuting time and expenses. Moreover, the buildings should be erected in relatively closed communities and managed in such a manner that will provide a sufficient amount of privacy, an acceptable standard of cleanliness, and adequate security to the dwellers.

Single houses and townhouses, which require more land, should be erected in the suburban areas of Bangkok where land is still abundant and the prevailing land prices are still considerably lower. The houses should be designed for maximum utility and comfort, and large enough for five-person living without residents feeling crowded and stressed. Townhouses, sharing common walls, should be partitioned from adjacent units with construction materials capable of muting or preventing sounds coming from adjacent units and also shielding the view from adjacent units in order to provide adequate privacy for the dwellers.

Moreover, a variety of activities that promote good relations among the people living in the same neighborhood should be planned and implemented on a continual basis.

Adequate transportation systems between the growing suburban communities and downtown Bangkok should be provided for the benefit of suburban commuters who still work in the city center. In addition, rapid development of suburban business, industrial, educational, and recreational centers should be

promoted in order to end suburban dwellers' continued dependency on downtown Bangkok for job, educational, and recreational opportunities and thus stop suburban dwellers from moving into the already congested downtown areas.

Lastly, the commercial banking system should provide both short and long-term loans for residential renovation or alteration, including the purchase of new furniture or household articles for downtown home owners who still have a strong attachment to their long-time residences and are unwilling to move elsewhere.

Siriwan Grisurapong. 1991 **The Study of Community and Household Decision Making to Allocate Resources for Child Health Status : a Case Study in Sikhiu District, Nakhon Ratchasima Province.** Thesis Ph.D., (Population and Development) The National Institute of Development Administration. 175 pp. Asso. Prof. Dr. Prakob Chirakiti, Chairman. (NID. RA 407.5 Tb Si 79T)

The aims of this study were to find indices which can best represent child health status, identify factors influencing child health and suggest the most effective resource allocation to improve child health. Data was assembled from Sikhiu, a district in Nakhon Ratchasima province in the northeastern part of Thailand. On a community level, readily available data was obtained from sources in province and district offices. The proportion of child non-malnutrition in each village was utilized as a dependent variable and activities of several intervention programs were regressed on it. The proportion of households covered by programs for providing latrines and improving household sanitation was related significantly to the proportion of child non-malnutrition. When the effective resource allocation alternative was examined, implementation of these two programs above was also proved to maximize the proportion of child non-malnutrition. If the objective is to arrive at 100% child non-malnutrition with minimum cost, the emphasis should be placed on programs to improve household sanitation and to provide immunization to pregnant women and infants.

On a household level, data from 258 children aged 0-4 years was collected. Anthropometric measurements: weight for height, height for age, and weight for age, and illness spells in the last 6 months, were employed to represent the level of

child health status. Both physical, household and community factors were included in the equation as predictor variables. The relationship between each dependent variable and the predictor variables was examined by discriminant analysis. In order to classify children into poor or good health groups, behavior reflecting the attention of the mother and accessibility of facilities variables demonstrate high predictivity. Among the three anthropometric measurements, height for age shows the highest percentage of correct group-case classification. Using this index to represent child health status should be considered. To allocate resources to maximize child health status, it is suggested that money should be allocated for delivery practice and time for care of children.

Further improvement of child health status might result from easier accessibility to health facilities and education of mothers about health practices. The allocation of resources should also emphasize low-technology programs at the community level as well as time spent to care for children at the household level.

Srismorn Suriyasasin. 1993. **Markov Analysis of Residential Mobility Patterns in Low-Cost Housing in the Bangkok Metropolitan Areas: Case Study in the Area of Bangkhen Don Muang, Bangkapi, Phrakhanong and Nonthaburi.** Thesis Ph.D (Population and Development) The National Institute of Development Administration. 171 pp. DBA. Somboonwan Satyarakwit, Chairman. (NID. HB 2104.55. A3 Sr39 T)

The first part of the study applies the Markov technique to analyze the residential mobility patterns only in a case study of four types of low-cost housing. These are row house/townhouse, condominium, upgraded slum housing and housing in non-upgraded slum. All residences were located in the districts of Bangkhen-Don Muang, Bangkapi, Phrakhanong and Nonthaburi. The total sample is 1,400 households, and the informants may be heads of households or spouses. The residential mobility patterns here are those which occur on average over 10 years per time.

The one step transition probability of residential mobility was derived from the numbers of sample units who are now staying in one of the four types of low cost housing and had their former residence in one of the four types of low-cost housing.

Logistic regression was employed to analyze the factors affecting residential mobility. The difference in salary is a factor which appears to influence the movers in almost every group, which indicates that money is the most important factor influencing low income group mobility.

From logistic regression, a simulation technique was used to determine whether a person is a mover or nonmover among four types of low-cost housing. The probability of residential mobility was then developed.

When comparing the probability of residential mobility analyzed by a logistic regression model and the Markov model, it is found that the values are rather different. This phenomenon may be explained by the factors which are used for analysis with logit. They are all expected variables which are estimated to be influential on the individual's decision whenever he changes his dwelling but the true decision to move or not move may come from other variables which are not taken into the model. The decision process is rather complex. It depends on the individual who has to make the decision and also depends on the situation, environment and time. However, to use the Markov technique to calculate the probability of residential mobility will not isolate the factors affecting the movers but will analyze instead the result of individual decisions.

Uraiwan Kanungsukkasem. 1991. **Patterns and Determinants of Health Service Utilization in Rural Thailand: a Case Study of Nakorn Sawan.** Thesis Ph. D. (Population and Development) The National Institute of Development Administration. 241 pp. Boonlert Leoprapai, Chairman. (NID. RA 140.9. T5 Ur 1)

This study looks at patterns and determinants of curative health service utilization by the rural population of Nakorn Sawan. A statistically representative survey was conducted covering 25 villages, 620 households and 1803 illness events; multi-level data collection included community, household and individual variables. Qualitative data collection included participant observation; and in-depth interviews were also held in 4 sample villages. This data set provided an appropriate interpretive analysis of health behavior patterns collected by the survey. Results show that people were making decisions about health service utilization on

a rational basis. Simple and less expensive treatments at lower level health services were first utilized. If first treatments were unsuccessful, higher level services were then utilized.

Logit regression analyses were applied to determine factors that predict health service utilization behaviors. The determinants of type of first source of treatment, seeking a second source of treatment or not, and type of second source of treatment were identified.

The first source of treatment was determined by indicators of government health policies, characteristics of population at risk, and community characteristics.

Unlike the determinants of first source of care, the probability of seeking a second source of treatment or not was heavily dependent upon need factors. Two other factors involved in the decision were age and type of first source of treatment.

Characteristics of population at risk and community determined the second source of treatment.

Some interesting findings were that having a non-farming household head increased the probability of seeking first treatment from private clinics or hospitals. Fatalistic beliefs by the wife of the household head decreased the probability of first seeking government hospitals and secondly seeking private health services; whereas beliefs in spirits increased the probability of seeking self treatment, non-institutional practitioners and health centers as the first and second source of treatment. In addition, the "wealthier" the community, the more likely people were to seek government health services for the first treatment and private clinics or hospitals for the second source. Lastly, the more bus trips to and from the community, the more sick persons were likely to seek institutional practitioners as their second source.

Rational choice in selecting health services allows us to predict people's utilization behaviors with some degree of confidence. The central government should support the rational choice process by providing better and more comprehensive information and communication channels through health education programs for the general population, special target groups and through the mass media.

Specialized training programs for government health care providers should also be provided to reduce the existing communication problems and social distance between the providers and the consumers.

Additionally, government should pay more attention to the private sector health services since they are so popular and utilized by the rural people.

Vipavee Pijitbundarn. 1993 **Health Care Seeking Patterns and their Implication for Health Expenditure in Thailand.** Thesis Ph.D. (Population and Development) The National Institute of Development Administration. 204 pp. Dr.Anek Hirunraks, Chairman. (NID RA 410.9. T5 V815 T)

The objectives of this study are to estimate the number of persons ill and sources of medical care, and to identify factors influencing the probability of seeking medical care, as well as to estimate the amount of expenditure for the outpatients and inpatients in public and private hospitals. Secondary data were obtained from two major sources: the 1986 Health and Welfare Survey undertaken by the National Statistics Office and other national data from the National Economic and Social Development Board. Primary data about private hospitals was assembled from 7 hospitals, four of them in Bangkok, the others in Songkhla, Khon Kaen and Chiang Rai. The decision of the sick person among treatment options was utilized as a dependent variable and a number of demographic and socioeconomics factors were regressed on it. The relationship between the dependent variable and the predicting variables was examined by a binary logistic regressional method. The logit result shows that professionally by occupied persons, females, urban residents and persons from a larger size family tended to have a higher probability of receiving modern treatment. Availability and accessibility factors had a significantly strong relation to the probability of seeking treatment. For children at age group 0-4 no predictor variables except GPP were related significantly to the probability of seeking treatment. For the other age groups no demographic factors, except family size, were related significantly to the probability of seeking treatment. The number of persons ill increases up to the year 2015, resulting in an increase in the medical care expenditure both in the public and private sector. The government should encourage the private sector to take some of the burden of health care provision by improving and relaxing rules and regulations on the role of private health care institutions.

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