Chapter 1

INTRODUCTION

The Shifting Demographics of the Philippines: Towards an Ageing Society

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The world's population is ageing, with Asia's population ageing faster than any other region due to its unusually rapid demographic transition from higher to lower birth and death rates. Asian countries, including Japan, Republic of Korea, Singapore, and Thailand are expected to have the highest share of people aged 65 and older by 2050 (United Nations Department of Economic and Social Affairs, 2023).

Consistent with global and regional trends, the demographic landscape of the Philippines is undergoing a significant shift. Fertility, the main driver of the country's population change, has recently experienced an unprecedented decline. The country's historically high total fertility rates, which have been gradually declining, sharply fell below replacement level, dropping from 2.7 in 2017 to 1.9 in 2022 (Philippine Statistics Authority [PSA] & ICF, 2023). The sharp fertility decline positions the Philippines amongst the low-fertility countries in the Association of Southeast Asian Nations (ASEAN) region, a stark contrast to its second-highest rank in the region just a decade ago (ASEAN, 2015).

Along with the declining fertility trend is an improving mortality picture. Similar to the general regional pattern, which shows Asians becoming healthier and living longer (Asian Development Bank, 2024), the Philippines exhibits sustained gains in life expectancy. By 2030, when the country is projected to transition to an ageing society, life expectancy at birth for males and females is estimated to reach 69.1 and 75.7,[1] respectively, up from 65.1 and 70.3 in 2000 (Cabigon, 2009). These longevity gains are mostly a consequence of reduced infant and child mortality in recent years, driven by improvements in healthcare and other socioeconomic factors, such as the enhanced educational status in the country (Chan, 2015).

The sharp fertility decline accompanied by the increasing life expectancy will impact the population's age structure, size, and growth eventually (Figure 1.1). Whilst the country's population structure is still relatively youthful, the 2020 census-based population projections anticipate a diminishing relative share of the younger age groups (below age 15), assuming the current fertility rate will hold (Figure 1.2). The projections also indicate that the share of the working-age population (ages 15–59) will continue to increase to its peak at 66% within the next decade, after which it will decline. In contrast, the share of the population 60 years old and over will experience a sustained increase, reaching the 10% mark by 2030, when the country will transition to an ageing society. This is according to the United Nations classification of an ageing society as one where the population of people over 60 years old accounts for more than 10% of the total population or where the population of people over 65 years old accounts for more than 7% of the total population (United Nations Department of Economic and Social Affairs, 1956). Using either metric, the Philippine population is projected to transition to an ageing society by 2030.

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[1] These figures were based on the output of the 2020 census-based population projections of the Interagency Working Group on Population Projections (IAWGPP).

## Figure 1.1. Philippine Population Size and Age Structure, 1970–2050
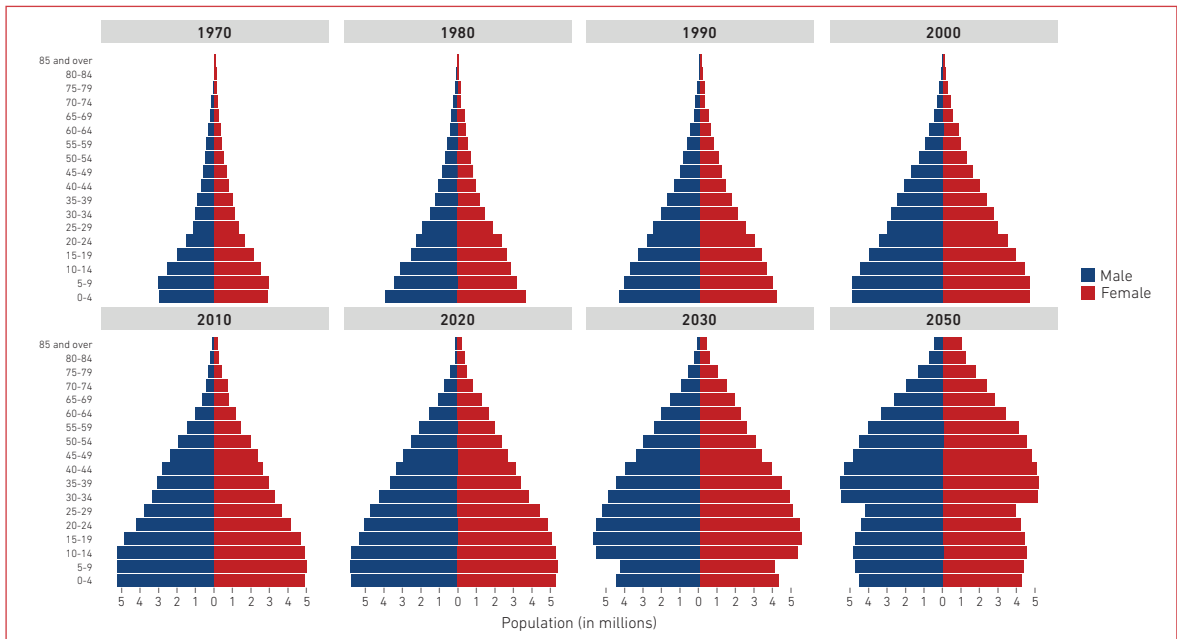
Source: Graph generated by the Demographic Research and Development Foundation (DRDF) using the 1970 to 2020 Census of Population and Housing (CPH; PSA, 1974, 1983, 1992, 2003, 2012, 2022) and 2030 to 2050 estimates from the 2020 census-based population projections by the Interagency Working Group on Population Projections (IAWGPP) (PSA, 2024a).

Figure 1.2. Percent Distribution of the Total Philippine Population by Age Groups, 1970–2050
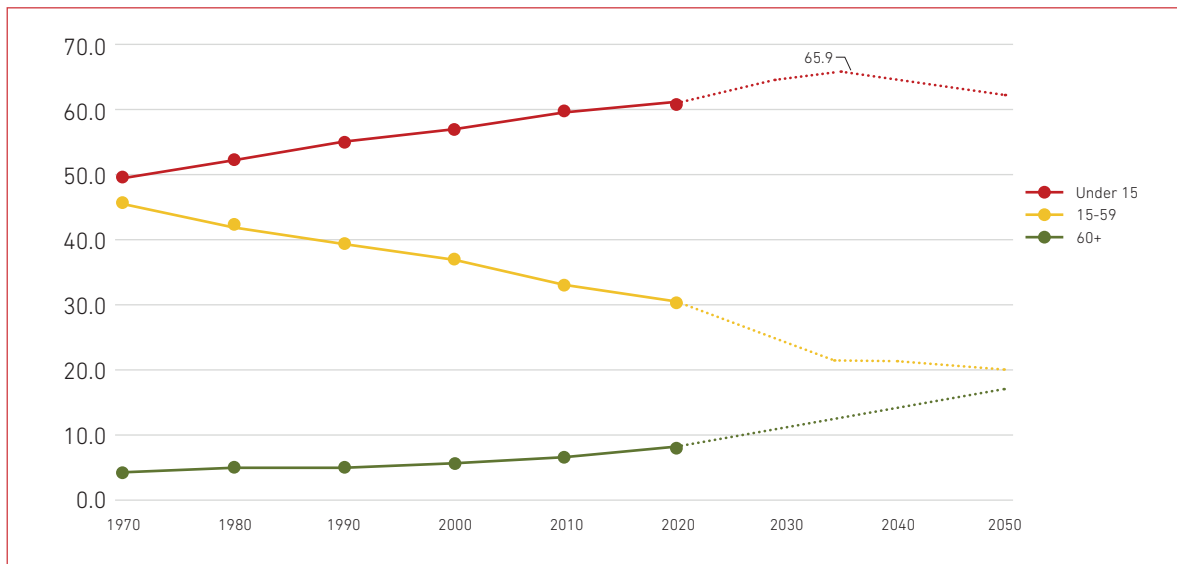
Source: Graph generated by DRDF using the 1970 to 2020 CPH (PSA, 1974, 1983, 1992, 2003, 2012, 2022) and 2030 to 2050 estimates from the 2020 census-based population projections by the IAWGPP (PSA, 2024a).

The country's maturing age structure requires attention, particularly given the significant number of older people involved. In 2020, 9.3 million people aged 60 and over; this number will increase to 23.7 million by 2050. The older population is currently the fastest-growing demographic group and is expected to continue this course until 2050 (Figure 1.3).

**Figure 1.3. Population Growth Rate by Age Group, Philippines, 1970–2050**
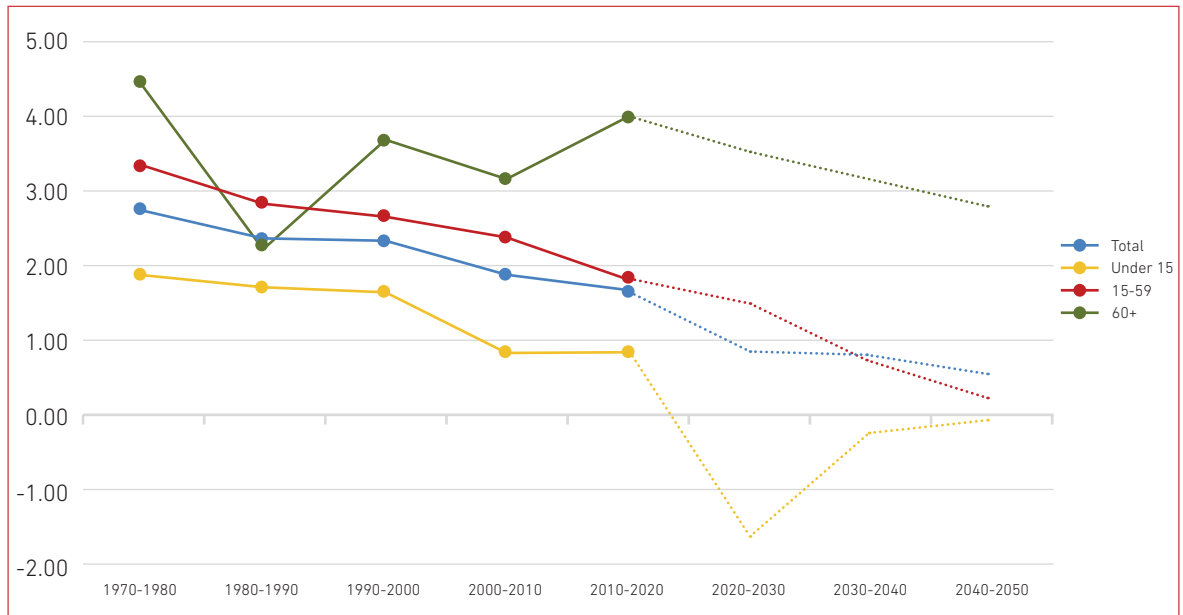
Source: Graph generated by DRDF using the 1970 to 2020 CPH (PSA, 1974, 1983, 1992, 2003, 2012, 2022) and 2030 to 2050 estimates from the 2020 census-based population projections by the IAWGPP (PSA, 2024a).

1. Preparing for an Ageing Society: Opportunities and Challenges

The evolving age structural change and the increasing number of older people are occurring alongside other major social, economic, and technological changes in the country, the interactions of which will frame the trajectory of ageing. One of the major social transformations that will profoundly impact the ageing process is education. Improvements in the educational attainment structures of populations have been established to be closely associated with health and general resilience (Lutz et al., 2019), with higher education expected to lead to better health literacy, healthier lifestyle choices, and greater access to healthcare resources, all of which contribute to increased longevity (Raghupathi and Raghupathi, 2020).

Education data from the past 5 decades indicate significant advancements in the educational attainment of older Filipinos. There has been a notable decrease in the proportion with no formal education, from over 42% in 1970 to 3% in 2020. Concurrently, the percentage of those who completed at least some secondary education surged from 7% to 46% over the same period (Figure 1.4). The continuing human capital investments in the country are expected to further improve the education profile of our incoming cohort of older persons. By 2050, the vast majority of older Filipinos are projected to have attained secondary or better education, which will have a profound impact on their health and well-being. Baseline data from the Longitudinal Study of Ageing and Health in the Philippines (LSAHP) show no significant gender differences in the education profile of older persons (Cruz & Cruz, 2019).

Figure 1.4. Educational Attainment of Older Filipinos, Aged 60 Years and Over, 1970–2050
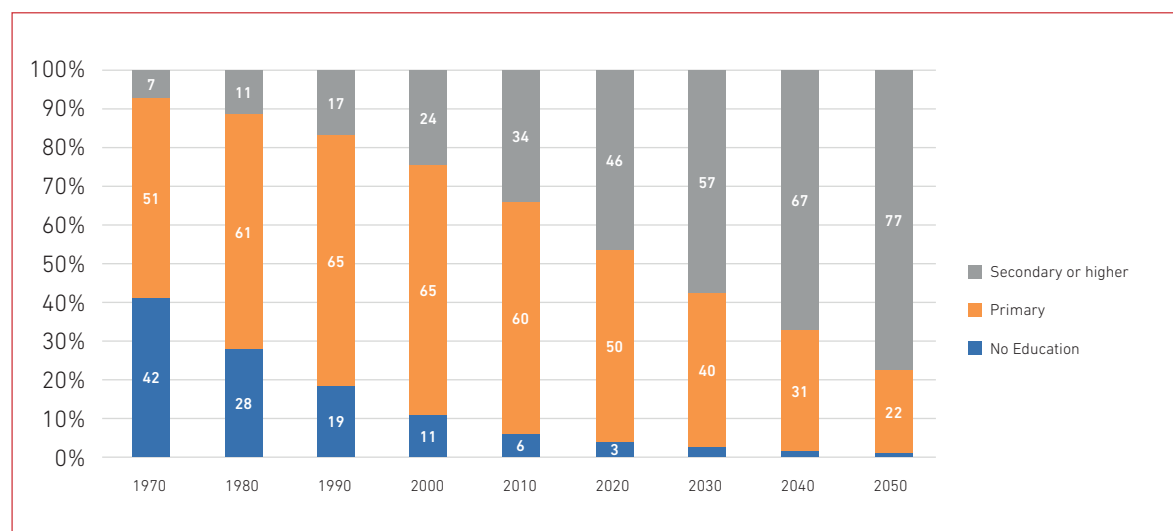
Source: Graph generated by DRDF using data from the Wittgenstein Centre for Demography and Global Human Capital (2018).

Despite the positive education trend, LSAHP baseline data indicate that older Filipinos lack the resources to fulfil basic economic needs. They register higher poverty prevalence than the general population (University of the Philippines Population Institute [UPPI] and Demographic Research and Development Foundation [DRDF], 2020), with the majority (57%) reporting some or considerable difficulty in meeting their household expenses (Cruz, 2019). This is higher than the level for the general population, with 22% of Filipinos having difficulty meeting their basic food and non-food needs in 2018 (PSA, 2023). Older Filipinos have little assets, with only about 5% having some savings in a bank. Almost half (49%) described their early life economic status as poor (Cruz, 2019), suggesting that many of them may have lived a lifetime in poverty. At least 14% reported that their household experienced hunger in the last 3 months, and 13% said their household is a recipient of the Conditional Cash Transfer, the country's poverty alleviation programme for the poorest of the poor.

Older females are more economically fragile, with one in three (35%) dependent on transfers from their children for their main source of economic support. Only one in four (23%) mentioned earnings from work as their main source of economic support, compared to one in three (37%) amongst their male counterparts (Cruz, 2019).

Along with their economic frailty are poor health outcomes marked by functional difficulty, chronic diseases, and high unmet need for health services, amongst others. Hypertension, the fourth leading cause of death amongst older Filipinos in 2022 (PSA, 2024b), is the most prevalent diagnosed chronic illness reported by older persons (Natividad, 2019a). At least 69% of older Filipinos have hypertension, amongst whom 38% are not aware that they have hypertension (Abalos et al., 2024). Besides the low level of awareness, treatment is also low, with 52% of older persons with untreated hypertension and 87% with uncontrolled blood pressure.

Older Filipinos have low awareness of government health programmes and services for older people. Vaccine uptake for the government's free immunisation for pneumococcal disease and influenza is low. Only 41% were aware of the pneumococcal vaccine; amongst those who were aware, about half (53%) had a pneumococcal vaccination after turning 60 (Natividad, 2019b). The corresponding figures for flu vaccines are lower at 30% and 36%, respectively.

Functional difficulty is also notable, with more than a fifth (22%) of older persons having difficulty performing at least one of the activities of daily living (Cruz & Saito, 2019). Older persons also have poor oral health and sub-optimal body mass index, particularly women, who are more likely to experience obesity compared to their male counterparts. About 3 in 10 (29%) experienced unmet healthcare needs, most commonly due to a lack of financial means (86%; Natividad, 2019b). This is consistent with existing gaps in healthcare coverage, with 89% Philippine Health Insurance Corporation (PhilHealth) coverage amongst older persons either as a member or as a dependent of a PhilHealth member as of 2022 (PSA, 2024c). This is despite the law that guarantees mandatory PhilHealth coverage for all senior citizens (RA 10645) as reiterated in the Universal Healthcare Law of 2019 (RA 11223).

LSAHP Wave 1 data also provided the first national-level prevalence of sarcopenia amongst older Filipinos. Sarcopenia, a geriatric syndrome marked by a loss of skeletal muscle mass, low muscle strength, and/or low physical performance, has gained attention in recent years (Chen et al., 2020). Anthropometric data indicate that the prevalence of sarcopenia was 6.8%, whilst that of severe sarcopenia was 6.4%, with significant differences by sex and age group (Paguirigan et al., 2024).

These poor health indicators are consistent with findings showing no evidence of compression of morbidity in the country. A comparison of the active life expectancy of older Filipinos between 2007 and 2018 indicates an expansion of morbidity, with older Filipinos' health status worsening over time (Cruz et al., 2022). This suggests that whilst older Filipinos may live longer, their additional years of life may not necessarily be in good health.

Older Filipinos seem to display resilience and positive, subjective well-being amidst their health and economic vulnerabilities. The LSAHP findings show that an overwhelming majority (94%) are satisfied with their life (Ogena, 2019). Only a few feel lonely (8%), lack companionship (10%), feel left out (7%), or feel isolated from others (6%). They are socially integrated and enjoy strong and caring family support, with the majority currently co-residing with their children (60%; Cruz & Cruz, 2019). Familial support is

evident in the active reciprocal exchange of support between older persons and their children, including non-co-resident children. This is demonstrated by the remittances from children within and outside the country, which is the most important source of economic support for older women (35%; Cruz, 2019).

Older Filipinos continue to significantly contribute to their families and communities, albeit in ways that are not easily quantifiable. About 14% are engaged in volunteer work in the church or community (Ogena, 2019). A high proportion (89%) provide emotional support to their children (Marquez, 2019). Older Filipinos serve as family caregivers, particularly women, who are the main providers of spousal and intergenerational caregiving. LSAHP baseline data show that about a fourth (24%) are involved in the partial or full care of their grandchildren (Cruz and Cruz, 2019). About two thirds (67%) of older males also report that their wives are their primary caregivers (Laguna, 2019).

2. LSAHP Research Towards Ageing Health Policies and Programmes

The LSAHP's focus on the social and behavioural factors affecting health outcomes underscores the importance of the social determinants of health framework in promoting good health in old age. It highlights the necessity of a multidisciplinary research approach to studying ageing, with a special focus on integrating social science in the formulation of targeted policies towards healthy ageing. This is particularly important in the Philippines, where health inequalities are prevalent, as evidenced by the multiple disadvantages amongst those in the lowest socioeconomic spectrum. By providing a rich database and research findings, the LSAHP provides a scientific base that helps inform and direct policies and programmes towards inclusive growth and development in the country. This aligns with the United Nations Decade of Healthy Ageing (2021–2030) and the overall framework of the Sustainable Development Goals, which aim to improve the lives of older people, their families, and the communities in which they live (World Health Organization, 2020).

No doubt the results of the LSAHP baseline study have helped provide a scientific basis for the Philippine government's response to the emerging needs of the growing older population. The findings of the LSAHP have become a vital resource for government agencies leading the promotion of ageing affairs in the country, including the Department of Health (DOH), Department of Social Welfare and Development, National Commission of Senior Citizens, Commission on Population and Development, Commission on Human Rights, and the Senate and Congress of the Philippines, as well as nongovernment organisations such as the Coalition of Services for the Elderly. LSAHP findings have also informed the Interagency Technical Working Group on Active and Healthy Ageing and Development, the United Nations Open-Ended Working Group on Ageing, and other development agencies like the Asian Development Bank and the World Health Organization Western Pacific Regional Office. Further analysis of the data has been used for journal publications, enriching the existing literature on ageing in the country.

3. Structure of the Report

This report, *Ageing and Health in the Philippines Wave 2*, is the second publication of the LSAHP project. The first report, titled *Ageing and Health in the Philippines*, was published in 2019, with its highlights discussed in an earlier section of this chapter. The current report presents a descriptive analysis of data collected from the Wave 2 survey, which includes information from surviving baseline respondents and informants for those who have died.

The report follows the structure of the Wave 1 report, with a primary focus on age and sex differentials of major indicators. All statistical tables generated in the Wave 1 report have been reproduced using Wave 2 data, although only the major indicators are discussed. Additionally, the report highlights new indicators generated from the Wave 2 data, particularly on geographic context, mortality, and COVID-19 experiences.

The report has eight chapters covering the major issues in population ageing:
Chapter 1 - The Shifting Demographics of the Philippines: Towards an Ageing Society
Chapter 2 - The Longitudinal Study of Ageing and Health in the Philippines Wave 2
Chapter 3 - Demographic and Socioeconomic Context
Chapter 4 - Health Status, Healthcare, and Healthcare Utilisation
Chapter 5 - Geographic Context
Chapter 6 - Mortality
Chapter 7 - COVID-19 Pandemic Experiences
Chapter 8 - Discussion, Conclusions, and Recommendations

The report includes four annexes:
Annex A - LSAHP Wave 2 Sampling Design and Weights
Annex B – Creation of the Wealth Index for the LSAHP Wave 2 Survey
Annex C – Supplementary Tables
Annex D – Research Team and Field Personnel
Annex E - Advisory Committee

Wave 2 weights were used to generate the percentages and means in the statistical tables for all chapters, except for Chapter 6 (Mortality), which used Wave 1 weights. The number of cases (N) reported in the tables is unweighted.

Chapter 1 introduces this report by highlighting the changing demographic landscape that is driving the Philippines' transition to an ageing society. It discusses the main findings of the LSAHP Wave 1 study, setting the stage for the follow-up study (LSAHP Wave 2). These findings emphasise the need to consider social and behavioural determinants when formulating policies to promote healthy ageing and reduce disparities in this population sector.

Chapter 2 provides an overview of the LSAHP Wave 2 study, including the study objectives and design, data scope, questionnaires, and other field documents. It also details the Wave 2 data collection process, highlighting the challenges of conducting fieldwork in a post-COVID situation. Preparatory field activities, including panel maintenance, ethics review clearance, and data processing, are likewise discussed.

Chapter 3 examines the demographic and socioeconomic context of older Filipinos using household data. It explores the household environment of older individuals, including housing characteristics such as house and lot ownership, construction materials of the roof, walls, and floor, main source of water, and household amenities. The chapter outlines the socioeconomic profile of the older person respondents and their immediate family members, including spouses, children, and grandchildren. It also examines economic indicators such as sources of income, assets, liabilities, and the adequacy of household income for older individuals.

Chapter 4, the main chapter of the report, focuses on health status, healthcare, and healthcare utilisation. These topics, which were covered in three chapters in the Wave 1 report, examine the major health status indicators, including self-rated health, diagnosed illnesses, oral health, sleep, pain, falls, incontinence, and depressive symptoms. Well-being and health-related behaviours, such as smoking and drinking, are also discussed. Alternative health measures using functional health are examined through activities of daily living, instrumental activities of daily living, Nagi functioning measures, the Washington Group Short Set on Functioning (WG-SS), the Global Activity Limitation Indicator (GALI), and experiences of being bedridden. The report also covers new indicators in Wave 2, such as the rapid diet screener, mini nutritional assessment (MNA), and the World Health Organization-Five Well-Being Index (WHO-5). Additionally, the chapter discusses older persons' healthcare utilisation, using indicators such as inpatient utilisation, outpatient utilisation, unmet need for healthcare, health insurance coverage, and long-term care.

Chapter 5, which delves into the geographic context of older Filipinos, is a new addition to the Wave 2 report and was not covered in the Wave 1 report. Using an improved system to gather Global Positioning System (GPS) data for each respondent, this chapter explores geospatial covariates derived from locational parameters, allowing for the analysis of respondents' proximity to various social infrastructures that may significantly affect their well-being. The analysis examines urban–rural differentials and major area groups (National Capital Region [NCR], Balance Luzon, Visayas, and Mindanao) in terms of geospatial covariates for social infrastructures, particularly the distance from health and financial facilities. Incorporating geospatial data adds a valuable dimension to understanding the contextual factors influencing the well-being of older Filipinos.

Chapter 6, focusing on mortality, is also a new addition to the LSAHP. Drawing upon data from individuals reported deceased amongst those interviewed at the baseline, this chapter examines the background characteristics, living arrangements, and caregiving situations of the deceased. Additionally, it investigates healthcare utilisation patterns leading up to their demise. The chapter also discusses death registration differentials by age and sex.

Chapter 7 delves into the COVID-19 experiences of older individuals. Similar to the two preceding chapters, this section is a new addition to the Wave 2 study, shedding light on the pandemic's impact on older individuals. Topics covered include COVID-19 infection rates, hospitalisations, and vaccination status. The chapter also examines access to healthcare, daily activities, and the economic well-being of older Filipinos during the pandemic.

The report concludes with Chapter 8, which summarises the key findings and their policy and programme implications within the context of the ongoing age structural change in the Philippines. All chapters end with a summary of major findings.

The report includes several annexes: Annex A discusses the sampling design, sample, and weights used in detail; Annex B explains the calculation of the wealth index. The remaining annexes present the supplementary tables numbered according to their corresponding table numbers in the baseline report, the research team, field personnel, and the advisory committee.

References

Abalos, J.B., Y. Saito, M.A. Ramos, Jr., and G.T. Cruz (2024), 'Prevalence, Awareness, Treatment, and Control of Hypertension among Older Adults in the Philippines.' *The Journals of Gerontology: Series A*, 79(2), glad155. https://doi.org/10.1093/gerona/glad155

Asian Development Bank (2024), *Aging Well in Asia: Asian Development Policy Report*. Manila. https://doi.org/10.22617/SGP240253-3

Association of Southeast Asian Nations (ASEAN) (2015), *ASEAN Statistical Yearbook 2015*. Jakarta.

Cabigon, J.V. (2009), *2000 Life Table Estimates for the Philippines, its Regions and Provinces by Sex.* Mandaluyong City: Commission on Population.

Chan, M.F. (2015), 'The Impact of Health Care Resources, Socioeconomic Status, and Demographics on Life Expectancy: A Cross-country Study in Three Southeast Asian Countries', *Asia Pacific Journal of Public Health*, 27(2), NP972–NP983. https://doi.org/10.1177/1010539513475650

Chen, L.K. et al. (2020), 'Asian Working Group for Sarcopenia: 2019 Consensus Update on Sarcopenia Diagnosis and Treatment', *Journal of the American Medical Directors Association*, 21(3), pp.300–07.

Cruz, C.J.P. (2019), 'Economic Well-being', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.105–15.

Cruz, C.J.P. and G.T. Cruz (2019), 'Filipino Older Persons', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines.* Jakarta: Economic Research Institute for ASEAN and East Asia, pp.27–46.

Cruz, G.T., C.J.P. Cruz, and Y. Saito (2022), 'Is there Compression or Expansion of Morbidity in the Philippines?' *Geriatrics & Gerontology International*, 22(7), pp.511–15. https://doi.org/10.1111/ggi.14398

Cruz, G.T. and Y. Saito (2019), 'Functional Health', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines.* Jakarta: Economic Research Institute for ASEAN and East Asia, pp.75–88.

Laguna, E. (2019), 'Caring for Older Persons', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines.* Jakarta: Economic Research Institute for ASEAN and East Asia, pp.173–92.

Lutz, W., J. Crespo Cuaresma, E. Kebede, A. Prskawetz, W.C. Sanderson, and E. Striessnig (2019), 'Education Rather than Age Structure Brings Demographic Dividend', *Proceedings of the National Academy of Sciences*, 116(26), pp.12798–803. https://doi.org/10.1073/pnas.1820362116

Marquez, M.P.N. (2019), 'Family Support and Intergenerational Exchanges', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.161–72.

Natividad, J.N. (2019a), 'Health Status', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.47–74.

Natividad, J.N. (2019b), 'Healthcare and Healthcare Utilisation', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.89–104.

Ogena, N. (2019), 'Activities, Social Isolation, and Information Technology', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.129–48.

Paguirigan, M.R.B., M.K.S.I. Cabaraban, G.T. Cruz, M.A. Ramos, C.J.P. Cruz, and Y. Saito (2024), Prevalence and Associated Factors of Sarcopenia among Older Filipinos. [Manuscript in preparation].

Philippine Statistics Authority (PSA) (1974), *1970 Census of Population and Housing*. Quezon City: PSA.

PSA (1983), 1980 *Census of Population and Housing*. Quezon City: PSA.

PSA (1992), 1990 *Census of Population and Housing*. Quezon City: PSA.

PSA (2003), 2000 *Census of Population and Housing*. Quezon City: PSA.

PSA (2012) 2010 *Census of Population and Housing*. Quezon City: PSA.

PSA (2022), 2020 *Census of Population and Housing*. Quezon City: PSA.

PSA (2023), *Preliminary 2023 First Semester Official Poverty Statistics* (No. 2023-391). Quezon City: PSA. https://psa.gov.ph/statistics/poverty/node/1684061846

PSA (2024a), 2020 *Census-based National Population projections*. [Dataset]. Quezon City: PSA.

PSA (2024b), R*egistered Deaths in the Philippines, 2022*. [Dataset]. Quezon City: PSA.

PSA (2024c), 2022 *Annual Poverty Indicator Survey.* [Dataset]. Quezon City: PSA.

PSA and ICF (2023), 2022 *Philippine National Demographic and Health Survey (NDHS): Final Report.* Quezon City, Philippines, and Rockville, Maryland, USA: PSA and ICF..

Raghupathi, V. and W. Raghupathi (2020), 'The Influence of Education on Health: An Empirical Assessment of OECD Countries for the Period 1995–2015. *Archives of Public Health*, 78(1), p. 20. https://doi.org/10.1186/s13690-020-00402-5

United Nations Department of Economic and Social Affairs (2023), *World Social Report 2023: Leaving No One behind in an Ageing World*. New York: United Nations.

United Nations Department of Economic and Social Affairs (1956), *The Aging of Populations and its [their] Economic and Social Implications.* New York: United Nations.

University of the Philippines Population Institute (UPPI) and Demographic Research and Development Foundation, Inc. (DRDF) (2020) 'COVID-19 and the Economic Vulnerability of Older Filipinos', *UPPI/DRDF Research Brief* No. 2. https://www.uppi.upd.edu.ph/sites/default/files/pdf/COVID-19-Research-Brief-02.pdf

Wittgenstein Centre for Demography and Global Human Capital (2018), Wittgenstein Centre Data Explorer Version 2.0. http://www.wittgensteincentre.org/dataexplorer

World Health Organization (2020), *UN Decade of Healthy Ageing: Plan of Action 2021–2030.* https://www.who.int/publications/m/item/decade-of-healthy-ageing-plan-of-action