

The 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making

13 - 14 January 2022 | Via Zoom



Scan for more information



The 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making

13 January 2022 | 14 January 2022

The Centre for Family and Population Research (CFPR) at National University of Singapore (NUS) is planning to hold, online, the 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making on 13-14 January 2022, in collaboration with Population Division of the United Nations (UNPD), Asian Population Association (APA), Center for Healthy Aging and Development Study, National School of Development (CHADS/NSD) at Peking University (PKU), China Population and Development Research Centre (CPDRC) and Population Association of Singapore (PAS). The 1st International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making was held on May 9-11, 2019 in Beijing, jointly organized by CPDRC, CHADS/NSD at PKU, and CFPR at NUS.

Household projection is becoming a major research topic with high policy and business relevance. Population growth has slowed down in many countries around the world, with some already experiencing negative growth. In the meantime, households are undergoing major transformations, and numbers of households with various types are increasing quickly due to reduction of household size. Household is the basic unit for analysing energy consumption, the demands of housing, home-consumer goods, eldercare, many other services, and planning of public facilities. Traditional approaches to population projections often dismiss household information, and may thus end up with inaccurate projections of home-based energy demands, housing, home-consumer goods and services that inadvertently mislead policymakers and market analysts.

As a leading tool in the field of household projections, the ProFamy extended cohort-component method/software simultaneously projects households of various types and sizes, considering the sex and age and living arrangements distributions of all individual members of the population under study. So far, scholars from 27 countries, UNFPA and World Bank have downloaded and used ProFamy free software for their projects on household and living arrangement projections to understand topics such as future changes of household structure, old-age living arrangements and care needs/costs, trends of population aging and human capital, future demands of energy, housing, furniture, automobiles and their environmental implications.

In addition to the same basic input data that standard population projections require, the main task of data preparation in order to use the ProFamy extended cohort-component method/software for household and living arrangement projections, is to estimate the age-

sex-specific standard schedules of the occurrence/exposure (o/e) rates of marriage/union formation and dissolutions and the age-parity-specific o/e rates of marital and non-marital fertility. Estimations of these age-sex-specific o/e rates can be relatively easily done by employing recently developed ProFamy user-friendly and free R software DemoRates (www.profamy.com.cn).

This conference will present the cutting-edge development in the methods and applications of household and living arrangement projections, and will also provide valuable opportunity for interested participants to learn about the ProFamy and the newly developed R software DemoRates. Conference participation is open to the public and free of charge. Please visit the conference website for registration and more information:

<https://fass.nus.edu.sg/cfpr/2nd-international-conference-and-training-workshop>

Conference Organization Committee:

Associate Professor Feng Qiushi, Deputy Director of CFPR, NUS (Chair)

Prof Jean Yeung, Founding Director of CFPR, NUS & President of PAS

Dr. Joelle Fong, Assistant Professor, LKY School of Public Policy, NUS

Prof Zeng Yi, Founding Director, CHADS, NSD/PKU

Dr. Zhang Xuying, Deputy Director of CPDRC

Conference Secretary:

Ms. Lu Siyao (Email: lusiyao@nus.edu.sg)

Ms. Zuraihah Binte Mohamad (Email: zuraihah@nus.edu.sg)

Ms. Syed Rabia (Email: fassyed@nus.edu.sg)

Ms. Teo Hui Qing Amy (Email: fasthqa@nus.edu.sg)

The 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making

13 January 2022 | 14 January 2022

13 January 2022 (Thursday) – Singapore Time

09:00 – 09:30 OPENING CEREMONEY AND WELCOME REMARKS

Moderator:
Feng Qiushi:

[Jorge H. Bravo](#) | Chief, Population Policies and Development Branch, UNPD

[Bussaranwan Teerawichitchainan & Vincent Chua](#) | Co-director of CFPR, NUS

[Aris Ananta](#) | President of APA (2019-2021)

[Reiko Hayashi](#) | President of APA

[He Dan](#) | Director of CPDRC

[Jean W. Yeung](#) | Founding Director of CFPR, NUS & President of PAS

09:30 – 10:00 KEYNOTE- 1

Moderator:
Jean Yeung

ProFamy: Method Development and Application

[Zeng Yi](#) | Peking University and Duke University, Member of The World Academy of Sciences (TWAS) for the Advancement of Science in Developing Countries, Foreign Member of the Royal Netherlands Academy of Arts and Sciences

10:00 – 11:30 PANEL: Application of ProFamy

Moderator:
Joelle Fong

Household and Living Arrangement Projections for Canada 2011-2061

[Samuel Vézina](#) | Statistics Canada

Applying ProFamy at the Subnational Level: A Case of Southern California, USA

[Feng Qiushi](#) | NUS

Household and Living Arrangements Projections for Brazil and Five Great Regions

[Tirza Aidar & Gustavo Brusse](#) | University of Campinas

The Uses of ProFamy Model for Household Projection in Iran

[Milad Bagi](#) | Bu-Ali Sina University & [Mohammad Jalal Abbasi-Shavazi](#) | University of Tehran

Analysis of Marital Transition in the Philippines

[Jeofrey Abalos](#) | NUS

Trend and Composition of One-person Households in Hong Kong: 1986-2016

[Adam Chueng](#) | Hong Kong Baptist University

LUNCH BREAK

The 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making

13 January 2022 | 14 January 2022

13 January 2022 (Thursday) – Singapore Time

13:00 – 14:00 PANEL: Dynamics of Household and Living Arrangement in Asia I

Moderator:
Mu Zheng

Projection of elderly living arrangement in Vietnam
[Nguyen Duc Vinh](#) | Vietnam Academy of Social Sciences

Changes in household size and living arrangements during 1996 – 2020, Thailand
[Patama Vapattanawong](#) | Mahidol University

A Benchmarked Framework for Quality of Life of the Elderly: A Case Study of Pakistan
[Arif Jawaid](#) | Lahore Garrison University

Japan's Experiences and Challenges on Universal Health Coverage for Older Population: From International and Japanese Domestic Views.
[Liu Keyang](#) | Osaka University

14:05 – 15:20 PANEL: Dynamics of Household and Living Arrangement in Asia II

Moderator:
Kriti Vikram

Changing Families and Households in India
[Premchand Dommaraju](#) | Nanyang Technological University

Population Dynamics and Changes in Household and Living Arrangements in Pakistan
[Sabahat Hussain](#) | Population Council, Pakistan

Changes in Household and Living Arrangement in Nepal
[Jhabindra Bhandari](#) | The Joint United Nations Programme on HIV/AIDS (UNAIDS)

Patterns and Determinants of the Elderly Living Arrangements in Asia
[Parveen Kaur](#) | University Malaysia Sarawak

What If Reality Does Not Meet Desire? Living Arrangement and Depression among Older Adults in China
[Tong Yuying](#) | Chinese University of Hong Kong

15:30 – 16:20 KEYNOTE-2 (Netherland Time 8:30am)

Moderator:
Vincent Chua

Household and Living Arrangement Projections: Methodological Challenges and Achievements
[Frans Willekens](#) | University of Groningen & Member of the Royal Netherlands Academy of Arts and Sciences

16:30 – 17:20 KEYNOTE-3 (UK Time 8:30am)

Moderator:
Bussaranwan
Teerawichitchainan

Housing, Households and Living arrangements in the UK: Intergenerational Co-operation or Intergenerational Conflict?

[Emily Grundy & Jiawei Wu](#) | University of Essex & Fellow of British Academy

END OF THE FIRST DAY MEETING

The 2nd International Conference and Training Workshop on Household and Living Arrangement Projections for Informed Decision-Making

13 January 2022 | 14 January 2022

14 January 2022 (Friday) – Singapore Time

10:00 – 12:00 TRAINING: ProFamy Software Package for Household and Living Arrangement Projections

Moderator:
Feng Qiushi

Introduction of ProFamy Methodology and Software
[Wang Zhenglian](#) | ProFamy Development Team
Examples of Market and Policy Research Applications of ProFamy
[Feng Qiushi](#) | National University of Singapore
ProFamy: Function and Illustration
[Wang Zhenglian](#) | ProFamy Development Team
Question and Answer

13:30 – 15:30 TRAINING: User-Friendly R Software "DemoRates" as Part of ProFamy Package

Moderator:
Feng Qiushi

Introduction of DemoRates
[Wang Zhenglian](#) | ProFamy Development Team
Estimating o/e Rates of Marital/Union Statuses Transitions
[Lu Siyao](#) | ProFamy Development Team
Estimating o/e Rates of Fertility
[Mo Yan](#) | ProFamy Development Team
Estimating o/e Rates of Children Leaving Parental Home
[Yan Shiqi](#) | ProFamy Development Team
Estimating o/e Rates of Disability
[Zhang Xuxi](#) | ProFamy Development Team
Question and Answer

16:30 – 17:20 KEYNOTE-4 (UK Time 8:30am)

Moderator:
Joelle Fong

Household Projections: Methods & Applications
[Michael Murphy](#) | The London School of Economics and Political Science & Fellow of British Academy

17:20 – 17:30 CLOSING REMARKS

[Feng Qiushi](#) | Deputy Director of CFPR, NUS

END OF THE SECOND DAY MEETING

KEYNOTE-1

ProFamy: Method Development and Application

Zeng Yi

(Peking University and Duke University)

09:30 – 10:00

Significant utilities:

Household and living arrangement projections are useful in socioeconomic planning at national and regional levels, including older adults home-based care needs/costs, age-friendly housing, welfare programs, residential energy demands and its impacts on the air pollution and environment protections, family financing, etc. Marketing analyses of various home-based goods and services, such as consumer durables, appliances, furniture and vehicles, heavily rely on household and living arrangement projections.

A brief introduction of ProFamy innovative methods/software:

ProFamy methods and user-friendly software are multi-dimensional cohort-component approach that projects simultaneously households of various types/sizes, and sex, age and living arrangements distributions of all individual of the population under study, using the conventional and commonly available demographic data as input. Assessments validated the accuracy of projections using ProFamy model for the United States 50 states and DC from 1990 to 2000, and for the 31 provinces in China from 2000 to 2010, namely, the forecast errors, measured by discrepancies between the projected values and the 2000/2010 census observations, are all reasonably small.

Applications:

ProFamy methods/software have been used by various scholars and analysts in different fields, such as households, living arrangement projections and socioeconomic planning at national and regional levels in China, Singapore, U.S., Brazil, Mexico, Germany, Iran; implications of changes in households and living arrangements for housing industry, impacts of residential energy demands on air pollution and environment protections in China, U.S.A and Pakistan; household automobile demands in U.S.A and Austria; fertility policy analyses, retirement ages and pension forecasting in China; elderly care needs/costs projections in China and U.S.A; family financing in Sri Lanka and China; Up to Nov. 2021, scholars from 28 countries, UNFPA and World Bank downloaded and use ProFamy free software to do household and living arrangement projections for informed decision-making.

Bio of Speaker:

Yi Zeng is a tenured Professor of National School of Development and Honorary Director of Center for Healthy Aging and Development Studies at Peking University. He is also a tenured Professor at Center for Study of Aging and Human Development and Geriatric Division of School of Medicine at Duke University. He is a member of The World Academy of Sciences (TWAS) for the advancement of

science in developing countries, and a foreign member of Royal Netherlands Academy of Arts and Sciences. Up to Nov., 2021, he has 224 academic articles written in English published internationally, with 187 articles in peer-reviewed academic journals (the others are English book chapters). He has 164 academic articles written in Chinese published in China, with 121 articles in Chinese peer-reviewed academic journals (the others are Chinese book chapters). He published thirty-one academic books, including eleven books in English published by well-known Presses in U.S. and Europe and 20 books written in Chinese published by the famous Chinese Presses. He has written and submitted 51 policy reports which were submitted to the policy makers.

Yi Zeng has been awarded four international academic prizes and sixteen national academic prizes of China, such as: The International Union for Scientific Studies of Populations (IUSSP) 2021 Laureate which is awarded to one scholar annually worldwide, the national prizes for advancement of science and technology awarded by the State Sciences and Technology Commission of China, “Chinese Population Prize (Science and Technology)”, jointly awarded by nine ministries and seven national non-governmental associations. He received “National Medal of Outstanding Contributions” awarded by Central Government of China. According to official search report by Duke University Library based on Google Scholar database, up to Oct. 2021, his articles/books have been cited 16,896 times by other scholars’ publications, his h-index is 61 and i10-index is 192.

PANEL: Application of ProFamy

Household and Living Arrangement Projections for Canada 2011-2061

Samuel Vézina

(Statistics Canada)

10:00 – 11:30

Abstract:

The objective of this presentation is to provide an overview of household and living arrangement projections for Canada between 2011 and 2061 using ProFamy. These projections are based on the low-, medium-, and high-variant of the population projections recently published by Statistics Canada. Two additional assumptions for future family formation are used to generate five projection scenarios. Results show that, along with the total Canadian population, the number of households is projected to increase in the coming decades but at a lower growth rate. Specifically, under the reference scenario, the total Canadian population would increase from 34.3 million in 2011 to 47.9 million in 2061. The number of households in Canada could increase to between 17.3 million and 23.6 million by 2061, up from 13.3 million in 2011. Despite the projected population and household growth, the average household size is likely to slightly decrease in the future and reach 2.3 members in 2061. Projections also reveal that under current demographic trends, tomorrow's seniors will be less likely to live in couples and more likely to live alone than they are today. These results have important implications in terms of housing demands and affordability issues associated with this lifestyle.

Bio of Speaker:

Samuel Vézina is a Senior Analyst at Statistics Canada. His current research interests are on microsimulation population projections, immigration and ethnocultural diversity, and Indigenous population and households in Canada. He received his Ph.D. in Demography from INRS - Institut national de la recherche scientifique, Canada. His doctoral work involved the development of a microsimulation model to simultaneously project demographic, ethnocultural and socioeconomic characteristics of the Canadian population. Samuel was awarded the Michael-Smith scholarship to conduct a comparative research Canada-Austria at the Wittgenstein Centre for Demography and Global Human Capital in Vienna. He earned a Master's degree in Demography (University of Montreal) for his work on demographic aging in Latin America and the Caribbean. Before enrolling in his Ph.D. program, Samuel was a Research Associate at Mount Saint Vincent University in Halifax, Canada where he was responsible for generating projections of future home care needs in Canada.

PANEL: Application of ProFamy

Applying ProFamy at the Subnational Level: A Case of Southern California, USA

Feng Qiushi

(National University of Singapore)

10:00 – 11:30

Abstract:

This study is to illustrate the application of the ProFamy method at the county level by projecting household types, sizes, and elderly living arrangements for six counties of Southern California from 2010 to 2040, including Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Using this specific case, this study introduces the rationales and procedure of the county-level application of the ProFamy method. Our validation test for the ProFamy to project the 2010 population and households using the 2000 census data support the use of the ProFamy at the county level. In result, the ProFamy forecasts on the six counties of Southern California provide detailed information on the county-level trends of households and elderly living arrangement in this region, which are valuable information for the local planning agency but usually beyond the capacity of the traditional methods.

Bio of Speaker:

Feng Qiushi received the Ph.D. degree from Duke University and is currently Associate Professor in National University of Singapore (NUS). He is Deputy Head of Department of Sociology and Deputy Director of the Centre for Family and Population Research (CFPR) in NUS. His research fields include aging and health, population studies, and economic sociology. He is the Associate Editor of *Asian Population Studies*, and Co-editor of the Springer Book Series *Advance in Studies of Aging and Health*. He serves on the editorial board for *Journal of Gerontology: Social Sciences*, *Journal of Aging and Health*, *Research on Aging*, and *Aging and Health Research*. His research has been supported by the United Nations Population Fund (UNPF), Singapore Ministry of Education (MOE), and the National Medical Research Council (NMRC). He is currently leading the MOE Tier-2 project, *Lifelong Education for Aging Productively (LEAP)* in Singapore, and is also appointed as the PI in charge of social determinants of health for SG70, the large multidisciplinary project on population aging launched by NUS Yong Loo Lin School of Medicine.

PANEL: Application of ProFamy

Household and Living Arrangements Projections for Brazil and Five Great Regions

Tirza Aidar & Gustavo Brusse

(University of Campinas)

10:00 – 11:30

Abstract:

(TBA)

Bio of Speakers:

Prof. Dr. Tirza Aidar has a Masters in Statistics, and PhD in Demography at Campinas State University (UNICAMP) (1984, 1992 and 2002, respectively). Professor of Demography and Statistical Analysis at the Institute of Philosophy and the Humanities (IFCH/UNICAMP, Brazil) since 2007. Researcher at Centre for Population Studies Elza Berquó (NEPO/UNICAMP) since 1998. Coordinator of the Graduate in Demography Program (2010-2014) and Demography Department supervisor (2015-2017), both at the IFCH/UNICAMP. Research areas: health and mortality; social inequalities on health; and population and household projections.

PANEL: Application of ProFamy

The Uses of ProFamy Model for Household Projection in Iran

Milad Bagi¹ & Mohammad Jalal Abbasi-Shavazi²

(Bu-Ali Sina University & University of Tehran)

10:00 – 11:30

Abstract:

Iranian family size and structure has undergone major changes in recent decades though several aspects of the family system and its functions have continued. Despite increasing age at marriage and lowering fertility to below-replacement level, family is still regarded highly, and sexual relationship as well as ex-nuptial birth are forbidden within the society. Parental and children's mutual support has remained strong during the life course. However, with the expansion of education, rise of urbanization and subsequent fertility decline, household structure has shifted to a nuclear one. The age structural transition from a young - to an ageing population has also considerable implications for family and households. Using the ProFamy model, the main aim of this paper is to project the future size and patterns of households in Iran during 2016 and 2051.

The results show that the share of nuclear households will decrease in the future (to less than 50% by 2036), and the household size continues its declining trend from 3.3 in 2016 to 2.7 in 2051. Consequently, the share of solo- and single-parent households as well as married couples without children will rise. The age structure of households will also change towards an ageing population, and thus, there will be less potential support within family. However, the speed of change depends upon the norms and values of younger cohorts about family and their relationship with their aged parents. Government policies regarding housing, social and financial support for the elderly, and the degree of compliance with the demands of young cohorts have considerable implications for future household structure in Iran.

Bio of Speakers:

Milad Bagi is an Assistant Professor³ of Demography at Bu-Ali Sina University, Hamedan, Iran. He obtained his PhD degree in Demography (2019) from the University of Tehran. His research interests include household and family demography, living arrangements, fertility and reproductive health studies in Iran. His research results and books have been shared via several publications and presentations at national and international population conferences.

¹ Assistant Professor of Demography, Department of Social Sciences, Faculty of Economic and Social Sciences, Bu-Ali Sina University (Corresponding Author). Email: m.bagi@basu.ac.ir

² Professor of Demography, University of Tehran, Iran, and Honorary Professor, University of Melbourne, Australia. E-mail: mabbasi@ut.ac.ir

Mohammad Jalal Abbasi-Shavazi is Professor of Demography, University of Tehran (UT), Iran. He obtained his PhD from the Australian National University; and served as Head, Department of Demography, UT (2002-2006) and the Director of the National Institute of Population Research, Iran ((2014-2020). He has widely published on Iran's fertility transition, family change, population policies, Muslim demography, and forced and refugee migration; and is the author of prize-winning book on The Fertility Transition in Iran: Revolution and Reproduction. Abbasi-Shavazi is a founding member of the Asian Population Association, and served as its Vice-President (2009-2010) and President (2011-2012). He was the President of Population Association of Iran (PAI) (2018-2021), and is the IUSSP Council member (2018-2025). Abbasi is the Editor of PAI journal, and a member of Editorial Board of Asian Population Studies, International Migration, Iranian Population Studies, and Demographia. Abbasi-Shavazi is the Laureate of the 2011 United Nations Population Award.

PANEL: Application of ProFamy

Analysis of Marital Transition in the Philippines

Jeofrey Abalos

(National University of Singapore)

10:00 – 11:30

Abstract:

This study examines the trends in marital transition among women in the Philippines. It also investigates the differentials in transition to first marriage by education and place of residence. Data are drawn from the several rounds of the Philippine National Demographic and Health Survey (NDHS) that interviewed Filipino women of reproductive age (15-49 years). Data analyses are implemented using the newly developed R software DemoRates which is part of the ProFamy extended cohort-component method. Given the continuing socioeconomic changes in the Philippines, it is expected that the transition to first marriage in the Philippines will be delayed, particularly among the highly educated and urban residents.

Bio of Speaker:

Dr Jeofrey Bautista Abalos is a Postdoctoral Fellow at the National University of Singapore, Centre for Family and Population Research. He completed his PhD in Demography at the Australian National University.

PANEL: Application of ProFamy

Trend and Composition of One-person Households in Hong Kong: 1986-2016

Adam Chueng

(Hong Kong Baptist University)

10:00 – 11:30

Abstract:

There has been a global rise of one-person households in most societies in the last few decades. The increasing trend of one-person households has important implications, from the individual level (such as health and behavioral consequences) to the societal level (such as energy consumption and housing demand). One-person households are particularly prevalent in global cities. In the demographic literature, the rise of one-person households is often seen as a marker of the rise of individualism. However, the proportion of one-person households in Hong Kong remains relatively low compared to other societies, even though Hong Kong has a very high level of socioeconomic development, low fertility rate and marriage rate. This study examines the trend and demographic composition of one-person households between 1986 and 2016. To do this, I draw 5% micro-data from Hong Kong Population By-census 1986, 1996, 2006 and 2016. I first conduct cross-tabulation analyses to reveal the changing demographic compositions of one-person households. Then, I conduct some logistic regression and Oaxaca-Blinder decomposition analyses to examine how the changing demographic composition contributes to the trend of the one-person households. Lastly, I discuss the role of the housing market in Hong Kong in the trend of one-person households and its implications on future studies in projecting household structure.

Bio of Speaker:

Adam Ka-Lok Cheung is Assistant Professor in the Department of Sociology at Hong Kong Baptist University. His current research projects examine 1) the patterns and determinants of living in one-person households, 2) household labor division and domestic outsourcing, 3) life-course trajectories of gender role and family attitudes, 4) cross-border marriage and family dynamics in Asian societies. His research has appeared in *Journal of Marriage and Family*, *Journal of Family Issues*, *Current Sociology*, *Demographic Research*, *Population Research and Policy Review*, *Violence Against Women*, *Social Science Research* and other peer-reviewed journals. He also received an honorable mention of Early Stage Family Scholar Award from the Committee on Family Research of International Sociological Association.

PANEL: Dynamics of Household and Living Arrangement in Asia I

Projection of population and households living arrangement in Vietnam

Nguyen Duc Vinh

(Vietnam Academy of Social Sciences)

13:00 – 14:00

Abstract:

Over the past few decades, Vietnam has undergone a period of demographic transition with great changes in both quantity and structure of population. Households are undergoing major transformations. In this context, population and household projection has become increasingly important for research and planning. Previous projections of the population of Vietnam are limited, not including household information. Most of them were done by the GSO with traditional approaches after each population census. One of the main reasons is the lack of an advanced computer software for population and household projection. The development of the ProFamy software enabled us to make the first population and household projection in Vietnam. Based on the 2019 census data and some suitable assumptions, the projection of population (age group, gender) and household living arrangement in Vietnam to 2049 for the whole country and by six regions as well as urban-rural areas has been implemented. The results can be used for analyzing and planning many aspects of future demands of social services and public facilities. However, that is just an initial effort. More comprehensive projections should be done when more accurate and detailed input data become available.

Bio of Speaker:

Nguyen Duc Vinh is an associate professor of sociology and director of the Institute of Sociology, Vietnam Academy of Social Sciences. His research focuses on socio-demographic change, particularly the issues related to the differential and transition of fertility, mortality, migration, health, and population aging in Vietnam. He has been involved in many research projects, and recently led a research project on replacement fertility and another on adolescent mental health in Vietnam. Many of his works have been published in domestic or international academic journals.

PANEL: Dynamics of Household and Living Arrangement in Asia I

Changes in household size and living arrangements during 1996 – 2020, Thailand

Patama Vapattanawong

(Mahidol University)

13:00 – 14:00

Abstract:

The changes in household structure and living arrangements are one concerned issue of policymakers in Thailand. The analysis from 1996, 2006, 2010, 2015, and 2020 Household Socio-economic Survey (HSES) was performed to understand these changes after being a below-replacement fertility country. The HSES is the national representative survey conducted by the National Statistical Office of Thailand. This survey covered around fifty thousand household samples in municipal and non-municipal areas in every province.

In this study, the unit of analysis was household. Regarding household structure, the household size, and type of households, older and non-older person households, were focused. The older person household was defined as a household where at least one person aged 60 years and over lived. A household without any person aged 60 years or over was defined as a non-older person household. In terms of the living arrangements, they were classified by three criteria; type of households, age group, and the older person's household head status. Accordingly, twelve types of living arrangements could be grouped.

The results showed that the average household size had been reducing over time from 3.6 persons/household in 1996 to be 2.8 in 2020. Comparing among different household sizes, the proportion of one- and two-person households had been increasing (from 9% in 1996 to 19% in 2020 and 16% in 1996 to 28% in 2020, respectively) while the proportion of more than two-person households had been declining from 75% to 52% in the same periods. At the same time, the older person households had been increasing from 29% in 1996 to 40% in 2020. Focusing on changes in living arrangements, the most prevalent in 1996 were non-older person households in which the working and young age living together (45% of total households). Though it was still highest in 2020, its proportion was reduced to 23%. In addition, a dramatic increase in living arrangements in these periods was found among the older person household and living alone (from 0.7% to 6%), the older person household and older persons living together (from 0.5% to 5%), and the older person household with an older person as head living with working-age (from 6% to 15%). These findings are essential to the social policy now and then.

Bio of Speaker:

Patama Vapattanawong is among the few demographers in Thailand. She received her B.Sc. in Nursing and Midwifery from Mahidol University, Thailand, in 1983; M.Sc. in Community Medicine

from Chulalongkorn University, Thailand, in 1993; and Ph.D. in Demography from Mahidol University, Thailand, in 2002. She is now a Professor at the Institute for Population and Social Research, Mahidol University, teaching many courses related to Demography such as Technique of Demographic Analysis; Indirect Technique for Demographic Estimation; Population, Health, and Community Health Services Development. She is keen on using large datasets to study demographic transition in Thailand and other related issues. Her research interests are population health and mortality, demography of aging, and population projection. Now she is the president of the Thai Population Association (TPA), the vice president of the Thai Association of Population and Social Researchers (TAPSR), and a member of the International Union for the Scientific Study of Population (IUSSP).

A Benchmarked Framework for Quality of Life of the Elderly: A Case Study of Pakistan

Arif Jawaid

(Lahore Garrison University)

13:00 – 14:00

Abstract:

Quality of Life of the elderly population in Pakistan is a neglected area. Quality of Life encompasses variables from governance to the end-users. There is an increasing concern for identifying the determinants of quality of life of elderly in Pakistan. Hence, this paper pinpoints the variables of quality of life of the elderly in Pakistan and will benchmark these into an original model. The research utilized document analysis approach focusing on researches and working papers. The review identified range of quality of life variables among older people. The findings reveal that the elderly people are very vulnerable to poor health and physical care. There is no proper mechanism to ensure their quality of life with very few government and nongovernmental agencies. This situation demands for a proper system of benchmarking on the quality of life for the ageing population to safeguard their vulnerabilities. The results also indicated that there are significant gaps from governance to end-users (elderly). Some of them are average monthly family income, medicine needs, property ownership and many others that affect the elderly in Pakistan. The research emphasizes the need to explore more factors influencing the quality of life of the elderly in Pakistan. It is recommended that to enhance the quality of life of these elderly work should be done on social and economic uplift.

Bio of Speaker:

Professor Arif is the Director Academics, Lahore Garrison University, Pakistan. He also has been Chairman of English Department in the same university since 2017. He held positions of Head of Teaching and Learning Centre and Head of Research and Development Centre at Linton University College, Malaysia. He has over 40 years of working experience in various professional engagements, which include leading, researching, teaching, training, developing curriculum and consulting. Prof. Arif has been awarded a distinction in PhD in Education/TESOL from the University of Wolverhampton (UK). His wide range of expertise has helped institutions in many ways especially developing curriculum for faculty development programs. His potentials are developing curriculum, promoting research methodologies and conducting teacher training courses at higher education level. He carried out Outcome Based Education training for lecturers, led many research projects and published many papers and books. He is also an active research consultant and project collaborator University Malaysia Sarawak. He has the honour of developing strategic plan for Linton University College, Malaysia and Lahore Garrison University.

PANEL: Dynamics of Household and Living Arrangement in Asia I

Japan's Experiences and Challenges on Universal Health Coverage for Older Population: From International and Japanese Domestic Views

Liu Keyang

(Osaka University)

13:00 – 14:00

Abstract:

In order to address global challenges and enhance international cooperation, the United Nations established 17 Sustainable Development Goals (SDGs) to be achieved by 2030. Goal 3 relates to the health field, “Ensuring healthy living and promoting welfare for all people of all ages” and target 3.8 specifies universal health coverage (UHC). Provision of quality essential health-care services is an essential component for achieving Target 3.8 and in an era of global ageing, especially in highly aged societies such as Japan, securing access to medical and essential health-care services for older people, is fundamental to achieving UHC and the SDGs. It is important to understand and summarize the factors that affect equity of access to health care for older populations. Japan is known as one of the pioneering countries that have achieved UHC in the past 60 years and is seen by the international community as a country that can provide knowledge and experience of how to achieve and sustain UHC when facing the new challenges of an increasingly aged population. Literature published only in Japanese domestic healthcare databases is not easily accessible to international researchers, and review of Japanese literature itself has been limited. So, systematically map literature in Japanese domestic healthcare databases may give a full picture on this topic, describe wider evidence of comprehensive perceptions for international researchers. We identified relevant articles, summarized the data and constructed a framework, listing the general concepts of medical services access specifically for the older population.

Bio of Speaker:

Dr. Keyang Liu, assistant professor in Osaka University Graduate School of Medicine, joint assistant professor in Peking University Health Science Center. Councilor of Japan Epidemiological Association.

Special appointed assistant professor in Campus Asia project (Program for raising research leaders in medicine and public health to solve global health problems in China, Japan, Korea, and ASEAN countries, from 2016).

He assisted to manage several Japanese national level cohort studies: assist to manage academic research on Circulatory Risk in Communities Study, The Japan Collaborative Cohort Study for Evaluation of Cancer Risk, and involved in Japan Gerontological Evaluation Study, Japan Public Health Center-based Prospective Study.

PANEL: Dynamics of Household and Living Arrangement in Asia II

Changing Families and Households in India

Premchand Dommaraju

(Nanyang Technological University)

14:05-15:20

Abstract:

Demographic changes in India are reshaping families and households. I begin by charting the demographic shifts by highlighting the key changes in marriage patterns, post-marital residence, fertility, migration, and life expectancy. This will be followed by an examination of how these demographic shifts are impacting family structures and living arrangements. I'll present the impact both at the level of family and the individual. At the family level, changes in household structure will be presented using a comprehensive typology of household types. At the individual level, the focus will be on changes over time and patterns across age groups. This could include, for instance, looking at individuals living with their mother and how this has changed over time and varies across age groups. Besides examining changes at the national level, I'll pay special attention to regional diversity in demographic, family, household patterns in India. I conclude by discussing the implications of family changes for the society and individuals.

Bio of Speaker:

Premchand Dommaraju is an associate professor of sociology and director of the MSc in Applied Gerontology programme at Nanyang Technological University, Singapore. His research focuses on socio-demographic issues related to marriage, families, and households, and ageing in Southeast and South Asia focusing on the common demographic issues faced by the diverse societies in the two regions. His works have appeared in leading social and demographic journals including *Population and Development Review*, *Demographic Research*, *Population*, and *Population Studies*.

Population Dynamics and Changes in Household and Living Arrangements in Pakistan

Sabahat Hussain

(Population Council, Pakistan)

14:05-15:20

Abstract:

Pakistan is the 5th most populous country in the world. In 2022, the total population of Pakistan is over 220 million, of which over 130 million are working age people. The population is projected to increase rapidly over the next years. Pakistan has a very young population however, according to the projections, the proportion of older people by the year 2080, will surpass the proportion of young age population (age 0-14) (Figure 1). This rapid population increase will automatically generate huge demands for more homes and living arrangements. Therefore, population policies in Pakistan need to consider future prospects of housing and living arrangements to avoid unplanned urbanization, poor socio-economic and health conditions, and environmental degradations. The population pyramids below (Figure 2 and figure 3) show how the age sex composition in Pakistan is changing followed by high fertility rates. While experiencing such rapid population trends, if the needs for housing and living arrangements are ignored, the government of Pakistan will face huge socio-economic challenges. This research will show the population dynamics in Pakistan and the situation of household and living arrangements, i.e., majority of households in Pakistan have an average household size of 6 and above, whereas 14 percent of households have an average household size of 10 and above (figure 4&5). The further statistics on “number of people per room” which show poor situation, i.e., 3.67 rooms per household with a size of 10 and above members (Census 2017), again reflects poor household and living arrangements in Pakistan.

Bio of Speaker:

Sabahat Hussain is a demographer working as a “Program Officer” at the Population Council’s Pakistan office. He has done his masters in “Global Ageing and Policy” from the University of Southampton, and masters in “Demography” and MPhil in “Health Economics” from the Pakistan Institute of Development Economics, Islamabad, Pakistan. As a first author and co-author, Mr. Hussain has contributed to around 18 publications, including journal articles, research reports, monographs, briefs, and working papers. His major research areas are Fertility, Migration, Urbanization, Ageing, Youth, Family Planning, reproductive health, and also linking these areas with Climate Change. Mr. Hussain is a member of various national and international research platforms such as “Population Association of Pakistan”, “IUSSP”, IOM Global Migration Data Network, etc. He has presented his research in various national and international research conferences and workshops.

Changes in Household and Living Arrangement in Nepal

Jhabindra Bhandari⁴

(The Joint United Nations Programme on HIV/AIDS (UNAIDS))

14:05-15:20

Abstract:

In the context of federal governance, Nepal is experiencing very rapid demographic changes in the last few decades as a result of transition from a high-mortality, high-fertility society to a low-mortality, low-fertility society within a relatively short span of time. More importantly, demographic changes have profound impacts on the society, economy, development. Since 1980 Nepal has seen significant declines in its total fertility rate, crude death rates, and population growth, alongside significant improvements in life expectancy.

The government of Nepal conducts periodic household survey to provide estimates for households and living arrangements. According to annual household survey (2015/16), 84.7% of the households are currently reported to live in their own houses. In rural, 95% live in their own houses and in urban 71%. The proportion of population living in their own house has decreased in this survey from 2014/15 when it was 87.2%. Currently, around 13% of the households reside in rented houses. It is interesting to observe that 98.4% households of the poorest quintile live in their own house whereas 28.7% of the richest quintile group live in rented house. In 2014/15 in the poorest quintile, 97.2% were living in their own house and 25.0% of the richest quintile group were living in rented house. Now in Nepal, 4.4 rooms on average is available for the household.

The houses in Nepal are mostly having outer walls that is mud bonded bricks/stone (37.6%) which is predominant in rural area (49.3% in rural and 20.4% in urban). It is interesting to find that the percent of outer wall of cement bonded brick/stone houses has increased from 33.4% in 2014/15 to 36.6 in 2015/16.

The changing patterns of households and living arrangements have profound impacts on socio-economic development of individuals, families and communities. The data around living arrangements of specific populations such as children and older people need to be further analyzed for policy interventions in order to enhance their health and well-being at large.

⁴Consultant, UNAIDS Regional Support Team for Asia and the Pacific

Bio of Speaker:

Dr. Jhabindra Bhandari from Nepal is a senior research fellow in global health and health systems in Euclid University and presently consultant for UNAIDS Regional Support Team for Asia and the Pacific, Bangkok, Thailand. He is immediate past president of Nepal Participatory Action Network – a civil society network working in the area of older people’s rights and health in Nepal. He has more than twenty years of professional experiences in population health and development in Nepal and Asia Pacific. He has worked for UNDP, UNFPA, UNICEF, UNESCO, WFP, IOM, HelpAge International and several other international and civil society organizations in a number of national and regional initiatives around population health, ageing, migration and HIV. His experiences, expertise and interest include population projections, population census, ageing populations, health systems development, HIV and family planning, surveys of households and living arrangements in rural and urban areas.

PANEL: Dynamics of Household and Living Arrangement in Asia II

Patterns and Determinants of the Elderly Living Arrangements in Asia

Parveen Kaur

(University Malaysia Sarawak)

14:05-15:20

Abstract:

Recent predominant trend on elderly living arrangements in Asia reveals a new norm of elderly living alone. The diminishing joint family and extended family systems have resulted in this worrying phenomenon. The rampant development in capitalism and industrialisation have intensely negotiated the security of traditional family values. This paper will study the patterns and determinants of preferred living arrangements of the Asian elderlies. In-depth secondary sources were sourced from journal articles from the years 2010 to 2020. These studies revealed that while the values of the Asian culture are for the elderly to live with family members and to be cared for by them, unfortunately these values are disappearing with time. There is an increasing significance of determinants causing such a trend, such as priorities on financial, privacy, freedom, housing, health of the elderly, the rise of elderly abuse, etc., that have forced the elderly to be displaced from their families and living alone. This paper examines the role of society in providing a better place for the elderlies living alone and finally the policies recommended to the Governments in financial, health, housing, etc. towards better living conditions for these displaced vulnerable elderlies.

Bio of Speaker:

Associate Professor Dr Parveen Kaur is a Lecturer at the Department of Anthropology and Sociology, Faculty of Social Sciences and Humanities, University Malaysia Sarawak in East Malaysia. She has over 25 years of academic experience which includes leading, researching, teaching, training, supervising and consulting. Dr Parveen holds a Doctor of Philosophy in Sociology and a Master of Philosophy in Human Development from University Malaya, Kuala Lumpur. She is a recipient of the prestigious scholarship Ryoichi Sasakawa Young Leaders Fellowship Fund Japan. Her wide range of expertise in Sociology encompasses gender and women studies specifically in disability, elderly, human trafficking, transgender, LGBT, employment, marriage, health, education, power, poverty, language, climate change, culture, religion, sexuality, violence, deviance, and information and communications technology etc. She served as the UNDP gender consultant for Malaysia. She is also a Certified Trainer by Malaysian Trainers' Board of Human Resource Development. She has been the project leader for various national and international research grants. Her vast research and consultancy projects especially involve marginalized communities.

What If Reality Does Not Meet Desire? Living Arrangement and Depression among Older Adults in China

Tong Yuying

(Chinese University of Hong Kong)

14:05-15:20

Abstract:

Intergenerational coresidence is a mixed blessing with both benefits and costs, and the individual preference may affect whether older adults benefit from the proximity with children. Using China Health and Retirement Longitudinal Studies (CHARLS) data, this study innovatively uses vignettes to measure the marriage-based living arrangement preference in later life, and clarifies how the association between the actual living arrangement and older adults' depression could be confounded and moderated by individual living arrangement preference. Using inverse-probability weighting (IPW) to address the pre-treatment bias, our results show that compared with coresidence, older adults living close by and living farther do not report higher level of depression. Compared with older adults living with children as desire, older adults not living as desire report higher level of depression. Meanwhile, among older adults living as desire, older adults living close by report higher level of depression whereas older adults living farther do not report significant higher level of depression compared with older adults living with children. The study shows evidence that the benefit of co-residence will be discounted if this living arrangement is not older adults' desire.

Bio of Speaker:

Yuying Tong received her PhD degree from the University of North Carolina at Chapel Hill and now is a professor in the department of sociology at the Chinese University of Hong Kong. She is also the co-director of the Center for Chinese Family at the Chinese University of Hong Kong. Her main research interests cross areas of migration and immigration, gender, family and life course as well as population well-being. She has published dozens of articles in the mainstream sociology and population journals such as American Journal of Sociology, Social Forces, Journal of Marriage and Marriage, Social Science Research and Demography etc.

KEYNOTE-2

Household and living arrangement projections: methodological challenges and achievements

Frans Willekens

(University of Groningen)

15:30 – 16:20

Abstract:

The presentation starts with major conceptual issues in the study of households. A household is a group or network of individuals who share housing (they have the same address and a coresidential arrangement) and at least some resources (e.g. food, economic and social support). Household members are somehow related but there exists a great diversity of personal relationships. They define household types.

Household models need to accommodate the diversity of household types. Five stages may be distinguished in the history of household modelling: (a) models based on headship rates, (b) multistate models with the household as the unit of analysis, (c) multistate models with the individual as the unit of analysis, with individuals grouped into cohorts, (d) multistate models with the individual as the unit of analysis that account for individual variability and individual life histories, and finally (e) multistate models with the individual as the unit of analysis that account for individual variability and individual life histories, and that account also for individual agency. Models in (e) are known as actor-based or agent-based models.

A major challenge is the estimation of model parameters (transition probabilities or rates) from empirical data. Several options are discussed. In the models developed in stage (e), transition probabilities/rates are replaced by behavioural rules. Major challenge here are (i) to derive transition rules from theories of action in the behavioural and social sciences, in particular actions related to household (and family) formation, dissolution, expansion and contraction, and (ii) to operationalize the rules derived from theories in demographic household projection models.

Bio of Speaker:

Frans Willekens is Honorary Fellow of Netherlands Interdisciplinary Demographic Institute (NIDI). He is Professor Emeritus, University of Groningen, former director of NIDI, former Chief Research Coordinator at the Max Planck Institute for Demographic Research, and former Chair of the European Doctoral School of Demography (2005-2020). He is a member of the Royal Netherlands Academy of Arts and Sciences (KNAW), a recipient of The EAPS Award for Population Studies (2014) of the European Association for Population Studies and The Mindel Sheps Award (2020) of the Population Association of America. In 2018, the Warsaw School of Economics awarded him a honorary doctorate. He has a PhD in urban systems engineering (1976). His main research interests are (a) international migration and (b) agent-based modelling and simulation. From 2015 to 2018,

he coordinated the international panel on Microsimulation and Agent-based Modelling, initiated by the International Union for the Scientific Study of Population (IUSSP).

KEYNOTE-3

Housing, Households and Living arrangements in the UK: Intergenerational Co-operation or Intergenerational Conflict?

Emily Grundy and Jiawei Wu

(University of Essex & Fellow of British Academy)

16:30-17:20

Abstract:

How a population is sorted into households has major implications for the consumption of a wide range of goods and services and household projections are recognised as of key importance in planning these services and infrastructure, including housing. This association is bi-directional as the supply and cost of housing and services which may be provided inside or outside the homes determines abilities to meet preferences for household arrangements. Over the past half century, the UK has, like many industrialised countries, seen changes in patterns of family formation and dissolution, such as increases in divorce and the residential independence of older people, which have influenced household patterns and housing demand. Unlike some other European countries, the UK has also experienced continuous population growth. Additionally, there have been major changes in policies relating to housing tenure and rent controls and large real increases in housing costs. Currently there is a perceived housing crisis which has fuelled debate about Inequalities between socio-economic groups and between generations. In this presentation we will consider trends in household patterns and intergenerational co-residence in the UK and the impacts of these on the well-being of younger and older generations, and for household projections.

Bio of Speakers:

Emily Grundy is Professor of Population Science at the Institute for Social & Economic Research (ISER) at the University of Essex, UK. She has held previous positions at the London School of Economics, London School of Hygiene & Tropical Medicine, the University of Cambridge, and King's College London. Emily's main interests include life-course influences on health at older ages, intergenerational exchanges, and household and family patterns, especially in relation to health. She has published widely on these topics and secured extensive research funding, including an ERC Advanced Grant. Emily is Fellow of the British Academy and the Academy of Social Sciences. (<https://orcid.org/0000-0002-9633-1116>)

Jiawei Wu is a postdoctoral researcher at ISER. He recently completed his PhD at King's College London on the topic of the transition to grandparenthood, grandchild care and grandparents' health in China.

Household Projections: Methods & Applications

Michael Murphy

(London School of Economics and Political Science)

16:30-17:20 [14 January 2022]

Abstract:

We discuss the reasons why household analysis is important for policy and planning purposes as well as influencing many aspects of life. The history of household analysis, including changing definitions is discussed.

The traditional method used for making household projections, the headship rate method is summarised and the limitations of this approach are considered. We discuss the advantages of using demographically-informed multistate models, emphasising comparisons with the standard cohort component method for making overall projections.

An example of how household projections may be used to estimate the effect of future household trends on the well-being at the population-level among older people in Western Europe is presented.

Bio of Speaker:

Michael Murphy is Emeritus Professor of Demography at the London School of Economics and Political Science and Visiting International Professor at the University of Helsinki. He is a Fellow of the British Academy, the United Kingdom's national academy for the humanities and the social sciences and Chairs the Sociology, Demography and Social Statistics Section. He has acted as an adviser to UK and US Governments, and international organisations, such as EU, UN and OECD and Chaired the Scientific Review Board of the Max Planck Institute for Demographic Research. His current research areas include population projections, demographic modelling of ageing and mortality trends, social care and living arrangements and well-being of older people.