

Report on

AGE STRUCTURAL TRANSITIONS AND POLICY IMPLICATIONS

Phuket, Thailand

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Organised by The Asian MetaCentre
 for Population and Sustainable Analysis

 The IUSSP Committee
 on Age Structure and Public Policy

By

Kannan Navaneetham

The workshop on Age Structural Transition and Public Policy was jointly organized in Phuket (Thailand) during November 8-10, 2000 by the IUSSP committee on Age Structure and Public Policy and the Asian Population Network (APN) of the Asian MetaCentre, Centre for Advanced Studies, National University of Singapore. This is the first of the three scientific workshops by the IUSSP committee on Age Structure and Public Policy.

The workshop primarily focused on the age structural transition of the countries, which are in the later stages of the fertility transition that includes many Asian and Latin American countries. However, the nature, structure and process of age structural transition in Asian and Latin American countries were also compared with experiences of developed countries in several presentations. The workshop has brought together 20 participants from 12 countries. The participants were from Australia, Austria, Brazil, China, India, New Zealand, Philippines, Russia, Singapore, Thailand, Turkey, and United States. The workshop featured 16 papers that were presented in five different sessions. The five session includes:

- (1) Modeling Age Structural Transition;
- (2) Policy Domain;
- (3) Regional Perspectives I;
- (4) Transition, Policy and Methodology; and
- (5) Regional Perspectives II.

The sixth and the final session covered the synthesis of the discussions of the papers presented which includes the issues and major themes emerged from the workshop.

Three papers were presented in the first session, which were mainly focused on the conceptual, methodological issues and dynamics of age structural transition based on the parametric and or simulation model. The paper by Ian Pool was a conceptual paper which analysed the consequences of demographic transition on the age structural transition in a broader framework. It was highlighted in the paper that the past demographic research mainly focused on the population dynamics and were given less importance of its consequences on the structure except on the aging issues. This paper has shown that demographic transition causes the age structural transition and this age structural transition is leading to population waves and demographic turbulence which has implications for public policy. Highlighting the disregards of this issues in the International Conference on Population and Development 1994, this paper also suggested a birth cohort size as the unit of the analysis rather than the rate for studying the age structural transition. This paper

gave the solid foundation for the workshop and highlighted the need to study age structural transition as well as its influence on the social and economic policies.

The paper by Shripad Tuljapurkar stressed the policy consequences of changing age structure on governmental expenditure on education, health and pensions based on the parametric model. This paper has highlighted the consequences of age structural transition on the problem of resource allocation. To be specific, it was shown using parametric model that the shift in the age structure induced by the demographic transition influence the age pattern of expenditure and this would vary according to the nature and timing of the fertility transition, and therefore leading to major problem in resource allocation.

Wolfgang Lutz and Warren Sanderson introduced the concept of population balance that links the macro level concerns of population growth, aging, human capital formation and intergenerational equity. It was argued that length of better life and educational attainment should be considered an additional population dimension when we define the population balance. This paper illustrated the consequences of fertility trends and the associated echo effects on the starting sizes of cohorts in China using the new concept of Cohort Succession Ratio. Moreover, the paper highlighted the important dimension that if the educational transition precedes the fertility transition then the life time income of the recent cohort would be enhanced.

In the second session on Policy Domain, three papers have been presented. The first paper by Gavin Jones emphasized the significant of the human resource development as a prerequisite for economic development. Comparing the process of demographic transition and age structural transition of the countries in Asia that are success stories, it was argued that rapid fertility decline has positive implications for economic development and these countries used the opportunity of decline in the youth dependency ratio to improve the quality of education as well as health and nutrition of children.

The paper by Gultiano and Ulrich assessed the micro level implications of the growing number of youths and changing social characteristics in the rural agrarian communities in Philippines. Due to 'youth bulge' on the agricultural sectors, the women and better educated tend to migrate from the villages and those left behind in the rural areas have poor access to land and therefore highly dependent on the public forestland. This has created the generational conflict in the rural areas of the Philippines.

Peter Xenos and Midea Kabamalan highlighted the undergoing youth transition in the Asian countries, its consequences on the social transition that includes shift in age at marriage, rise in school enrolment, and changes in the labour force participation rates. This paper argued that youth transition associated with social transition has created a numerous problem among the youth and suggested a need for youth policy in the Asian countries.

The session on Regional Perspectives I has featured three papers covering Thailand, China and Latin America. The paper on Thailand by Napaporn Chayovan cautioned the rapid increase of aged population in the country likely to have unusual effect on its economy and society due to changing consumption pattern. It was highlighted that substantial proportions of elderly are living with insufficient income and majorities of them have had no savings. Gender and rural-urban inequalities among the elderly with regard to accessibility of economic resources were also persisted over time.

The paper by Yan Hao highlighted the impact of baby boom generations on the age structural transition in China. The baby boom in China resulted an irregular shape of age structure and this

will keep changing as baby boomers gradually move from school ages through working ages and then to retirement ages. This paper discussed the implications of this on the future social and economic development in China and recommended that government should take early steps to reform the existing public pension system in cities and consolidate the family support system in rural areas as the baby boomers enter the retirement ages in the next 10-20 years.

The important dimension of regional differences in age structural transition was brought out in a paper by Laura Wong while analyzing the aging and human development in Latin America. This paper pointed out that age structural changes in Latin American countries is due to dramatic fertility decline followed by the mortality decline and the countries of high, medium human development index in Latin America are currently undergoing a costly process of aging.

Three papers were presented in the session on Transition, Policy and Methodology. Nan Li demonstrated using the time-dependent population model that rapid fertility decline in the less developed and least developed countries would result in significant baby bust and this is in contrast with age structural transition experienced by the western countries. It was shown that this baby bust age structural transition in the developing countries would reduce the size of the working age population after 50 years and therefore will have significant effect on the labour productivity.

The paper by John Bryant used the macro simulation model to project the distribution of elderly women by number of living children after 25 years in South Korea and to study the impact of HIV/AIDS epidemic on the distribution of Thailand women aged 60+ by number of living children. This paper revealed that the proportion of older women with two or three living children is set to rise sharply over coming decades whereas the proportion with large number of living children is set to fall in South Korea. In addition, the AIDS epidemic in Thailand would increase the number of women of aged 60+ having only with few children.

Gustav Feichtinger's paper attempted to link the population dynamics model and inter-temporal optimization model to study cost-benefit analysis that has great potential in the application of employment, family planning and HIV incidence.

The session on Regional perspectives II has featured four papers. Radha Devi presented an age structural dynamics of Indian Population and pointed out that the age structure in India is fast changing and is crossing through the intermediate age structure. This paper also highlighted social and economic implications of the elderly in the future where majority of the workers are engaged in informal sector and their ability to save for old age is insufficient due to low standard of living of these people.

Turgary Unalan paper dealt with the role of age structural transition on the changing family structure in Turkey. Turkey is also in the process of age structural transition that has contributed to the growing proportion of one and two person household. The share of the families with couples living without children was increased during the decade 1990-2000 and is expected to increase in the future. A regional differential also exists with respect to family type in Turkey.

The role of age specific growth rates on studying population aging was presented by Subrata Lahiri and Srinivasan with the illustrations by China, Japan, South Korea and India. It was pointed out that the change in population aging seems relatively faster in South Korea compared to Japan and regarding sex differentials in population aging, it was relatively faster among females in China, Japan and South Korea. However, similar pattern was not found in the case of India.

Pirozkov presented a paper on the age structural dynamics of post soviet states namely Russia and Ukraine. The study indicated that number of elderly as well as their proportion would increase in Russia in the future. In addition, age structural dynamics and population aging for Russia and Ukraine were similar but their trajectories were irregular in both the countries.

The final session was devoted to synthesizing the paper presented in the workshop. While integrating all the presentations and discussions in the workshop, Ian pool pointed out that age structural transition is an integral part of the demographic transition and its trajectories would vary according to nature and process of demographic transition. Age structural transition has both opportunity and turbulence in its process. This has a significant implication on the social and economic development and therefore a challenge for the policy makers to respond to this process.

On theoretical themes, this workshop has identified that age structural transition has leading to structural effects and contextual effects and therefore need for theoretical elaboration to understand their linkages where age structure and institutions are undergoing changes. On methodological issues, this workshop raised very pertinent questions on measurement issues like what should be the unit of study and how to measure age structural transition and suggested a need for methodological development. On conceptual issues, the workshop argued that ageing of a population is a component of age structural transition and introduced the concepts of waves, turbulence and mutations. The workshop discussed how to define population momentum in the context of age structural transition and introduced the concept of demographic density and population balance for studying age structural transition. On the substantive theme, the workshop discussed the critical issue of integrating macro-meso-micro effects as well as generational effects in the process the age structural transition. The regional issues as well as rural-urban issues are important dimension in age structural transition as its effects are contextual. On the policy side, the workshop suggested for redefining population policy in response to population growth, age structural transition and ageing.

The papers are being revised for publication as an edited book by the end of 2001. Nevertheless, the papers presented in the workshop are available in the Asian MetaCentre website.

List of Participants	
Participants	Affiliation
John Bryant	Khon Kaen University, Thailand; and Otago University, New Zealand
Dakshayaniamma Radha Devi	International Institute for Population Sciences, India
Gavin Jones	Graduate Program in Demography, Research School of Social Sciences, Australian National University, Australia
John Knodel	University of Michigan, Population Studies Center, USA
Nan Li	Mountain View Research, USA and University of Victoria, Canada

Asian MetaCentre for Population and Sustainable Development Analysis

Wolfgang Lutz	Population Project, IIASA, Austria
Ian Pool	Population Studies Centre, University of Waikato, New Zealand
H. T. Abdullah Khan	Population Project, IIASA, Austria (Asian MetaCentre)
Yan Hao	Institute of Social Development, State Development Planning Commission, China
Kannan Navaneetham	Centre for Advanced Studies, National University of Singapore, Singapore (Asian MetaCentre)
Gustav Feichtinger	University of Technology, Vienna
Socorro A. Gultiano	Office of Population Studies, University of San Carlos, Philippines
Laura Rodriquez Wong	CEDEPLAR / Federal University of Minas Gerais, Brazil
Turgay Unalan	Institute of Population Studies, Hacettepe University, Turkey
Peter Xenos	Population and Health Studies, East-West Center, Hawaii
Shripad Tuljapurka	Mountain View Research, USA
Gaiane Safarova	Saint-Petersburg Institute for Economics and Mathematics, RAS, Russia
Napaporn Chayovan	College of Population Studies, Chulalongkorn University, Thailand
Vipan Prachuabmoh	College of Population Studies, Chulalongkorn University, Thailand
Subrata Lahiri	Department of Public Health & Mortality Studies, International Institute for Population Sciences, India