

Monitoring active ageing in the Asia-Pacific region: Recommendations for future implementation of the MIPAA

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Abstract. Being uniquely positioned in terms of population growth and rapid ageing, the Asia-Pacific region is of high importance in ensuring that the Madrid International Plan of Action on Ageing (MIPAA) monitoring and implementation framework is accessible and attractive to member States, the majority of which are developing and have varied resources and research infrastructures. This paper reviews the current data collection processes of 14 countries in the Asia-Pacific region, and discusses the various frameworks being used to monitor active ageing in the global context. We consequently suggest how a more functional and sustainable set of metrics can be developed to maximise countries' participation in the MIPAA implementation and to build ageing knowledge globally, in particular around developing countries. We conclude that a dashboard of indicators that both constructs the Active Ageing Index (AAI) and is aligned with the key priorities of the MIPAA should become part of the toolkit to monitor MIPAA implementation in the future, but so too this framework should incorporate Asia-Pacific indicators that reflect the region's unique demographic context and priorities, such as the community support.

Keywords: Asia-Pacific, active ageing, older population, monitoring, MIPAA, developing countries.

Introduction: Ageing in the Asia-Pacific region

The Asia-Pacific region is among the fastest ageing and is the most populous region in the world (United Nations Development Programme [UNDP], 2016). It also comprises a diverse range of country circumstances, from developed countries like Australia and Japan, to transitional Commonwealth of Independent States (CIS) countries, and taking in Confucian, Buddhist, Islamic and Christian value systems (Phillips, 2000). It is made up of countries that the United Nations classifies as developing, including China, Indonesia, India and Pakistan.

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Indeed 46 out of 58 (79%) of the countries represented by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, 2017a) are categorised as developing, and small island states make up a large proportion of these.

The Asia-Pacific region is undergoing dramatic transformation, both economically, encompassing some of the world's fastest-growing economies - change that is having dramatic impacts in terms of poverty reduction (UNESCAP, 2017a) - and demographically, with ageing occurring considerably more rapidly than in Organisation for Economic Cooperation and Development (OECD) countries. The older population of the Asia-Pacific region is expected to double by 2050, by when older persons will make up a quarter of the region's population (United Nations Development Programme, 2016; UNESCAP, 2017a). There is significant variation across this large and diverse region, which contains an estimated 60% of the global older population (UNESCAP, 2017a). For example, poverty reduction has been dramatic in China, falling from 67% to 1.9% over the period 2000-2013, and while life expectancy in countries like Japan and Australia is high at over 80, other countries such as India, Pakistan and Afghanistan lag significantly behind, with life expectancies under 70.

Quality of life is also changing in the region; at the same time as life expectancy trends have shifted upwards, the Asia-Pacific region retains some of the world's highest death rates for non-communicable diseases (NCDs), with a double-burden of communicable disease in many developing countries, where older persons are particularly at risk (UNESCAP, 2017a; United Nations Populations Fund [UNFPA], 2017). The United Nations Development Programme (UNDP, 2016) has distinguished the pace of ageing in the region in terms of 3 key groups of countries:

- Approximately one third of countries have more youthful populations that will experience ageing in two to three decades' time, and tend to be lower-income;
- Another middle group of just under half of the Asia-Pacific countries where the fastest growth is occurring among the working age population, including China which currently contains over 40% of the region's older population; and
- Another quarter of countries that are ageing rapidly and now have aged populations, which are concentrated in East Asia.

These demographic differences will necessarily require different kinds of policy responses. Notwithstanding gains in circumstances and longevity, 400 million persons in the region live in extreme poverty, an experience concentrated particularly in South Asia. Older persons are more vulnerable to poverty due to their weaker relationship with economic activity, with women and those in rural areas at higher risk (UNESCAP, 2017a). This is exacerbated by a relatively low retirement age, the effect of which is to prolong retirement and potential dependency, as well as increasing the risk of economic disadvantage in later life. Only about a third of the older population in the region are in receipt of a pension (UNFPA, 2012; United Nations Economic and Social Council [ECOSOC], 2017) identified improving older persons' access to good quality work as a future challenge.

Value systems that venerate the supportive multi-generational family are reinforced in developing countries (UNDP, 2016); however, shifting demographics can weaken these assumptions, as is already being seen in Japan and South Korea (Choi, 2010; Kumagai, 2014). The pace of ageing in the Asia-Pacific region will have major consequences for employment, health and long-term care, social protection, and disadvantage and income security in later life. Since countries are at distinct stages of demographic transition with divergent resources, infrastructures around these are uneven and policy actions varied, and developing and rapidly ageing societies are experiencing particular challenges. It is critical that robust and consistent mechanisms are applied to the collection of country-level ageing information to enable trends to be monitored and responded to. A trend to watch, likely to impact upon older persons' experience, is the outmigration of care workers, creating a shortage of qualified caregivers at the same time as the Asia-Pacific region is experiencing accelerated ageing (UNESCAP, 2017a).

Current measurements around the Madrid International Plan of Action on Ageing

At the international level, the Madrid International Plan of Action on Ageing (MIPAA) of 2002 provided a comprehensive framework on how to address population ageing and protect older persons' rights, through actively involving them in the development process, ensuring their health and well-being, and providing an enabling, age-friendly environment. These priorities were intended to reflect the ageing agenda of developing countries more than the MIPAA's predecessor, the Vienna International Plan of Action on Ageing (VIPAA) of 1982. Indeed, Sidorenko and Walker (2004) have described the broad formulation of the Vienna Plan as humanitarian in comparison to the more development-oriented MIPAA. Since the Vienna Plan, demographic ageing has taken hold in developing countries, and their accelerated ageing demands a more refined set of global indicators.

The MIPAA's strategic framework drills-down to ageing indicators around each of its three priority directions, through a suite of 18 issues, 35 objectives, and 239 policy recommendations, with the anticipation that monitoring is bottom-up. Countries were not expected to be mandated to provide information on all indicators, given their differential circumstances and resources. Indeed, Huber (2005) has emphasised the necessary variation in the speed and direction of countries implementing the MIPAA roadmap, reflecting developmental differences, but also in placing a specific priority on issues of an older population. Moreover, inconsistencies around national reporting problematise meaningful comparisons between countries, and make it difficult to assess when countries have effected progress in supporting ageing societies.

United Nations Guidelines (2006) were subsequently developed that populated the MIPAA objectives in attaching a mixture of instrumental and outcome indicators to each, which reflected a detailed set of actions on which countries were encouraged to collect and analyse data. This process of review and appraisal was intended to enable member States to identify gaps, priorities and emerging issues around ageing, feeding into responsive actions, and enabling more effective tracking of progress around goals.

In the Asia-Pacific region, review and appraisal of the MIPAA has been supported by the Economic and Social Commission for Asia and the Pacific (ESCAP), which produces Regional Implementation Strategies on a five-yearly basis. The first of the region's implementation strategies preceded the MIPAA, at the same time as it was aligned with its key priority directions: the Macao Plan for Asia and the Pacific, otherwise known as the Shanghai Implementation Strategy (SIS) of 1999. In a key distinction from the MIPAA, the SIS differentiated implementation and monitoring activity as a policy domain in its own right, and as key to supporting the shared priorities of development, health and environment (UNESCAP, 2003). ESCAP's current work is guided both by the MIPAA and by the 2012 Bangkok Statement on the Asia-Pacific Review of the Implementation of the MIPAA. The Macao Ageing Index (Table 1) was developed to complement the SIS in measuring policy progress, and totalled 88 policy implementation indicators (Chan *et al.*, 2010).

Regular regional reviews enable ESCAP to agree a supportive framework for action around implementing the MIPAA, reflecting member States' diverse profiles. The third review of 2017 (UNESCAP, 2017a) has been strongly formulated with reference to the 2030 Agenda for Sustainable Development Goals around which there is global consensus on international development. The 2030 Agenda has pledged 'leave no one behind' and helped identify emerging issues in the region around learning opportunities throughout the life-course, broadening access to technology, and the need for age-disaggregated data: in particular around the provision of unpaid care by older persons (UNESCAP, 2017a). As part of the third review, for the period 2012-2017, ESCAP conducted a country survey, securing responses from 28 of the region's 58 countries, information that covered 89% of the region's population (UNESCAP, 2017a). Similarly, UNFPA's synthesis of Asia-Pacific countries' MIPAA progress drew upon a subsection of the region: 26 countries (UNFPA, 2017).

The challenges of data collection and complementary approaches

Our recent analysis of regional approaches to implementing the MIPAA for UNFPA (Parry and Zaidi, 2018, reports 1-5) indicated a large degree of variation in the United Nations regions' capacities to comply with the level of data compilation required to respond in full to the MIPAA. In particular, there was uneven progress across the Asia-Pacific region in the key MIPAA three priority areas, with: social protection programmes being uneven, particularly so in countries with extreme poverty, and women the most vulnerable (priority area 1); ad hoc responses to older persons' needs in emergency planning (1); limited access to free healthcare (2); geriatric facilities limited to higher-income countries (2); limited mental health services for older persons (2); and scarce data around elder abuse (3).

In large part, these gaps were most accentuated in developing countries. In terms of data collection, an extensive informal sector in the region has problematised monitoring around employment indicators. Given the Asia-Pacific region's unique position in relation to the ageing challenge, it is vital that high quality age-disaggregated data is collected to support this transition.

The first decade-and-a-half of regional monitoring around the MIPAA has highlighted the variability of practices, which raises the issue about how data monitoring frameworks can be usefully refined. Sidorenko and Walker (2004) have lobbied for more systematic evaluation processes, and, by illustration, developed a matrix linking thematic priorities and policy domains with desired quality of life goals. They argued that the demonstration of clearer linkages between outcomes and actions would simplify and strengthen monitoring processes, potentially enhancing participation among developing countries. Within each policy domain, the authors suggested that outcomes be measured in a continuum, for example, running from social exclusion through to integration and participation. This approach was intended to make goals more specific and impactful in older persons' lives, but also provides a ready-to-use evaluation template. In order to illustrate how this kind of monitoring could be implemented, the matrix was populated with examples of typical actions from the MIPAA under quality of life targets (*ibid.*).

In Sidorenko and Zaidi's more recent analysis of the review process around the MIPAA (2018), they draw attention to a lack of clearly-defined appraisal criteria, leading to a disproportionate submission of anecdotal, descriptive and self-defined information, and little deeper evaluation of the relationship between outputs and policy impact. In particular, they critique the limited use of indicators in national reporting, an approach that has hampered assessment of country-level progress, as well as benchmarking exercises, at the same time as they note that inconsistency and varied reporting patterns is unsurprising in a voluntary system. They recommend a MIPAA monitoring toolkit with different layers of indicator, along the lines of the dashboard of indicators used in the Active Ageing Index (AAI), which are aligned with the MIPAA's three priority directions.

Amid the challenges of data collection across a diverse regional context, in this paper we review how data is currently being collected in different countries across the Asia-Pacific region, illustrating some of the variation and challenges of complying with the MIPAA amid different circumstances. Given the existing frameworks for monitoring active ageing across a global context, we then reflect upon their utility in developing a functional set of metrics that will maximise their adoption, and provide higher quality information to support monitoring of the region's MIPAA implementation. This is important both in terms of global comparison, but also at the national policy level, enabling the impact of initiatives to be evaluated and improved, and identifying gaps for future development.

A key recommendation of previous reviews of the MIPAA assessment process has been the need to establish a comprehensive international set of indicators that provide for sufficient nuance to make meaningful evaluation of national progress against its framework (Sidorenko and Zaidi, 2018). These authors' analysis of ageing policy frameworks proposes a closer engagement with key stakeholders, and a review process with three key components: comparative indicators on ageing for mutual learning; indicators that are accessible to national and international policy-makers; and a signal towards areas for future policy actions in different contexts across the world.

In the Economic Commission for Europe (ECE) United Nations region, in parallel to MIPAA data monitoring, efforts have been undertaken to quantify countries' responses to the ageing challenge by conceptualising them in terms of 'active ageing' (Zaidi and Stanton, 2015; Zaidi *et al.*, 2017). In this, the UNECE has set out to identify where programmes and policies can stimulate older persons' contributions and potentials, drawing upon the World Health Organisation's definition of active ageing (WHO, 2002). Analysis is achieved through the projection of an index, populated by indicators around different priorities (employment, social participation, independent living, and capacity for active ageing), onto which countries' scores are plotted. This calculation enables policy makers to make accessible assessment of international differences, and to measure progress achieved in active ageing and its different components, identifying areas for intervention and support. Scores range from 0 to 100, providing a single indicator of country-level development on an issue, and enabling benchmarking and tracking of policy impact to be conducted. The first results of the Active Ageing Index (AAI), based on the 28 EU member states, were published in 2012, comprising information on 22 indicators, organised around four domains, and disaggregated by gender.

Active ageing values can be broken down by individual indicator, combined into policy domains, or summarised in an aggregated country score, facilitating global comparisons and the production of a league table of progress around active ageing. The 2015 AAI analytical report (Zaidi and Stanton, 2015) set the AAI goalpost score at 57.5. While developed in relation to EU countries, the AAI has been extended to cover Russia, the USA, Canada, Switzerland, Iceland, Norway, India and China, and is continually evolving to engage with global ageing factors. In recent analysis, Scandinavian countries scored high on the AAI (Zaidi *et al.*, 2017), and a gender disparity emerged in terms of healthy and active ageing. Given its success in testing, and in line with the momentum created by the ageing challenge in the Asia-Pacific region to find more functional ways of monitoring active ageing, the AAI has particular relevance to our discussions.

As the AAI gains traction beyond the EEC region, its advantages in terms of enabling rapid national comparisons and estimations of progress through the use of a single set of accessible indicators, are evident. There is a need to also ensure that meaningful monitoring systems around active ageing are synchronised with the sustainable development agenda (see below), which has received international buy-in, to ensure that demands for metrics speak to each other intelligently, and facilitate motivation among countries where data collection infrastructure is less developed.

The 2030 Agenda and its Sustainable Development Goals (SDGs) are committed to create development and prosperity for persons of all ages, including those in old age (United Nations, 2015). In contrast to their predecessor, the Millennium Development Goals, the new post-2015 SDGs make specific mention of older persons and ageing as a cornerstone of sustainable development (Zaidi, 2016; Bennett and Zaidi, 2016).

In monitoring the SDGs, there is broader commitment to disaggregating indicators by age and gender, characteristics that have often been lacking in data collection in developing countries. For instance, Goal 3: Ensure healthy lives and promote well-being for all at all ages, is

particularly relevant for older persons in positioning them as one of the main beneficiaries for future international development processes. The most critical implementation tool of the SDGs is its indicators framework. The 17 Goals and their 169 targets will be followed up and reviewed systematically using a set of global, largely quantitative indicators.

However, the development of the SDG indicators framework has been challenging as it must address all aspects included in the targets, at the same time as enlisting pragmatism regarding the means of implementation by national statistical authorities. In many countries, existing statistics are not suitable for this purpose. To better understand and promote the role of older persons in the development process, and to assess their economic, social, health and cultural conditions, it is crucial that countries develop systematic statistical systems. This will include not just data collection for older age groups, but also systematic analysis, with disaggregation by age and sex to fill evidence gaps. There could be three options:

- (1) Disaggregate existing survey and administrative data by age for older age-groups;
- (2) Remove the age-cap on existing surveys and include older persons in the survey;
- (3) Develop new specialised survey instruments to collect data directly from older persons.

The first two options may be the only feasible options for many of the resource-constrained countries in Asia and the Pacific. However, it can be strongly recommended that all countries invest in collecting data using the specialised survey instruments and methodologies to collect data on older men and women.

The coverage of the ageing indicators respectively considered in the MIPAA, AAI and the Asia-Pacific Macao Index are compared in Table 1 below. As gaps are highlighted in each of the frameworks, MIPAA indicators may need to be supplemented in the future, evolving around MIPAA priorities as social conditions shift around ageing, an issue that we discuss in the conclusion.

These three frameworks indicate a large degree of convergence, but also gaps in indicators around: rural development (AAI and Macao); access to knowledge, education and training (Macao); emergency situations (AAI and Macao); older persons and HIV/AIDS (AAI); training of care providers and health professionals (AAI and Macao); and images of ageing (AAI). Some of these, such as a lack of indicators around emergency situations in the Macao Index, indicate a pressing gap given the history of natural disasters in the Pacific area.

In other respects, the MIPAA could be supplemented with indicators that other indexes collect information upon: social connectedness (AAI), physical exercise (AAI); social services and community support (Macao); regional mechanisms on ageing (Macao); and regional and international cooperation (Macao). This degree of convergence, but also differences between frameworks, provides actionable evidence for how monitoring frameworks might be refined to enhance their utility and maximise countries' participation in the future.

Table 1: Comparison of ageing indicators: United Nations Guidelines on the MIPAA, the Active Ageing Index and the Macao Index

MIPAA Indicators	Active Ageing Index	Macao Ageing Index
Priority 1: Older Persons and Development		
1. Active participation in society: volunteering; voting; caring for grandchildren; decision-making	2.1 Voluntary activities 2.4 Political participation	Active participation of older persons
2. Work and the ageing labour force: employment rates; informal sector and business ownership	1.1-1.4 Employment rate by 5-year age band	Older persons and market security
3. Rural development: small-scale enterprises; community support services; migrant programmes	> Gap	> Gap
4. Access to knowledge, education and training: educational attainment; literacy; education and training programmes; telephone and PC ownership	3.8 Lifelong learning 4.4 Use of ICT 4.6 Education attainment	> Gap
5. Intergenerational solidarity: positivity and provision of support across generations	2.2 Care to children and grandchildren	Older persons and the family
> Gap	4.5 Social connectedness	> Gap
6. Eradication of poverty: rates below poverty lines	3.5 Poverty risk	Poverty and old age
7. Income security, social protection/social security and poverty protection	3.4 Financial security	Social protection/social security
8. Emergency situations: appropriate assistance and targeting; contribution to rebuilding	> Gap	> Gap
Priority 2: Advancing Health and Wellbeing into Old Age		
1. Health promotion and well-being throughout life: risk reduction; life expectancy; disability; chronic morbidity; safe water and nutritional programmes	4.1 Remaining life expectancy at age 65 4.2 Share of HLE at 65	Health and nutrition
> Gap	3.1 Physical exercise	> Gap
2. Universal and equal access to healthcare services	3.2 Access to health services	Access to healthcare services
3. Older persons and HIV/AIDS: prevalence; social support; caring for adult children and grandchildren	> Gap	Older persons and HIV/AIDS
4. Training of care providers and health professionals, geriatric-driven healthcare services	> Gap	> Gap
5. Mental health needs of older persons; incidence and treatment rates	4.3 Mental well-being	Disability and mental health needs
6. Older persons and disabilities: programmes preventing functional decline; adapted housing	4.2 Healthy life expectancy	
Priority 3: Ensuring Enabling and Supportive Environments		
1. Housing and the living environment: sanitation, lighting; mobile services; transportation systems	3.3 Independent living	Housing and the living environment
2. Care and support for caregivers: support services; caregivers' satisfaction; older persons providing care	2.3 Care to older adults	Care and support for caregivers
3. Neglect, abuse and violence: prevalence	3.7 Physical safety	Neglect, abuse and violence
4. Images of ageing: positive attitudes of ageing	> Gap	Productive ageing
> Gap	> Gap	Community support
> Gap	> Gap	Regional ageing mechanisms
> Gap	> Gap	Regional and international cooperation

Data feasibility for the Active Ageing Index indicators in the Asia-Pacific region

At present, there is no single source that identifies all the countries and multi-country studies of ageing in the Asia-Pacific region. Several past attempts to review such studies in the region have relied upon reports or conference presentations delivered to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), World Bank, or World Health Organization (WHO). The amount of detail available from published sources varies considerably. There are a few examples of the recent multi-country studies that focus directly on available data for ageing-related issues in the Asia-Pacific region. These include: available datasets from the ageing-related surveys in the Asia-Pacific region (Teerawichitachainan and Knodel, 2015); policies and legislative development related to older persons from the 26 countries in the region (Williamson, 2015); current demographic trends in the process of ageing in the Asia-Pacific region (UNESCAP, 2017b); the policy and legislation development progress made by the countries in the region in implementing MIPAA (ibid., 2017a); analysis and evaluation on the current situation of the countries' welfare and labour markets, pension systems, health care and long-term care systems (World Bank, 2015); and the quality and accessibility of health data for older persons in the Western Pacific regions (WHO, 2014). Although these studies reveal substantial existence of relevant data on ageing in the Asia-Pacific region, the value of this resource is much dependent on its availability for research access.

In our analysis for ESCAP (Zaidi *et al.*, 2018 forthcoming), we looked at the availability of nationally representative surveys in Asia-Pacific countries to ascertain the region's readiness for data collection around ageing, specifically countries' capacity to calculate the AAI. We thus evaluated the contents of available datasets, their cross-national comparability, dataset accessibility, and data gaps in relation to 14 Asia-Pacific countries: Australia, Bangladesh, Cambodia, China, India, Indonesia, Japan, South Korea, Malaysia, Myanmar, New Zealand, Philippines, Thailand and Vietnam. 11 of these countries (85%) are currently classified as developing by the United Nations. Pragmatic decisions were taken to exclude from the analysis some low- and middle-income countries with limited data availability and on which there were issues around comparability. These information gaps should be considered in implications about future data monitoring. This data is presented in Table 2 below.

The most valuable and comprehensive datasets for the purposes of monitoring active ageing were representative longitudinal age surveys conducted at a national level, along the lines of the US Health and Retirement Survey (HRS). Labour force and household surveys covering the over 50s were another constructive source of information, covering employment, income, and health and well-being. In large part, national censuses and surveys had not been specifically designed to record information on older persons as the main respondents. Nevertheless, they often constituted countries' key source of information, and provided the basis for calculating AAI information. Where censuses provided valuable information at the individual level on demographic characteristics and employment, they have tended to offer less information on income, health status, social participation, household economic activity, and older persons' wellbeing.

Of the 14 countries' data collection processes that we examined, all conducted population censuses on a regular basis. However, there was more limited availability of representative and comprehensive longitudinal surveys on ageing, with this being lacking in Bangladesh, Indonesia and Malaysia (all classified as developing countries). A number of countries were conducting surveys on older persons as part of as international collaborations to build data infrastructure that addressed issues related to global ageing. For example, China, Japan, Korea, and India were conducting longitudinal ageing surveys, along the lines of the US's Health and Retirement Study (HRS) and the English Longitudinal Study of Ageing (ELSA). The countries that were most advanced in population ageing, such as Australia, Japan, Korea, and New Zealand, had comprehensive and nationally representative ageing surveys, but so too did several other developing countries, including Thailand, India, and China.

Looking at the labour force surveys operating in 10 of these 14 countries, an issue emerged about comparability. This related to difference in the way that data was collected around age: although many countries disaggregated indicators by age and sex up to the age of 75, some countries used 65 and above as a combined upper age group. This is an important issue, given the diversity of labour-market circumstances of older persons of different ages in different countries. In contrast, the 11 reviewed surveys on older persons shared commonalities and differences in terms of sample size and indicators. In terms of age limit, different definitions of older persons were in operation: many of the surveys were limited to persons aged 45 or 50 and over, while others covered samples of adults aged 60 or 65 and over. The longitudinal surveys most similar to the US and English models (HRS and the ELSA), such as China Health and Retirement Longitudinal Study (CHALS), Longitudinal Aging Study in India (LASI), Japanese Study on Aging and Retirement (JSTAR), and Korean Longitudinal Study on Ageing (KLoSA), tended to interview respondents aged 45 and over. These surveys mainly covered key information for the AAI indicators for the Asia-Pacific region.

Through a content analysis of the 14 surveys on ageing, labour force, and family we ascertained the data available for the AAI for these countries, which is presented in Table 3. Our analysis indicates that a significant effort is being made towards collecting ageing-related data in countries where population ageing is at a more advanced stage, for example, Australia, Japan, Korea, and New Zealand. In contrast, in countries with a relatively younger age structure, such as Bangladesh, Malaysia, Myanmar, and Vietnam, less attention has been paid to ageing-related data collection. Census surveys and household surveys do not usually have specific information related to health, wellbeing, social participation, income and expenditure, and family support for older persons. Some notable gaps were identified in countries' ability to provide information in the second domain of the AAI, 'participation and relationship', the least comparable AAI indicator being 'volunteer activities'. Six of the 14 countries, namely Cambodia, India, Malaysia, Myanmar, Philippines, and Vietnam, did not have data for voluntary activities. In addition, there was no data available to assess the second indicator of 'political participation' in four countries: Bangladesh, Malaysia, Philippines, and Vietnam. The third indicator, 'provide care to children', was the most comparable as only Malaysia lacks this data. The last indicator, 'provide care to older adults', was also largely comparable, except in three countries.

Table 2: Availability of data related to active ageing from the ageing surveys, National Census, and other health and labour surveys in 14 Asia-Pacific countries

Country	Labour related surveys	Census or living condition related surveys	Ageing surveys
Australia	Household, Income and Labour Dynamics in Australia Survey (18 Waves available)	General Social Survey (2006, 2010, 2014)	Australian Longitudinal Study of Ageing (1988, 1993, 1994, 1995, 1997, 1998, 2001, 2005, 2006, 2008, 2009, 2011, 2013, 2014)
Bangladesh	Labour Force Survey (2015)	Household Income and Expenditure Survey (2010), Population Census, 2001, 2011	-
Cambodia	Labour Force Survey (2007)	Cambodia Social Economic Survey (2004), Population Census, 2008	Cambodia Elderly Survey (2004)
China	Labour Force Survey (2015)	Population Census, 2000, 2010	- Study on Global Ageing and Adult Health (SAGE) 2008-10, 2014 - China Health and Retirement Longitudinal Study (CHALS) 2011, 2013, 2015 - Chinese Longitudinal Healthy Longevity Survey (CLHLS), 1998, 2000, 2002, 2005, 2008-9, 2011-12
India	-	Population Census, 2001, 2011	- Study on Global Ageing and Adult Health (SAGE), 2007-8, 2014 - Longitudinal Aging Study in India, 2010
Indonesia	Labour Force Survey (2016)	Indonesia Family Life Survey, 1993, 1998, 2000, 2008, 2015 Population Census, 2000, 2010	-
Japan	Labour Force Survey (2016)	Population Census 2005, 2015	Japanese Study on Ageing and Retirement 2007, 2009, 2011
Korea	Economically Active Population Survey 2016	Population Census 2000, 2010	Korea Longitudinal Study of Ageing (KLoSA), 2006, 2008, 2010, 2012, 2014
Malaysia	Labour Force Survey (2016)	Population Census 2000, 2010 Malaysian Population and Family survey, 2014	-
Myanmar	Labour Force Survey (2015)	Population Census 2014	Myanmar Ageing Survey, 2012
New Zealand	-	Population Census 2001, 2006, 2013	- New Zealand Longitudinal Study of Ageing (NLSA) 2013 - Health, Work and Retirement Study (HWR), 2006, 2008, 2016
Philippines	-	Population Census 2006, 2011	Philippines Longitudinal Study of Ageing (2007)
Thailand	Labour Force Survey (2015)	Population Census 2000, 2010	- National Survey of Older Persons in Thailand, 2002, 2007, 2011, 2014 - Panel Survey and Study on Health, Ageing, and Retirement in Thailand, 2009, 2013-14
Vietnam	Labour Force Survey (2015)	Population Census 2009	Vietnam Ageing Survey 2011

Note: The latest available questionnaire was examined.

Table 3: Summary of content availability for data related to Active Ageing Index calculation for 14 Asia-Pacific countries: Individual level information

Country	Basic Characteristics						Employment				Participation and relationship			Independent, healthy and secure living						Capacity and enabling environment								
	Sex	Age	Marital status	Religion	Ethnicity	Literacy	Employment rate (55-59)	Employment rate (60-64)	Employment rate (65-69)	Employment rate (70-74)	Volunteer activities (age 55+)	Political activities	Provide care to children	Provide care to older adults	Physical exercise	Access to health & dental care	Independent living arrangement	Relative median income	No poverty risk	No severe material deprivation	Feeling safe to walk (night)	Lifelong learning	Remaining life expectancy achievement of 50 years at age 55	Share of healthy life years in the remaining life expectancy at age 55	Mental wellbeing	Use of ICT aged 55-74	Social connectedness	Educational attainment
Australia	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	-	V	V	V	V
Bangladesh	V	V	V	V	-	V	V	V	V	V	-	V	V	-	V	V	V	V	V	V	-	V	-	-	-	V	-	V
Cambodia	V	V	V	V	V	V	V	V	V	-	V	V	V	V	V	V	V	V	V	V	-	-	-	-	V	V	V	V
China	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	-	-	-	V	V	V	V
India	V	V	V	V	V	V	V	V	V	-	V	V	V	V	V	V	V	V	V	V	-	-	-	-	V	V	V	V
Indonesia	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	-	-	-	-	V	V	V	V
Japan	V	V	V	V	-	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	V	-	-	V	V	V	V
Korea	V	V	V	V	-	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	V	-	-	V	V	V	V
Malaysia	V	V	V	V	V	V	V	V	V	-	-	-	-	-	-	V	-	-	-	-	-	-	-	-	-	V	-	-
Myanmar	V	V	V	V	V	V	V	V	V	-	V	V	-	-	-	-	-	-	-	-	-	-	-	-	V	-	-	-
New Zealand	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	-	-	V	V	V	V
Philippines	V	V	V	V	-	V	-	V	V	-	-	V	-	V	V	V	V	V	V	-	-	-	-	-	V	V	V	V
Thailand	V	V	V	V	-	V	V	V	V	V	V	V	V	V	V	V	V	V	V	-	-	-	-	-	V	V	V	V
Vietnam	V	V	V	V	V	V	V	V	V	-	-	V	V	V	V	V	V	V	V	-	-	-	-	-	V	V	-	V

Note: V denotes indicator available from the data sources; - denotes indicator not available from the data sources

Among the third domain, 'independent, healthy, and secure living', the least comparable AAI indicator was 'feeling safe to walk (at night)'. Only Australia and New Zealand collected data for this indicator. Limited data was also available for the lifelong learning indicator with four countries amassing data for this indicator. None of the survey data provided direct information related to the 'remaining life expectancy achievement of 50 years at age 55' and 'share of healthy life years in the remaining life expectancy at age 55' indicators. However,

similar information can be obtained through the international organisation database. Data on 'life expectancy at age 60' can be obtained from the United Nations population database, and 'healthy life expectancy (HALE) at age 60' can be obtained from the World Health Organization database for all selected countries in the Asia-Pacific region. The remaining four indicators in the fourth domain (capacity and enabling environment) were largely comparable.

Notably, the active ageing indicators were developed in Europe where the harmonised survey data is available and easily accessible. Our review of data availability in the Asia-Pacific region indicates that harmonised data is not replicated there, which can prove problematic in terms of compiling data for many of the active ageing indicators. Indicators on the social participation of older persons, such as voluntary activities, and those related to secure living or social connectedness, were among the most difficult to obtain. To fill the data gap, a number of publicly published data sources and other international databases can be useful. These data sources need to be evaluated further in order to develop a comparative tool to measure active ageing in the Asia-Pacific region. Countries that are not under consideration in this paper are mostly low-income countries in the Asia-Pacific region, namely Bhutan, Cook Islands, DPR Korea, Fiji, Iran, Lao PDR, Maldives, Mongolia, Nepal, Pakistan, Palau, Solomon Islands, Sri Lanka, Tonga, and Tuvalu. Notably about half of these are also not part of UNFPA's report on MIPAA progress in the area either (2017). This flags up a group of countries that we are lacking information on for ageing and older persons. In all these countries, there is no survey specifically targeting older persons or living condition surveys for older persons. In addition, we do not include low-income countries in this region due to a lack of comparable data availability for AAI calculation, and the greater difficulty in accessing some of the national survey data and documents. Only limited indicators for AAI calculation among unselected countries can be obtained through labour force surveys, health surveys, such as demographic and health surveys (DHS), and censuses.

Conclusions: The future of monitoring progress around the MIPAA in the region

Earlier we compared the indicators produced by the MIPAA with those used in other frameworks relevant for the Asia-Pacific countries. This paper has provided a detailed analysis of data sources in the same countries, mapping them against the domains of the AAI to indicate the feasibility of extending and applying this tool in the region. Our analysis of data collection around the MIPAA at a country level illustrates some of the challenges, as well as the existing infrastructures that can be drawn upon in monitoring regional progress around active ageing. This article now concludes with a discussion on the future of data monitoring around active ageing, and how a dashboard of indicators can be taken forward. This has implications beyond the Asia-Pacific region; our analysis identified a number of areas where information on MIPAA indicators was scarce, relating particularly to developing countries. Review of an indicators dashboard that appreciates these differences and identifies areas for development is valuable in producing meaningful information to track progress around the MIPAA in other regions too, particularly in the most rapidly ageing countries that have most to gain from this task.

Given that it will be necessary to include non-governmental organisations as well as national statistical communities in these considerations, and that research infrastructures are less established in developing countries, detailed guidance on data collection protocol, including clear timescales for reporting, is an area where investment will have significant impacts. The formation of the United Nations Titchfield City Group on Ageing and Age-Disaggregation is a timely initiative for this reason. Sidorenko and Zaidi (2018) make the case that an investment in universal assessment tools is vital to ensure that the MIPAA continues to be implemented in lasting and consequential ways. In practical terms, our analysis for ESCAP (Zaidi *et al.*, 2018 forthcoming) suggests that future implementation and appraisal work for the MIPAA will be strengthened by continuing to elaborate and refine the indicators used to assess national progress in the recent United Nations regional Commission reviews. A dashboard of indicators needs to be selected by using comparable definitions, in order to identify where a country within a region, or a region in the global comparison, is doing well or falling short. In view of the national difficulties that have been experienced in obtaining high quality information across all indicators of the MIPAA, and in complying with data collection protocol that would enable systematic comparison, we suggest that the MIPAA looks at building capacity by utilising some of the more successful aspects of existing frameworks to ensure that feasibility is at the heart of an ageing index. A process of continually refining an achievable and accessible dashboard of indicators, organised around distinctive domains of ageing, would have strong benefits. The construction of an active ageing index would enable international comparison and highlight areas for policy actions to improve countries' scores on different aspects of achieving the MIPAA goal of 'a society for all ages'. The capacity of these indicators to be easily aggregated into a composite index, similar to the European version of the Active Ageing Index, will be key in allowing for benchmarking and providing a signpost into policy actions.

There is strong value in indicators being listed under different headings, enabling domain-specific indexes to be constructed around various aspects of active and healthy ageing. These aggregations will allow countries to be ranked based on their index value, in addition to against each of a long list of indicators, offering a more nuanced analysis, flexibility, and providing opportunities for mutual learning. A dashboard of indicators of this kind would be aligned with the priority areas, issues and objectives of the MIPAA. This will enable a closer MIPAA monitoring, but with the flexibility to import the most relevant indicators from frameworks such as the AAI and the Macao Index. Our analysis of existing data sources in the Asia-Pacific region aligns with data availability for the AAI indicators, rather than those suggested in the original MIPAA framework or in the Macao Index. Some of the issues around data feasibility in the Asia-Pacific region for an ageing index like the AAI include: different definitions used around age categories, which hamper comparability; a lack of age disaggregation in the surveys; and sampling and enumeration difficulties around older age groups in some countries, potentially leading to bias in data. These, however, underline the need to develop robust data collection protocols, rather than negate the currency of an index.

The conclusion of our analysis is that a dashboard of indicators that both estimates the AAI and is aligned with the key priorities of the MIPAA should become part of the toolkit to monitor MIPAA implementation in the future, but so too this framework should incorporate

Asia-Pacific indicators that reflect the region's unique demographic context and priorities, such as community support. For example UNFPA's (2017) analysis of progress on the MIPAA emphasised the importance of utilising pre-existing resources in the 'enabling environments' priority area, specifically the region's abundant older persons' associations, which are valuable in supporting social solidarity and encouraging broader participation in public life (and thus impacting too on priority area 1). The dashboard of indicators developed in the MIPAA framework would be a good starting point for supplementation. Due to the challenges around data collection witnessed since the MIPAA, it is essential that a dashboard of indicators is accompanied by high quality methodological guidance on establishing robust monitoring mechanisms, on production of age-disaggregated data, and on the kind of research infrastructure necessary to support this. This might include examples of good practice, guidance on how data collection might make use of existing frameworks, and research support.

A critical question remains: how can MIPAA implementation and progress be monitored in countries that lack age-disaggregated data? Furthermore, how can the issue of a lack of international data comparability be addressed? Reflecting countries' relative difficulties in capturing different kinds of information, a priority is to identify *achievable* data collection processes, and a simplified structure for the age-disaggregation of data. A pragmatic way forward will be to identify clustering of countries with the help of their developmental context, and availability and comparability of age-disaggregated data. An index and dashboard of indicators can then be prepared for many of the data-rich countries, such as those covered in detail above. They will then set examples, not just for policy learnings, but in the development of age-disaggregated data for other countries in the region. There may be scope to develop a reduced form index, especially for countries where population ageing is less accelerated and data disaggregated by age is scarce, on the basis that establishing a baseline for monitoring will pre-empt progression. Such a reduced form index could be piloted for its feasibility in a number of countries. Two-paced development of the MIPAA monitoring toolkit would offer mutual learnings for all countries concerned.

Last but not least, the 2030 Agenda of Sustainable Development Goals (SDGs) have presented new opportunities to include older persons in addressing challenges linked with poverty, gender equality, employment and decent work, inclusive cities, and climate change. Its two pledges 'leaving no one behind' and 'reaching the furthest behind first' underline a commitment that no development process is complete without the protection and promotion of the rights of vulnerable groups in society, and that the older population, when empowered, can serve as agents of development in line with the active and healthy ageing agenda, and the MIPAA's policy directions. The MIPAA has provided gerontologists and policymakers alike with an invaluable framework for assessing active ageing, and one that our analysis suggests contains abundant scope to build upon in responding to the monitoring challenge of a rapidly, and unequally, ageing world. The effective implementation of the MIPAA will be critical to achieving several Sustainable Development Goals, and in explicitly recognising the issues of ageing and older persons.

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