Template proposing Priority Areas for World Health Organization and Royal Thai Government (WHO-RTG) Country Cooperation Strategy (CCS) 2022-2026

Proposed Priority Area: Urban Health

Q1. This proposal is submitted by

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Q2. Please specify all partners who collectively drafted and submitted this proposal:

- a) Department of Health, MOPH
- b) IHPP, MOPH
- c) Department of Disease Control, MOPH
- d) Department of Medical Services (Nopparat Rajathanee Hospital), MOPH
- e) Pollution Control Department, MONRE
- f) Department of Environmental Quality Promotion, MONRE
- g) Office of Nature Resources and Environment Policy and Planning, MONRE
- h) Bangkok Metropolitan Administration
- i) Nonthaburi Municipality
- j) Department of Public Works and Town & Country Planning
- k) Department of Local Administration
- I) National Municipal League of Thailand

Q3. Please provide a clear problem statement with justification for the inclusion of this topic in the CCS 2022-2026. Please also specify why there is a need for additional support under the CCS, beyond the usual budget and current work of Thai health system will not be able to solve the problem.

[Note: (1) Problem statement should highlight a demonstrable impact on the health of people in Thailand. (2) If this topic is part of the current CCS 2017-2021, please indicate why it should continue under CCS 2022-2026 and what will be differences. Please highlight any lessons learned from the previous implementation period (CCS 2017-2021). Max 500 words

The world is undergoing an urban transition including Thailand where 51.4 percent of total population lived in urban areas in 2020. The effects of urban living on health and well-being are vary widely and are affected by environmental risks, such as air pollution, waste and chemical contamination, barriers to physical activity, absence of green space, climate change, and in some cases social exclusion, poverty, and unaffordable housing. Persisting health challenges in urban cities include chronic non-communicable diseases such as obesity, diabetes, high blood pressure, cardiovascular disease, respiratory diseases, some types of cancers, and mental health problems.

Bangkok and vicinities confront these problems, First, compounded by urban heat-island effect and air pollution, major environmental risks factor of NCDs. Persisting PM2.5 crisis in Bangkok creates more unpredictability at a time when the changing climate may also be contributing to extreme weather events. Rapid urbanization has transformed Bangkok's landscape, creating a heat-island effect that stimulates the formation of inversion layers and trapping the urban area's self-generated pollutants during dry season. The

behavior of air pollutants under such conditions becomes more irregular and the concentration more hazardous to population health. Therefore, green infrastructure strategies including green space can reduce the effect from heat and air pollution to health

Second, transport systems without options for public or active (walking, biking) transit provide limited opportunities for physical activity. Low physical activity and air pollution are the risks causing deaths attributed to NCDs. For every additional hour spent in a car per day the risk of obesity increases by 6%. Low physical activity has a significant environmental component, through transport modes, land-use planning, city design, and access to greenspaces.

Third, people with low incomes are more likely to live in polluted areas and children and pregnant women are at higher risk of health problems related to pollution. However, health, environmental, societal and climate benefits can be achieved through health-focused urban design, proper city governance and healthy urban planning systems to promote safety and quality of life for society. Actions to unlock benefits include moving towards efficient land use and solid waste management; adequate provision of housing, water and sanitation, and create environmental friendly smart and safe cities for all population group.

While the environmental risks to health as described above from air pollution, low physical activity and poor housing and land-use can be influenced through personal choices, they are likely to be more affected by policy strategies which will be necessary to deliver on global commitments such as The Paris Agreement on climate change. Moreover, implementing cross-sectoral policy changes may be more equitable than changes in behavior at the individual level. Since urban cities are major sources of greenhouse gases and air pollution, identifying and implementing co-benefits-based policy solutions would align with sustainability goals on climate change adaptation and mitigation in urban cities across the region, particularly in supporting the development of low carbon economies, infrastructure, and transport.

Thailand's national air quality standards are currently weaker than the guideline WHO levels. There are persisting challenges of reducing the national standard of PM2.5 to follow WHO guideline. Moreover, the major challenge is to reduce the number of deaths from air pollution by two thirds by 2030 as in the WHO global health agenda on Air pollution and health. There is a need for scaling-up of the response by health and other to prevent air pollution diseases, exposure to air pollution and their costs to society. In Bangkok, various government, private, academic and public sectors need to cooperate to continually mitigate air pollution. The National Agenda Action Plan to eradicate PM2.5, attempting to ensure the number of days of PM2.5 does not exceed the Thailand air quality standards. Each measure will be implemented based on the level of PM2.5 and the potential impact on people's health. However, a better health and clean air future requires systems-level change from civil society, the private sector and country, provincial and city governments has a role to play together to reduce air pollution from all sources.

Therefore, there is a need for high level and upstream policy to incorporate health criteria in urban policies, city master plans, and sector development policies and plans for climate change and air pollution, transport, land-use planning, water, housing, and related sectors. These are cover determinants of health that cannot be addressed by the health sector alone. The major challenge of cross-sectoral collaboration on urban health is needs for additional support under the CCS, especially:

- 1. **Strengthen capacity** for health and non-health sector to integrate determinants of health and generate evidence to inform urban health policy. This support can expand to the areas of other 2017-2021 CCS programs such as CCS- Global Governance for Sustainable Health (GGHS)
- 2. **Situational analysis** and risk quantification and prioritization of the urban health evidence for policy in Thailand aiming to reduce the health risks and impacts of urban population, especially NCD. This support also can expand to the areas of CCS-NCD

3. Develop sustainable platforms for various agencies' sharing progress and M&E of urban health program implementation across health and non-health sector including international agencies, NGOs, and private sector to involve in urban health agenda and track progress to achieve the SDGs targets (i.e. SDGs 3 7 11 13)

Q4. How can WHO add value? What is the role of WHO (either WHO Thailand or SEARO or Headquarter) in supporting this priority area? Max 300 words

- 1) WHO can provide a model for the health sector to contribute to healthy urban planning and policies, sustainable development and climate resilience through WHO's Urban Health Initiative which already implemented in many countries.
- 2) WHO can support Thailand leadership, capacity and tools to address urban planning and health issues more effectively by add value through the strategic actions in Q5 by:
 - Provide tools and training Materials: Provide health-oriented tools and training materials, adapted for use at the city level, to assess air pollution and other environmental risks to health and for generation of evidence to inform urban health policy
 - Technical support for quantifying economic costs: Provide evidence about economic costs of poor development choices so as to leverage investments that benefit health as well as equity, particularly for vulnerable groups.
 - Enhance competency and leadership: Enhance health sector competency and leadership to use those tools, to demonstrate the health costs of unsustainable development and demand more health-enhancing urban policies.
 - Promote BreatheLife campaign: Develop and promote membership of the BreatheLife campaign to leverage policy and public commitments to clean air, climate-friendly cities and healthier urban lifestyles

Q5. Please specify what focus areas need to be addressed under this priority area, proposed plans/activities and the budget needed in Thai Baht for 5 years during 2022-2026. (maximum 5 areas, each area should be linked to the problem statement) Max 500 words

Focus areas

The air pollution, low physical activity, and poor land use and housing are set as focus area and target to prevent health impacts of this proposed project. The prevention targets and strategic actions are include:

- 1) Urban heat-island effect and air pollution: with strategies on traffic and industrial emissions control, improved energy options, environmental policy targets to prevent health impacts from air pollution and heat. Co-benefits-based strategies address air pollution and potential policy strategies address climate change by targeting their common causes, so they can be synergistic and more cost-effective. Policy actions at local and national levels to reduce air pollution can benefit climate change mitigation and adaptation and also reduce risks of cardiovascular disease, chronic respiratory disease, lung cancer and diabetes. Actions on air pollution can be enhanced to include action on healthy and resilient urban transport.
- 2) Efficient transport systems: with health prevention targets and strategies with Transport sector to improve and increase the use of public transport, walking/cycling infrastructure together with regulations on motor vehicle use to reduce levels of fine particulate pollution and increase physical activity that reduce risk of overweight and obesity related diseases such as diabetes. Moreover, less motor vehicle use can reduce the risk of traffic injuries.

3) Health-supportive land-use and housing: with prevention targets and strategies with Land use sector to reduce poor land use and strengthen housing sanitation. The greenspace strategies can reduce the impact of flooding events, reduce the impact of urban-heat island effect and increase opportunities for physical activity. There are the economic benefits of green infrastructure to non-health sectors co-benefits for the community include increased green space; revitalization of communities; habitat creation, urban heat island mitigation, and air quality improvements green infrastructure-based actions can be more effective if implemented alongside health promotion and healthcare services provision.

• Brief proposed plans/activities for 5 years during 2022-2026.

- 1) Develop the Integrated information system for urban environment and health data and platforms or tools to promote urban healthy lifestyles and reduce health risks and link to SDGs)
- Assess and map current sector and related policies and enhance health policymakers competencies and convene health leaders at urban level to assess pollution risks and take action, building on Health in All Policies approaches
- 3) Knowledge generation, develop and apply tools for assessing health and economic benefits by assess the economic costs of risks to health and monitor risks and the effectiveness of new interventions for health and health equity
- 4) Test alternative scenarios—vision for healthy urban future articulated intensify targeted information and demands for change
- 5) Raise awareness of the huge health impacts of unhealthy urban environments among policy leaders and the public, including through better monitoring of air pollution and other risks.
- 6) Strengthen urban leaders act –changes in policies, air quality, climate, environmental and track health indicators and incorporate health criteria in sectoral and urban policies, city master plans, and sector development policies and plans
- 7) Co-decision making and cooperation from related sectors to track progress on policy change and results from urban initiatives to address environmental risk, their links to health as well as the SDGs target.

• Proposed budget for 5 years during 2022-2026.

Annual budget 10 million THB, with the total budget of 50 million THB to be requested under the CCS mechanism

Q6. What are the changes we want to see over the 5 years – what will be different in 5 years as a result of this program under CCS 2022-2026. Max 500 words

- a) Urban resilience and health adaptation to climate change: Increasing urban and climate resilience of health systems, and health determinants. To at least double annual investment in health adaptation to climate change from by 2026, with a focus on surveillance for climate sensitive health outcomes, and climate resilience & sustainable energy in urban area.
- b) Gaining the urban health "co-benefits" of climate mitigation and air quality management, particularly reducing 10 percent of incidence cases from air pollution in 2026. To assess the number of hospital admission and outpatients from air pollution in urban areas; the expected health gains from Nationally Determined Contributions to the UNFCCC; and the potential for larger gains through more ambitious action.
- c) Ensuring support for urban health and cross-sector action, through a new economic approach, and scale up of financial investments. To define a coherent approach to link the economics of climate, environment and health, and how to

- value and promote climate, transport, and land-use policies that are in the national health interest.
- d) **Engaging the urban health community** and civil society in mitigation and adaptation.
- e) **Measuring national progress and reporting SDG indicators**. By 2026, the national evidence and progress tracking through climate and health country profiles, and to support reporting and tracking of indicators relevant to urban health, both under the SDGs.