DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS (DESA)
AND
ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP)

Asia-Pacific Workshop on Measuring Population Ageing and Assessing its Economic and Fiscal Consequences
24-27 (a.m.) June 2019
Bangkok, Thailand

REPORT OF THE ASIA-PACIFIC WORKSHOP ON MEASURING POPULATION AGEING AND ASSESSING ITS ECONOMIC AND FISCAL CONSEQUENCES

Contents

I. Organization

A. Background

1. The Workshop was organized by the Population Division of the United Nations Department of Economic and Social Affairs (DESA) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and was a component of capacity development as envisioned by the Madrid International Plan of Action on Ageing (MIPAA) and the regional outcome document of the Third Review and Appraisal of the Madrid International Plan of Action on Ageing (ESCAP/74/20). It was held at the United Nations Conference Centre in Bangkok, Thailand from 24 to 27 (a.m.) June 2019. For more information on the Workshop, including its presentations, please see: https://www.unescap.org/events/workshop-measuring-population-ageing-and-assessing-its-economic-and-fiscal-consequences or https://www.un.org/en/development/desa/population/events/other/34/index.asp.

B. Objective of the Meeting

2. The purpose of the Workshop was to introduce:

a) New measures of population ageing that reflect the emerging demographic landscape of the Asian and Pacific region, and
b) Innovative methods for assessing the medium- and long-run economic and fiscal impacts of population ageing.

C. Attendance

3. The Workshop was attended by government officials and national professionals involved in envisioning national futures via population, economic, fiscal or budgetary forecasts. Representatives of United Nations entities, Bangkok-based universities and civil society also attended. The list of participants is attached as an Annex.

II. Context

4. Population ageing is one of the most important forces shaping social and economic development in Asia and the Pacific, yet it is not always explicitly included in policy discussions. Because the influence of population change is difficult to discern in the short-run, a myopic policy focus inevitably results in delays in addressing mounting challenges associated with, for example, population ageing, the effects of climate change on livelihoods and well-being of people, the increase in non-communicable disease and the effects of environmental degradation on small island, developing states.

5. Achievement of an inclusive economic development that leaves no one behind requires investment in access to health care and education, and good planning. Because achieving the Sustainable Development Goals (SDGs) by 2030 also means ensuring their sustainability beyond 2030, training in the use of long-run population, economic and fiscal forecasts is an important component of capacity development, as envisioned by MIPAA and the Asia-Pacific review document of MIPAA.

6. The ability of policymakers and analysts in national statistical offices; ministries in the planning, economic and social sectors; and research institutions of many developing countries to undertake policy analysis on population ageing and development has been hampered by a lack of methodological frameworks to assess the socioeconomic implications of changing age structures on economic well-being, economic growth, and the sustainability of support mechanisms. This obstacle can be addressed by using medium- and long-run economic and fiscal forecast models based on population projections, age-disaggregated data from National Transfer Accounts (NTAs) and empirically-based observations of relationships between economic development and the roles played by individuals, families, communities and the state in providing support for children and older persons.

7. Integrating population and development strategies into national planning and decision-making is a key objective of the Programme of Action of the International Conference on Population and Development (ICPD) and an important area of work of DESA) and ESCAP in support of Member States.

III. Proceedings of the Meeting

Monday, 24 June 2019

A. Item 1: Welcome and course introduction

8. Dr. Srinivas Tata, Director, Social Development Division, ESCAP made opening remarks highlighting population ageing as a force shaping the development outcomes in the Asia and Pacific region for the coming decades. Forecasts based on population projections were powerful tools to access adequate preparation for the future. The Workshop brought together participants from the technical as well as the policy side, thus providing the bridge between research and policy formulation. This would help both DESA and ESCAP to support member States in their efforts to formulate and implement policies that most effectively addressed population ageing, including from economic and fiscal planning perspectives. Dr. Tata also expressed interest in learning more about the trends and developments in the countries represented at the Workshop in this regard, and he noted that there would be opportunities for participants to present and actively participate throughout the Workshop.

9. Mr. Tim Miller, Global Adviser on Population and Development, Population Division, DESA emphasized how the changing trends in population age structures,

from child abundant to elderly abundant, were transforming economies and societies. He stressed the important implications of these changes, in particular on the impacts of an ageing population on economic growth and sustainable development. Statistical problems included limited and incoherent economic data concerning changing age structures because economic statistics and data collection systems were designed in the last century to solve other issues. The methodological framework of NTAs, which measured economic relationships between age groups within a national economy, addressed the problem of lack of data regarding shifting trends in age structures.

10. Mr. Miller described the two new features added to NTAs: 1) the measure of national economic activity by age, and 2) the measure of the intergenerational flow of resources through institutions such as the market, the state and families. He also shared a graph showing the economic life cycle with two periods of dependency in which individuals consumed more than they produced. These periods of dependency, both early and late in life, were financed by institutions such as the family, the state, yhr community and the market.

11. The NTA method had the following five strengths: 1) it offered an integral vision of government action and of economic actors, 2) it was evidence-based, 3) it had a long-run focus that enabled seeing adaptations, 4) it provided a flexible framework – distributional national accounts (age, sex and educational level) and 5) it was backed by an NTA network. Mr. Miller subsequently opened the floor for participants to briefly introduce themselves.

B. Item 2: Population ageing in Asia-Pacific: challenges and opportunities

12. Ms. Sabine Henning, Chief, Sustainable Demographic Transition Section, Social Development Division, ESCAP provided an overview of the trends in population ageing in Asia and the Pacific. Population ageing was a success story of development presenting challenges and opportunities for countries. Due to rapid declines in fertility, the regional transition from "ageing"[1] to "aged" societies[2] was happening quickly, and governments where this was occurring were forced to act and take advantage of the window of opportunity for economic development. However, many countries in Asia and the Pacific were not yet prepared to respond to the opportunity. Moreover, healthy life expectancy had increased less than total life expectancy for many countries in the world and in Asia and the Pacific, and older persons often spent up to ten years living with impairments. The gender dimension of population ageing and the policy implications and challenges of a greater share of women amongst older populations had to be addressed in any national planning activity focusing on the needs of older persons.

[1] The term population ageing refers to an increasing share of the older population in respect to the younger population.
[2] The population structure of a country is defined as "aged" if the percentage of the population aged 65 years or older is at least 14 per cent.

13. MIPAA provided the global guiding document on population ageing, and it complemented the 2030 Agenda for Sustainable Development. The 2030 Agenda was a comprehensive agenda with a focus on leaving no one behind, including older persons. Many of the SDGs addressed the situation of older persons. Since adopting MIPAA, there had been three global and regional reviews, and it was up to member States to decide on the time and location for the next global and regional reviews. The ESCAP Social Development Division was supporting member States in reviewing and appraising MIPAA. The Division was also working on the use of Information and Communication Technologies (ICTs) for improving access of older persons to health care, developing a dashboard of indicators on the situation of older persons in Asia and the Pacific, supporting capacity-development on pensions and data, and assisting member States in defining and revising policies and programmes focused on older persons. She concluded by noting that demography often focused on looking into the future, but that one had to be aware of the echoes of the past, often referred to as "momentum" in affecting current and future population change.

C. Item 3: "Future-proofing" sustainable development: The need for projections

14. Mr. Miller introduced the objectives of the Workshop, which included finding new methods/models for measuring the impacts of population ageing. By the end of the Workshop each participant was expected to be able to assess population ageing in her/his own country with new measures of ageing, such as prospective age, thanatological age and the economic dependency ratio.

15. Mr. Miller and Ms. Mun Sim Lai, Population Affairs Officer, Population Division, DESA gave a joint presentation on "future-proofing" of sustainable development. Future-proofing, as the process of anticipating the future and developing methods of minimizing the effects of shocks and stresses of future events, was required in order to not compromise the ability of future generations to cope with such events. Population change was a slow but cumulative process that led to dramatic demographic transformations. Mr. Miller and Ms. Lai provided an example of slow versus rapid processes and explained the annual change of economic versus demographic indicators, to conclude that economic processes were often short-lived with many ups and downs, whereas population change occurred gradually with fewer annual "shocks", yet with long-run echo effects. The median age of the world population over the long-term was changing dramatically and it was important to have long-run population projections, such as those shown in the United States of America Social Security Administration's report, with a 75-year time horizon, and Australia's Intergenerational Report, which presented a forecast over a 40-year time horizon.

16. Mr. Miller then talked about medium- and long-run population forecasts and the three different ways to use population forecasts to project future outcomes: variants approach, integrated scenario approach and probabilistic approach. The variants approach consisted of identifying one variable and changing that to observe

its impact on population forecasts. The integrated scenario required changing more than one variable (two or three) to study different forecasts. Finally, in the probabilistic approach, thousands of projections were produced, and attention focused on the distribution of the projections rather than on single projections. The core idea of the probabilistic approach was to use the variability observed in the past as the best guide to project the future. Mr. Miller then shared the probabilistic forecasts of female life expectancy for Thailand as an example of envisioning alternative futures and the likelihood of these scenarios based on past trends.

D. Item 4: New demographic measures of ageing

17. Mr. Miller and Ms. Lai introduced the traditional demographic dependency ratios: young-age dependency ratio, old-age dependency ratio and total dependency ratio. They then explained and compared four different indicators for measuring dependency: 1) demographic dependency ratio, 2) prospective-age dependency ratio (measuring remaining life expectancy), 3) thanatological-age dependency ratio (years before death) and 4) economic dependency ratio (as used in NTAs) (effective consumers/effective producers).

E. Item 5: Country presentations: Long-run economic and fiscal forecasts (Bangladesh/Cambodia)

18. Mr. Suviddya Hang, Deputy Secretary General, General Secretariat for Population and Development, Ministry of Planning, Cambodia gave a presentation on population ageing in Cambodia. First, he presented figures of government spending on health care, education and pensions based on the total government budget, GDP per capita and whether the government produced long-run forecasts and how often the government produced such forecasts. The length of the forecast horizon was five years. He shared trends on estimated and projected fertility rates from 1990 to 2030, labour force participation declines over the life course for people living in urban and rural areas, and tax revenues.

19. Mr. Muhammad Moshiur Rahman, Economist, United Nations Development Programme (UNDP), Bangladesh indicated that the Government of Bangladesh produced long-term forecasts for each type of expenditure. The length of the forecasts was generally 25 years (2016-2031), and the Government usually based its forecasts on five-year planning. He then showed projections of key macroeconomic indicators, such as per capita nominal GDP from the Delta Plan 2100, and a graph mapping Gini-coefficient inequality per district, indicating that for most districts this was at high levels. The population pyramid for Bangladesh showed the effects of declining fertility and mortality in the country. Recent political turmoil, including in neighboring Myanmar was affecting Bangladesh, in particular the Rohingya crisis which would also affect the distribution and structure of the population of Bangladesh.

F. Item 6: Hands-on training (Calculation of demographic measures of ageing: Chronological age, thanatological age, and prospective age)

20. During the hands-on training and using their own country's population data by age group (or population estimates and projections from the World Population Prospects), participants were taught how to calculate the demographic dependency ratio and the economic dependency ratio for young, adult and older population age groups.

Tuesday, 25 June 2019

G. Item 7: Forecasting the economic consequences of population ageing

21. Ms. Lai and Mr. Miller highlighted how to forecast the economic consequences of population ageing. The presentation explained how changing age structures could have economic consequences and how these could be forecasted using NTAs. Most countries in the world had shifted from a youth-dominated population to ageing populations. According to NTAs, one could classify economies by consumption levels. Economies were defined as "aged" economies when people consumed more than they earned. Consumption levels were calculated using NTA consumption profiles. Using these profiles, it could be forecasted that by 2070, 155 economies in the world would be aged economies – only countries in sub-Saharan Africa and South Asia would remain young economies. The classification of an ageing economy was not always the same as the classification of an ageing population and depended on consumption structures in the country. An aged economy was a relatively new phenomenon that would dominate the economies of the world in the future. They further explained what kind of economic shifts could happen resulting from an aged population structure. The assumption was that a demographic dividend could be realized when the working-age population was increasing in size, while a demographic tax could materialize when the ageing population was increasing in size. In preparing participants for the hands-on exercise, they concluded by explaining how to calculate and forecast GDP per capita, using the NTA method.

H. Item 8: Hands-on training (Country case studies of 50-year economic forecasts)

22. In the hands-on exercise, participants calculated the time when the youth bulge ended in different countries and forecasted when each country would become an ageing economy. The differences between population ageing and economic ageing were discussed.

I. Item 9: UNFPA activities in Asia-Pacific on population ageing and National Transfer Accounts

23. Mr. Rintaro Mori, Regional Advisor for Population Ageing and Sustainable Development, United Nations Fund for Population and Development (UNFPA), Asia-Pacific gave a presentation on "UNFPA activities in Asia-Pacific on Population Ageing and National Transfer Accounts". Regional offices supported the country offices on

providing assistance to member States in drafting and revising policies on population ageing. The regional office also provided regional strategy development and training. UNFPA had funded NTA data collection and analysis for many years and had worked in collaboration with the East-West Center in Honolulu, Hawaii, United States of America. He further highlighted some results from the analysis of NTAs, such as the economic lifecycle for Japan and Thailand. In Japan, spending increased with age, while it decreased with age in Thailand. Fertility rates were typically lower in countries with high spending on human capital, such as Japan, the Republic of Korea and Thailand. As for the sources of consumption of older persons in different countries in the Asia-Pacific region, while in India and the Philippines older persons mainly lived from their assets, in China, public transfers played the main role, with family transfers also contributing, but to a smaller extent. Several policy options in ageing societies included providing more employment opportunities to young adults and increasing labour force participation of women. In some countries, the opportunity to benefit from the demographic dividend had already passed and children and older persons had not fully benefitted from it. In concluding, he suggested taking a lifecycle approach to ageing, which focused on promoting healthy ageing to ensure that all generations benefited.

J. Item 10: Population ageing and social protection

24. Ms. Vanessa Steinmayer, Population Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP gave a presentation on population ageing and its impact on social protection. In order to achieve the goals of the 2030 Agenda, social protection would be even more pertinent in ageing societies. Population ageing co-occurred while household sizes were declining, leading to an increase in the number and share of nuclear families within a population. Further, in many countries of the Asia-Pacific region, health-care costs were largely borne by private households, which could be a burden for small households. Public health-care spending to GDP was not necessarily correlated to the percentage of the population aged 60 or over in a country – it also depended on government priorities, effectiveness of spending and other factors. Public health spending should be seen as an investment and, particularly if spent in preventive health care, would contribute to increasing healthy life expectancy. Older persons often lived from work income or transfers from their children, and coverage of older persons through pension systems was limited in most countries of the Asia-Pacific region. In addition, most of the pension beneficiaries were to be found in the highest income quintile. Older women had limited income sources because they were often excluded from accessing decent work during their working-age and consequently, from pensions. With the current design of pension systems, they perpetuated existing inequalities which were built-up throughout the lifecycle. More and better data and information on income sources of older persons would be needed, as well as more detailed data on health expenditures, to be able to design sustainable social protection systems.

25. The subsequent discussion evolved around shifts in health-care spending and reforms of the long-term care system in Japan, which eased the public burden on health-care spending. Participants also discussed how to convince Governments to address inequalities within the design of social protection. The large informal sector in many countries in the Asia-Pacific region created further inequalities because of the difficulties to include informal sector workers in the pension system.

K. Item 11: Scenario forecasts to assess policy responses to population ageing

26. In the hands-on exercise, participants assessed scenarios to forecast and assess policy responses to population ageing, such as investing in education, promoting gender equality and ensuring healthy ageing through country case studies.

L. Item 12: Country presentations: Long-run economic and fiscal forecasts (Fiji/India/Indonesia)

27. Ms. Dilitiana M. Baleinabuli, Principal Welfare Officer, Older Persons Unit Ministry of Women, Children and Poverty Alleviation, Fiji noted that in Fiji, short-, medium- and long-run forecasting were all done for health and education sectors; moreover, this was carried out to provide social protection for both young and older persons. The government's non-contributory pension scheme was targeted at those with no form of superannuation. With increasing numbers of older persons, fiscal sustainability could be an issue in the future.

28. Mr. Narayana Muttur Ranganathan, Professor, Fiscal Policy Institute, India explained that India's estimates and forecasts at the national level covered two years, while longer trajectories were used in certain states, such as Karnataka. Fiscal projections, on the other hand, went two to three years into the future. These projections were central to assessing fiscal deficits and were part of national stabilization programmes.

29. Mr. Hariyadi Sabar, Deputy Director for Population Planning and Social Protection, National Development Planning Agency of the Ministry of National Development Planning, Indonesia presented Indonesia's health-care, education and pension forecasts, with reference to the effects of structural changes in the population, especially increases in life expectancy and the overall ageing of the Indonesian population. The dependency ratio was largely contingent on trends in the total fertility rate. He concluded by stating how the country needed to find ways to increase labour productivity, since it was projected that, by the late 2040s, fertility would fall below replacement level.

M. Item 13. Hands on training (Country case studies of policy responses to population ageing: Investing in education, promoting gender equality, insuring healthy ageing)

30. Under this agenda item, since issues related to investing in education, promoting gender equality and ensuring healthy ageing were mainstreamed

throughout the Workshop, the topic of dependency ratio introduced on the first day was revisited. Participants used a spreadsheet with a summary of the four ways to calculate older age dependency ratios, namely demographic, prospective, thanatological and economic. They populated the spreadsheets and used total population by five-year age groups and NTA data for all years until 2100.

Wednesday, 26 June 2019

N. Item 14: Forecasting the consequences of population ageing for public financing of education and pensions

31. Mr. Miller and Ms. Lai shared findings on the consequences of population ageing for public financing in Latin America and compared them to findings from OECD countries. In Latin America, in general, there were 12 elderly per 100 working age adults, US$14,000 GDP per capita and 13 per cent social spending by public sector as share of GDP in 2015. On the other hand, OECD countries in 2015, had an average of 30 elderly per 100 working age adults, US$41,000 GDP per capita and 21 per cent social spending by public sector as a share of GDP. GDP per capita was projected to increase in Latin America to US$30,000 in 2045, with an increase in the proportion of older persons to 27 per 100 working age adults and a rise to 19 per cent social spending by public sector as a share of GDP. The populations in both Latin America and Asia and the Pacific were becoming older and wealthier and certain countries would come to resemble others in terms of ageing and spending. Costa Rica's projections, he shared, would appear to resemble Sweden in terms of education, pensions and health care, and Brazil would come to resemble Portugal in terms of spending. The projected fiscal challenges of growing older and wealthier populations varied among countries.

32. Mr. Miller then suggested calculating government spending for countries among all three sectors (education, pensions and health care), and looking at two drivers of future social spending: population ageing and policy change. When calculating government spending it was forecasted that, as GDP per capita increased, benefits for target populations (such as older persons) would move towards OECD levels of benefits.

O. Item 15: Hands-on training (Country case studies of 50-year forecasts for public spending on education and pensions)

33. Participants calculated projected spending on public education for their own countries. Mr. Miller and Ms. Lai indicated that population ageing meant that the main fiscal challenge for public education would be the growing budgetary pressure from pensions and health care; yet it also meant a reduced demographic pressure for funding education.

34. Furthermore, Mr. Miller explained that if the current GDP share of spending was maintained, countries in Asia and the Pacific would come to resemble OECD countries in terms of levels of educational investment per child. This was because a

declining school aged population meant that more money could be invested in each individual child, even when the share of the GDP spent on education was maintained.

P. Item 16: A life course perspective on population ageing: Learning from research on the demographic dividend

35. Mr. Marco Roncarati, Social Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP introduced a project, jointly implemented by the Economic Commission for Africa and ESCAP on the "Demographic Dividend with a Gender Dimension". He explained the concept of the demographic dividend as a window of opportunity for faster development and economic growth, as lower fertility rates led to a reduction in the number and share of the younger population and a shift towards a greater number and share in the working-age population. If investments in human capital and health care were undertaken, this could in turn be translated into labour productivity increases and faster economic growth. He insisted on the demographic dividend as an opportunity to increase investments in social development factors, such as education, health, infrastructure and jobs and then displayed rates of Asia-Pacific old-age support ratios and education factors, and rates of gender and wealth equality. Many people were employed in the informal sector of the economy with little pension coverage in old age. This needed to be addressed, in particular in countries which intended to harness the benefits of the demographic dividend with a growing number of people in the working-age population.

Q. Item 17: Forecasting the consequences of population ageing for public financing of health care

36. Mr. Miller discussed the effect of public expenditures on pensions and how population ageing led to increased fiscal pressures on pensions, which was sometimes offset and sometimes reinforced by changes in pension benefit generosity. Data from Latin America showed that the dependency ratio for older persons was projected to increase over time and that there was tremendous diversity between countries when it came to the level of generosity of pension programmes, with some providing as low as ten per cent of the average wage and some as high as 40/50 per cent of the average wage. A hands-on training followed to determine each government's type of pension plan for the average worker.

R. Item 18: Country presentations (Iran/Lao PDR/Malaysia)

37. Mr. Majid Koosheshi, Head of the Department of Demography, University of Tehran, Islamic Republic of Iran indicated that the Islamic Republic of Iran did not produce long-term forecasts, rather only five-year plans. There were data available based on eight national censuses, the last one from 2016. The further analysis of the data showed changes in the population age structure and the support ratio over time. In addition, the he described age profiles of labour income for employees in formal and informal labour markets.

38. Ms. Kinnalone Phimmavong, Chief of Macroeconomic Policy Research Division, National Institute for Economic Research, Lao People's Democratic Republic shared population figures, GDP per capita, labour force participation rate, and other demographic and economic figures of the country. There was no concrete policy for older persons yet, and in 2019 the Older Person Development Division was set up under the Department of Policy on Devotee, Disabled and Elderly (Ministry of Labour and Social Welfare). Out-of-pocket spending was the largest source of health financing, with 45.1 per cent of health spending financed by households in 2016.

39. Ms. Sharifah Azizah, Head of Social Gerontology Lab, Malaysian Research Institute on Ageing (MyAgeing), Malaysia indicated that Malaysia was carrying out its fourth long-term plan. This type of long-term plan was called an Outline Perspective Plan (OPP). Medium-term plans were prepared for five-year terms and, in the short term, yearly budget presentations were given once a year, normally in October. The Public Service Department for Planning selected the allocation of Government spending for pensions and the Ministry of Finance for operating expenditure. Population projections prepared by Malaysia's Department of Statistics for 2010-2040 indicated that in 2021, Malaysia was projected to become an ageing society, with 7.1 per cent of its population aged 65 or over. Moreover, the percentage of older persons was projected to double to 14 per cent by 2046.

S. Item 19: Hands-on training (Country case studies of 50-year forecasts for public spending on health care)

40. Participants calculated public spending on health care relative to GDP, recognizing two effects driving dramatic increases: population ageing, meaning more health expenditure, and economic growth. Countries showed similar health-care expenditures at younger ages, while there were differences between high-income and low-income countries in the amount of spending for ages 50 and above. An increase in the public spending on health care was seen as an indicator for increased overall development of the country. The training included calculating projections of public spending on health care for 2060.

Thursday, 27 June 2019

T. Item 20: The Intergenerational Report

41. Mr. Miller informed participants that DESA was planning to draft a report, referred to as the "Intergenerational Report", to analyse long-term population changes and assess the sustainability of policies addressing new demographic trends. Participants agreed that it should look ahead to the period 2040-2050 and cover two parts. The first would be on issues such as changes in population age structure and GDP per capita; the second part would cover social spending, in particular with regard to education, health and pensions. Mr. Miller indicated that DESA would appreciate receiving population data in the subsequent months from countries represented in the

Workshop. A link with a series of questions would be sent to meeting participants after the Workshop.

U. Item 21: Country presentations: Long-run economic and fiscal forecasts (Thailand/Viet Nam)

42. Mr. Toan Pham Ngoc, Director, Center for Information, Strategic Analysis and Forecast of the Institute of Labour Science and Social Affairs, Viet Nam informed the Workshop that significant changes in the labour force were being experienced in Viet Nam, with a declining working age population as a consequence of population ageing. Social insurance had been increasing in terms of both coverage and payments made, especially in the previous two to three years. Moreover, because people often moved back to rural areas, social insurance coverage needed to be directed there.

43. Mr. Pairat Klumthong, Planning and Policy Analyst, Office of the National Economic and Social Development Council, Thailand noted that Thailand had a wealth of data on ageing and social services and, as a consequence, much analysis had taken place including projections regarding health, education and pensions. Projections indicated that spending in each of these domains would increase two- to four-fold until the year 2033, with spending on pensions rising the most in both absolute terms and as a percentage of GDP. On the other hand, spending on education was projected to fall as a percentage of GDP. Considerable efforts were being directed to maintaining fiscal stability in light of population ageing.

V. Item 22: Demographic Dividend Index: A conceptual framework

44. Mr. Latif Dramani, Professor, Regional Research Centre of Generational Economy, Senegal gave a presentation on the Demographic Dividend Monitoring Index, in particular its five dimensions, covering: economic issues, quality of living, poverty exiting (including welfare theories), the extended human development indicator (based on human capital theory) and networking and territories (comprising: financial flows, infrastructure, migration and urbanization). The Index, with its 40 component variables, was a useful analytical and modelling tool which could support SDG investment targeting. The Index had been modified to include gender dimensions which helped understand disparities between men and women, and contribute to women's empowerment, including in the economic sphere. Regarding the sources of data, these were mainly NTAs and Household Surveys, along with some use of Censuses and Poverty Surveys. For each country it would take two to four weeks to compute the Index, mainly involving National Statistical Offices filling in templates, though having NTAs was fundamental. Any missing data could be compensated for by using the best estimates agreed upon by consensus of a team of national experts including those from National Statistical Offices. The Index, by identifying gaps, could be employed as a useful policy tool to advocate for targeted investment in the development domains most needing it.

W. Item 23: Final group discussion and closure

45. Mr. Miller and Ms. Lai presented the results from exercises earlier in the Workshop to measure population age structures for each country being represented. They looked at the trajectory of youth-dominant populations, the demographic dividend peak and when the aged economy would begin, a time in which the consumption of those age 65 and over would be greater than those aged 0-19. When considering old-age dependency ratios, GDP and fiscal budget forecasting, it was important to consider public spending on education, health and pensions in order to maintain sustainable development, along with active ageing.

46. In closing, Mr. Miller and Ms. Lai thanked all participants for their active engagement as well as ESCAP colleagues for their valuable support. He also encouraged participants to keep in touch for further collaboration. Mr. Marco Roncarati reiterated the words of thanks and noted that much useful information had been garnered from participants, networks had been developed and enhanced, and DESA had proved to be a valued co-organizer.

X. The way forward

47. Looking ahead, in terms of follow up to the Workshop, it was noted that collaboration would be sought concerning the "Intergenerational Report", to be developed by DESA with the support of ESCAP. Workshop participants would be asked to contribute data and information from their respective countries. In addition, the existing network of experts working on NTAs and demographic issues would be strengthened and tapped into for future work, including capacity development. Related to this, UNFPA Thailand planned to hold a workshop in early December 2019 with policymakers from ministries of Thailand and neighbouring countries to promote technical cooperation on the use of NTAs for policy planning. ESCAP and DESA would be contributing to this workshop by providing substantive and logistical input and support.

48. With regard to policy development and medium- and long-run economic and fiscal forecasting, it was agreed that more attention should be paid to enhancing collection, dissemination, and analysis of data, particularly disaggregated by age and sex. Public expenditure forecasting should address the needs of older persons, especially regarding health care, pensions and education. NTA data and analysis would help assess progress in achieving the SDGs, in particular those related to eradicating poverty and ending hunger; ensuring good health and well-being for all; and ensuring quality education and gender equality. NTA data and analysis would also support the regular follow-up and review of the MIPAA at the global and regional levels, including forthcoming reviews anticipated in the near future. DESA and ESCAP were well positioned to help countries in Asia and the Pacific in strengthening their capacity in this regard and to support progress reporting on the implementation of ageing policies in regard to MIPAA.

ANNEX

United Nations | Department of Economic and Social Affairs

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

Meeting Room F (MR-F), United Nations Conference Centre (UNCC)
Bangkok, 24-27 June 2019

PROGRAMME

Monday, 24 June 2019	
08:30 – 09:00	Registration
09:00 – 10:00	**Item 1: Welcome and course introduction** *Srinivas Tata, Director, Social Development Division, ESCAP* *Tim Miller, Global Adviser on Population and Development, Population Division, DESA*
10:00 – 10:30	***Refreshment break and group photo***
10:30 – 11:00	**Item 2: Population ageing in Asia-Pacific: Challenges and opportunities** **Sabine Henning, Chief, Sustainable Demographic Transition Section, Social Development Division, ESCAP**
11:00 – 11:45	**Item 3: "Future-proofing" sustainable development: the need for projections** *Tim Miller, Global Adviser on Population and Development, Population Division, DESA and Mun Sim Lai, Population Affairs Officer, Population Division, DESA*
11:45 – 13:15	***Lunch break***
13:15 – 14:15	**Item 4: New demographic measures of ageing** *Tim Miller, Global Adviser on Population and Development, Population Division, DESA*
14:15 – 15:00	**Item 5: Country presentations: Long-run economic and fiscal forecasts (Cambodia / Bangladesh)**
15:00 – 15:30	***Afternoon break***
15:30 – 17:00	**Item 6: Hands-on training** (Calculation of demographic measures of ageing: chronological age, thanatological age, and prospective age) *Mun Sim Lai, Population Affairs Officer, Population Division, DESA*

Tuesday, 25 June 2019	
09:00 – 10:00	**Item 7: Forecasting the economic consequences of population ageing** *Mun Sim Lai, Population Affairs Officer, Population Division, DESA*
10:00 – 10:30	***Morning break***
10:30 – 12:00	**Item 8: Hands-on training (**Country case studies of 50-year economic forecasts) *Tim Miller, Global Adviser on Population and Development, Population Division, DESA*
12:00 – 13:15	***Lunch break***
13:15 – 13:30	**Item 9: UNFPA activities in Asia-Pacific on population ageing and National Transfer Accounts** *Rintaro Mori, Regional Adviser for Population Ageing and Sustainable Development, UNFPA, Asia-Pacific Regional Office*
13:30 – 14:00	**Item 10: Population ageing and social protection** *Vanessa Steinmayer, Population Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP*
14:00 – 15:00	**Item 11: Scenario forecasts to assess policy responses to population ageing** *Mun Sim, Lai Population Affairs Officer, Population Division, DESA and Tim Miller, Global Adviser on Population and Development, Population Division, DESA*
15:00 – 15:15	***Afternoon break***
15:15 – 16:00	**Item 12: Country presentations: Long-run economic and fiscal forecasts (Fiji /India /Indonesia)**
16:00 – 17:00	**Item 13: Hands-on training** (Country case studies of policy responses to population ageing: investing in education, promoting gender equality, insuring healthy ageing) *Mun Sim Lai, Population Affairs Officer, Population Division, DESA and Marco Roncarati, Social Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP*

Wednesday, 26 June 2019	
09:00 – 10:00	**Item 14: Forecasting the consequences of population ageing for public financing of education and pensions** *Tim Miller, Global Adviser on Population and Development, Population Division, DESA and Mun Sim Lai, Population Affairs Officer, Population Division, DESA*
10:00 – 10:30	***Morning break***
10:30 – 12:00	**Item 15: Hands-on training** (Country case studies of 50-year forecasts for public spending on education and pensions) *Mun Sim Lai, Population Affairs Officer, Population Division, DESA and Marco Roncarati, Social Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP*
12:00 – 13:30	***Lunch break***
13:30 – 14:00	**Item 16: A life course perspective on population ageing: Learning from research on the demographic dividend** *Marco Roncarati, Social Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP*
14:00 – 15:00	**Item 17: Forecasting the consequences of population ageing for public financing of health care** *Tim Miller, Global Adviser on Population and Development, Population Division, DESA and Mun Sim Lai, Population Affairs Officer, Population Division, DESA*
15:00 – 15:15	***Afternoon break***
15:15 – 16:00	**Item 18: Country presentations: Long-run economic and fiscal forecasts (Iran /Lao PDR /Malaysia)**
16:00 – 17:00	**Item 19: Hands-on training (**Country case studies of 50-year forecasts for public spending on health care) *Mun Sim Lai, Population Affairs Officer, Population Division, DESA and Marco Roncarati, Social Affairs Officer, Sustainable Demographic Transition Section, Social Development Division, ESCAP*

Thursday, 27 June 2019	
09:00 – 09:45	**Item 20: The Intergenerational Report** *Tim Miller, Global Adviser on Population and Development, Population Division, DESA and Mun Sim Lai, Population Affairs Officer, Population Division, DESA*
09:45 – 10:15	**Item 21: Country presentations: Long-run economic and fiscal forecasts (Thailand /Viet Nam)**
10:15 – 10:30	***Morning break***
10:30 – 11:30	**Item 22: Demographic Dividend Index: A conceptual framework** *Latif Dramani, Coordonnatuer, Centre Régional d'Excellence en Economie Générationnelle (CREG)*
11:30 – 12:00	**Item 23: Final group discussion and closure**

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