

Promoting healthy ageing in Asia-Pacific through action on climate and air pollution

Annex:

1. Overview of policies that promote healthy ageing linked to climate change and air pollution
2. Further reading

September 2023

1. Overview of policies that promote healthy ageing linked to climate change and air pollution

Policy or plan	Year	Aim and activities
UN Madrid International Plan of Action on Ageing	2002	<p>This is the global agenda for tackling the issue of ageing in the 21st century, focusing on three priority areas: 1) older persons and development; 2) advancing health and wellbeing into old age; and 3) ensuring enabling and supportive environments.</p> <p>It acknowledges that the health of older people is determined by a lifelong accumulation of behaviours and environmental exposures, highlighting the importance of advancing health and wellbeing across the life course and into old age.</p> <p>The second priority specifies that governments' responsibilities include identifying and addressing environmental and socioeconomic factors that contribute to the onset of disease and disability in later life, such as reducing environmental pollution.</p> <p>The third priority highlights the recognition of interactions between environmental, economic and social policies, including providing housing and a living environment that is equitable and accessible to older people, particularly in rural areas.</p>
UN Decade of Healthy Ageing (2021–2030)	2021	<p>This is the second action plan of the WHO Global Strategy on Ageing and Health, building on the Madrid International Plan of Action on Ageing, and explaining how to promote healthy ageing through multisectoral approaches.</p> <p>It identifies the priorities to strengthen research and collaboration on emerging areas, including the effects of climate change on the health of older people; strengthening intersectoral links among gender, age, nutrition and food systems, climate change and work on cities.</p>
World Health Organization (WHO): Regional Action Plan on Healthy Ageing in the Western Pacific	2020	<p>The action plan highlights that the leading causes of non-communicable diseases (NCDs) are increasingly beyond the control of the traditional reach of the health sector. Therefore, investing in health from a more holistic perspective, such as through health-determining sectors including energy, transport, building, agriculture and urban sectors, has been incorporated into the emerging perception of healthy ageing.</p>
UN Economic and Social Commission for Asia and the Pacific (ESCAP): Accelerating implementation of the Madrid International Plan of Action on Ageing, 2002, to build a sustainable society for all ages in Asia and the Pacific	2022	<p>This is an outcome document to accelerate regional action on ageing in the Asia- Pacific region.</p> <p>It aims to protect older people from all emergency situations, including climate-related disasters while recognising older people's role in climate action by sharing their experiences in disaster risk management and climate mitigation and adaptation.</p>

WHO: Updated global air quality guidelines	2021	<p>This guideline provides new scientific evidence which revealed that the health risks of air pollution are large and increasing, particularly due to deteriorating air pollution in lower-income countries, exacerbated by climate change and coupled with population ageing and changing lifestyles.</p> <p>Tightening regulations of air quality standards can particularly limit the annual mean concentration of major health-damaging air pollutants such as PM_{2.5} not exceeding 5 µg/m³, which will significantly reduce the health and economic burdens of NCDs.</p>
World Meteorological Organization (WMO): Early Warnings for All initiative	2023	<p>This initiative aims to prioritise protecting people in climate-vulnerable countries, by mobilising climate adaptation investments of US\$ 3.1 billion in early warning systems to reduce loss and damage by 30% between 2023 and 2027 against extreme weather events including heatwaves. This includes measures of strengthening disaster risk knowledge sharing, observations and forecasting, preparedness and response, and communication of early warnings.</p>
Japan: Strategy for Sustainable Food Systems (MIDORI)	2021	<p>Japan's Green growth strategy through achieving carbon neutrality in 2050 recognises the shrinking number of older producers in the food, agriculture, forestry and fisheries sectors, driven by population ageing, as being a main challenge threatening farm production.</p> <p>Through promoting innovation and behavioural changes, the objective of MIDORI is to develop the sustainable food systems affected by triple threats of climate change, biodiversity loss and ageing. Japan has promoted agricultural policy reform since 2019, with increased investments in climate-smart agriculture.</p> <p>It aims to achieve a number of policy goals, including reducing the use of chemical pesticides by 50%, increasing the use of organic farming to 25% of farmland, and improving labour productivity in food manufacturing industries by 30%.</p> <p>To improve the production side of sustainability and productivity, priority actions include integrated pest management with artificial intelligence technologies, electrification of agricultural mechanisation (such as electromotive tractors), carbon sequestration through biochar products and blue carbon, and improved work environment.</p> <p>Reducing food loss and waste, and promoting a shift to more balanced dietary patterns, including sustainably sourced seafood, can promote sustainable consumption. The development of a circular economy with more use of local resources can improve rural livelihoods and promote healthy eating.</p>
China: National Climate Change Adaptation Strategy 2035	2022	<p>This national strategy highlights the priority of strengthening the adaptive capacities of socioeconomic systems to climate change, including agriculture and food security, and public health.</p> <p>It aims to identify and protect vulnerable groups against the impacts of climate change, by monitoring climate-sensitive diseases including infectious and cardiovascular diseases.</p> <p>It also aims to strengthen climate-resilient health systems, including through developing climate and health adaptation pilots in hospitals and caring homes.</p>

2. Further reading

- Andrei M (2022) From Japan to Iceland, futuristic vertical farms are starting to bloom. *ZME Science*, 9 November. <https://www.zmescience.com/science/agriculture-science/indoor-futuristic-japanese-vertical-farm-already-generating-12000-heads-lettuce-day/#:~:text=In%20the%20Shizuoka%20Prefecture%2C%20a,enjoy%20round%20the%20year%20crops.>
- Association of Academies and Societies of Science in Asia [AASSA] (2021) *The imperative of climate action to promote and protect health in Asia*. AASSA Secretariat. https://www.interacademies.org/sites/default/files/2021-11/AASSA_CCH_report_Web_051121.pdf
- Bangkok Post (2023) Every breath a struggle in country's toxic air. Bangkok Post, 21 April. <https://www.bangkokpost.com/thailand/general/2554404/every-breath-a-struggle-in-countrys-toxic-air>
- Baptista E and Master F (2023) *Insights: rust belt province got old before it got rich, as much of China will*. Reuters, 28 February. <https://www.reuters.com/world/asia-pacific/rust-belt-province-got-old-before-it-got-rich-much-china-will-2023-02-28/>
- Bloomberg News (2019) China pension system set to dry up by 2035, think tank says. Bloomberg, 11 April. <https://www.bloomberg.com/news/articles/2019-04-11/china-pension-system-set-to-dry-up-by-2035-think-tank-says#xj4y7vzkg>
- Chinese Aging Well Association [CAWA] (2019) *Elderly health in China*.
- China CDC: The Writing Committee of the Report on cardiovascular health and diseases in China (2022) *Report on cardiovascular health and diseases in China 2021: an updated summary*. doi: 10.3967/bes2022.079
- Cabinet Secretariat (2023) Policy speech by Prime Minister Kishida to the 211th Session of the Diet, Tokyo, 23 January. https://japan.kantei.go.jp/101_kishida/actions/202301/_00030.html
- Chen Z et al. (2017) Challenges of dementia care in China. *Geriatrics*. <https://doi.org/10.3390/geriatrics2010007>
- Gan H et al. (2022) Deaths and disability-adjusted life years burden attributed to air pollution in China, 1990-2019: results from the global burden of disease study 2019. *Frontiers in Environmental Science*. <https://doi.org/10.3389/fenvs.2022.945870>
- Gokhale H (2021) Japan's carbon tax policy: limitations and policy suggestions. *Current Research in Environmental Sustainability*. <https://doi.org/10.1016/j.crsust.2021.100082>
- International Carbon Action Partnership [ICAP] (2023) *Japan's Cabinet approves policy roadmap including plans for national ETS*. <https://icapcarbonaction.com/en/news/japans-cabinet-approves-policy-roadmap-including-plans-national-ets>
- Jarzebski MP et al. (2021) Ageing and population shrinking: implications for sustainability in the urban century. *Npj Urban Sustainability*. <https://doi.org/10.1038/s42949-021-00023-z>
- Karliner J et al. (2023) Momentum builds for health-care climate action. *The Lancet*. [https://doi.org/10.1016/S0140-6736\(23\)01079-6](https://doi.org/10.1016/S0140-6736(23)01079-6)
- Letsch L, Dasgupta S and Robinson E (2023) *Adapting to the impacts of extreme heat on Bangladesh's labour force*. Grantham Research Institute on Climate Change and the Environment and the Centre for Climate Change Economics and Policy. <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2023/07/Adapting-to-the-impacts-of-extreme-heat-on-Bangladesh.pdf>
- Li D et al. (2022) A review of smart agriculture and production practices in Japanese large-scale rice farming. *Journal of the Science of Food and Agriculture*. <https://doi.org/10.1002/jsfa.12204>
- Ministry of Economy, Trade and Industry of Japan [METI] (2021) Green growth strategy through achieving carbon neutrality in 2050. Web page. https://www.meti.go.jp/english/policy/energy_environment/global_warming/ggs2050/pdf/ggs_full_en1013.pdf
- One Health Global Network (n.d.) What is One Health? Web page. <http://www.onehealthglobal.net/what-is-one-health/>
- Peking University (2023) *China's "Dual carbon" report*.
- Repkine A and Lee HC (2022) Determinants of healthy and active ageing in Korea. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/ijerph192416802>

- Song Y et al. (2022) Prevalence of malnutrition among elderly in the community of China: a meta-analysis. *Chinese Journal of Epidemiology*. [10.3760/cma.j.cn112338-20210824-00676](https://doi.org/10.3760/cma.j.cn112338-20210824-00676)
- Statistics Bureau of Japan (2022) *Statistical handbook of Japan 2022*. <https://www.stat.go.jp/english/data/handbook/c0117.html>
- The Lancet (2022) Population ageing in China: crisis or opportunity? *The Lancet*. [https://doi.org/10.1016/S0140-6736\(22\)02410-2](https://doi.org/10.1016/S0140-6736(22)02410-2)
- Usman M et al. (2021) Strained agricultural farming under the stress of youths' career selection tendencies: a case study from Hokkaido (Japan). *Humanities and Social Sciences Communications*. <https://doi.org/10.1057/s41599-020-00688-4>
- United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP] (2022) *Outcome document: accelerating implementation of the Madrid International Plan of Action on Ageing, 2002, to build a sustainable society for all ages in Asia and the Pacific*. https://www.unescap.org/sites/default/d8files/event-documents/MIPAA_IGM.3_3_Add.1_E.pdf
- Wang H (2021) *Aging population may present challenges, and opportunities*. China Daily, 22 November. <https://www.chinadaily.com.cn/a/202111/22/WS619af472a310cdd39bc76a93.html>
- Wilker E, Osman M and Weisskopf M (2023) Ambient air pollution and clinical dementia: systematic review and meta-analysis. *BMJ*. <https://doi.org/10.1136/bmj-2022-071620>
- World Health Organisation [WHO] (2014) *Climate change adaptation to protect human health: China adaptation report*. <https://www.who.int/news/item/01-10-2010-climate-change-adaptation-to-protect-human-health>
- WHO (2018) Heat and health. Web page. <https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health>
- WHO (2021a) *Regional action plan on healthy ageing in the Western Pacific*. Manila: WHO Regional Office for the Western Pacific. <https://www.who.int/publications/i/item/9789290619352>
- WHO (2023) *Regional action framework for noncommunicable disease prevention and control in the Western Pacific*. <https://www.who.int/westernpacific/publications-detail/9789290620044>
- World Bank (n.d.) Population ages 65 and above (% of total population). World Development Indicators. <https://data.worldbank.org/indicator/>
- Yin H et al. (2021) Population ageing and deaths attributable to ambient PM2.5 pollution: a global analysis of economic cost. *The Lancet Planetary Health*. [https://doi.org/10.1016/S2542-5196\(21\)00131-5](https://doi.org/10.1016/S2542-5196(21)00131-5)
- Yiu P, Li G, Tan CK, and Obe M (2023) *China's aging population threatens a Japan-style lost decade*. Nikkei Asia News. <https://asia.nikkei.com/Spotlight/The-Big-Story/China-s-aging-population-threatens-a-Japan-style-lost-decade>
- Yoshino N and Miyamoto H (2019) *How does population aging affect the effectiveness of monetary and fiscal policies?* Asian Development Bank Institute. <https://www.adb.org/sites/default/files/publication/546916/adbi-wp1064.pdf>
- Zhang F et al. (2022) Long-term exposure to air pollution might decrease bone mineral density T-score and increase the prevalence of osteoporosis in Hubei province: evidence from China Osteoporosis Prevalence Study. *Osteoporosis International*. <https://doi.org/10.1007/s00198-022-06488-7>