Financing intersectoral action for women’s, children’s and adolescents’ health (WCAH) and well-being, with a focus on climate change

1. Objectives
This Board paper summarizes current evidence on the linkages between women’s, children’s and adolescents’ health (WCAH) financing and climate financing and draws out opportunities for co-financing and associated challenges. Given the very scarce literature at the interface between WCAH and climate financing, the focus is on health and climate financing and on wider experiences with co-financing models for health and other sectors, teasing out the specific lessons for WCAH. The evidence review methods are set out in the Annex. The specific objectives of the paper are to:
A. Examine the impact of climate change and climate hazards on health and WCAH financing
B. Describe existing co-financing models/intersectoral financing for health and other sectors
C. Document experience of financing arrangements which target climate and health-related goals
D. Draw lessons and recommendations to inform future WCAH and climate financing.

2. Background
Women, children and adolescents (WCA) are especially vulnerable to climate change. Please see Board paper 4.1 for an overview of the impacts of climate change on WCAH. Given their greater need for health care services, women and children are often prioritized within national health financing arrangements through exemptions, cash transfers that enhance access to quality services, and purchasing mechanisms such as performance-based financing to encourage greater supply-side responsiveness. With crises such as COVID-19 and climate change, there have been proposals to reconsider the approach to financing WCAH to support innovations that protect WCA from the effects of crises. The need for action across financing functions, including revenue generation, pooling and purchasing, has been recognized, with proposals to reduce financing fragmentation and for more integrated financing mechanisms for WCAH and health system strengthening and preparedness. There is also interest in considering the interconnections and potential synergies between WCAH and climate financing. Financing WCAH can reduce climate risk for the health system by funding investments in sustainable, strengthened and climate resilient health systems. Climate financing can also be a source of funding for WCAH, and, by promoting fiscal resilience to climate shocks, can ensure sufficient and sustainable WCAH financing. There are also well documented health and climate co-benefits from investments in climate and health that could be more efficiently leveraged through co-financing. However, it remains unclear what opportunities exist for WCAH and climate co-financing and at which health system scales.

3. Key Findings
A. Impact of climate change and climate hazards on health and WCAH financing
Climate change can affect fiscal space for health: Climate hazards have macro-economic consequences reducing growth and tax revenue, reducing total government resources, including for health and WCAH. Climate hazards also influence the subnational allocation of funding, with potential pro-rich allocations where wealthier localities are better able to respond to disasters and absorb funding. There is evidence of sustained increases in government health expenditure and/or health insurance claims associated with carbon emissions in Korea and Taiwan and hurricanes in the US, which exceeded the value of immediate post-disaster aid.
Climate change results in pressures on private health spending: Climate change impacts private health spending directly through additional ill health and disease and indirectly through livelihood effects. In lower income settings, households bear much of the health care cost of climate sensitive conditions, with hazard-related medical and funeral costs amounting to on average 2190 US dollars per household in Indonesia. A study across 49 African countries reported that a 1% increase in the level of greenhouse (CO2) emissions could increase out of pocket health expenditures by 0.423%. Increased out-of-pocket health expenditures can result in increased demand for private health insurance, widening wealth gaps in financial protection. Such financial challenges are of particular concern for climate refugees and migrants who may fall between domestic health financing arrangements and require innovative financing approaches such as health insurance schemes, multi-purpose cash transfers, or remittances to strengthen adaptive capacity and resilience (see Social Protection section below). Climate change can also reduce household income, through shifts to lower-income activities, reduced crop production and increased food prices. Rural households working in agriculture are most at risk, with earthquakes having the greatest income effects, followed by droughts and wildfires. Livelihood effects can result in the migration of men for alternative employment, increasing income vulnerability of women. Reduced income impacts care-seeking across the reproductive, maternal and child health continuum (including an increase in home deliveries). Additional out-of-pocket payments combined with reduced income effects of climate hazards, will increase the occurrence of catastrophic health expenditures and impoverishment effects of healthcare access.

B. Co-financing models for health and other sectors
Given the interconnections between climate change and health financing, it is important to consider the potential for a joined up approach for financing climate and WCAH. Co-financing is defined as joint financing of a programme by two or more entities with different sectoral objectives with a view to more efficiently achieving their goals. It can involve increasing resources available for WCAH by pooling funds with other sectors, or encouraging health sector investments beyond the health sector to improve health outcomes. McGuire et al. (2019) conducted a literature review and, based on 81 case studies, identified two effective approaches to co-financing, namely ‘integrative’ and ‘promotion’ co-financing modes. Integrative models utilize co-financing mechanisms to incorporate or improve service provision across multiple sectors. The co-financing model tends to be population-centric, where the aim is often targeted towards a specific population group. Most integrative models were sub-national pooling budgets, where national legislations permitted voluntary budget pooling by local governments across sectors. Promotion models, on the other hand, describe a scenario where one sector is investing in another sector to address factors that impact its own sectoral outcomes. Promotion models mostly involve transfer payments of grants from a health payer to fund intersectoral projects. Much of the evidence on climate and health/WCAH financing set out below follows the promotion model, whereby financing is allocated to climate mitigation/adaptation in the health sector, or where climate financing benefits health. There is much more limited evidence of integrative models involving joint pooling of budgets.

C. Financing which targets climate and health goals

Health financing for climate mitigation and adaptation
Global (aid) financing: Between 3-7% of bilateral Official Development Assistance (ODA) is targeted at climate adaptation. However, due to project misclassification, this may be less in real terms. Less than 1% of bilateral health aid was targeted at climate mitigation.
National financing: There are limited documented examples of health financing at country level being used to support climate adaptation or mitigation within the health sector, and these are from higher income settings. One such example includes the United States (US) Centre for Disease Control and Prevention (CDC) BRACE (Building Resilience Against Climate Effects) initiative to support capacity for climate adaptation in 18 public health jurisdictions (Box 1), which has valuable lessons for low and middle-income countries (LMICs).

Box 1. United States BRACE initiative
Receipt of BRACE funding was effective in supporting climate and health programming. However, a number of barriers and enablers to effective financing of climate adaptation in the health sector were identified. Enablers included: (1) adequate and earmarked funding for climate adaptation to avoid funds being reassigned to other priorities; (2) funds for dedicated staff time, training and technical support for adaptation planning, and outreach to raise community awareness; (3) leveraging local level funding from better-funded sectors for health. Challenges included: (1) restrictions on the use of funding, complex fiscal and contracting procedures; (2) protracted hiring timelines; (3) equity concerns as rural health departments did not receive funding due to lower baseline performance and population—both of which were criteria for funding—and were less able to recruit and retain staff.

**Investment of health insurance funds according to environmental criteria:** Encouraging health insurance companies to invest their reserves in a climate-friendly way (e.g. in adaptation or mitigation activities), is a way of linking health financing to climate goals. However, this requires monitoring, accountability, and transparency for beneficiaries regarding insurance investments.

**Green purchasing for health care:** The purchasing function of health financing provides a lever through which to incentivize mitigation and adaptation strategies within the health sector. So far, existing examples relate mostly to procurement among global agencies and are focused on reducing carbon emissions. For example, the United Nations (UN) established a Sustainable Procurement in the Health Sector initiative, which encourages the inclusion of environmental criteria in health product and service procurement across the UN.

Country-level initiatives funded by Swedish SIDA in Guatemala, Moldova, Tanzania, Vietnam and Zambia aim to reduce greenhouse gas emissions in the supply chain among others.

**Health financing re-adjustments in the wake of a climate hazard:** There is some evidence documenting temporary adjustments to health financing arrangements to meet the health care needs of those affected by climate hazards, including a two-year exemption from co-payments and health insurance waivers. A common concern is the short-term nature of the financing for disaster response mechanisms, despite the enduring health consequences of climate hazards, and the lack of consistency within countries with potential for inequities. Climate hazards can prompt the mobilization of substantial climate and health funding, as was the case in California following wildfires, where funds were obtained for surveillance of climate-sensitive conditions and for local health departments and communities to develop climate and health resilience plans.

**Climate financing that supports health-related activities or goals.**

Climate financing (including aid, social protection, carbon credits and carbon taxes) can be a potential source of funds for climate mitigation and adaptation in the health sector or for broader health sector investments which benefit WCA. Equally, climate financing can result in health and WCAH co-benefits.

**Global financing:** Less than 1% of climate aid targets health-related activities (mostly grant funding). There is a considerable resource gap for climate adaptation and mitigation in the health sector and a lack of accredited health institutions which can apply for climate funding. There is potential for greater use of climate financing instruments (grants, insurance, bonds) for health as these allow for the inclusion of health and well-being goals. Of note is the context specificity of climate resilience and health and well-being outcomes which may not necessarily always align. As a result, equity and WCAH need to be explicitly monitored and incorporated into climate adaptation financing, as they cannot be assumed to result from improved climate resilience. The inclusion and prioritization of WCAH is likely to be country-determined, given the strong focus of international climate financing on country ownership.

**Social protection:** Social protection includes cash transfers (non-contributory national social assistance programmes) and contributory insurance schemes. It can be deliberately targeted to climate risks (adaptive social protection) by scaling-up coverage in response to a shock in the short term, or by broadening the scope of what is covered to enhance livelihood support for households. There are a number of ways that adaptive social protection can also target health. For example, cash transfers can be used to incentivize climate mitigation strategies at the household level e.g. installing solar panels (Australia, China, India, Japan and the United Kingdom of Great Britain and Northern Ireland), or adaptation (e.g. heatproofing houses), with health co-benefits. Cash transfers can also be used to reduce the health consequences of climate hazards, by providing access to health care for refugees or internally displaced populations. Indeed, there is growing...
recognition of the importance of aligning social protection, health financing and climate-related humanitarian assistance. Cash transfers can also encourage care uptake among WCA after a hazard. For example, cash transfers were given to orphans and vulnerable children to ensure they attend health check-ups during drought in Kenya. Even in the absence of climate hazards, unconditional cash transfers have been shown to improve access to maternal and child health service use and health outcomes. One of the pathways through which cash transfers can increase uptake of health care is through additional enrolment in health insurance schemes. For example, a study in Ethiopia found that participation in the social safety net programme increased enrolment in community-based health insurance by 16.3 percentage points among female-headed households in food insecure and drought prone rural areas. However, vulnerable groups including women sometimes experience barriers to insurance access related to illiteracy and gender norms. In the context of flood insurance, the claims process itself has been identified as an aggravator of mental health illness post-flood. Exclusive reliance on private insurance could exacerbate health inequalities and prove unsustainable as overall risk levels increase, meaning that public sector, multilateral donors and civil society are necessary partners in insurance mechanisms and their implementation.

Financing health goals through carbon credits or offsets: There is a growing body of evidence on the use of carbon credit sales to fund or incentivize emission reduction initiatives with health co-benefits, such as clean cookstoves, household water treatment projects, community forest fire management and public transport infrastructure. However, there can be associated governance issues and potential lack of alignment between health and mitigation goals. For example, in clean cookstove projects, the cookstoves and fuel switches that maximize health outcomes do not necessarily maximize emission reduction. Another potential misalignment arises when carbon credit-funded projects in low-income countries increase demand by increasing income, which might then increase emissions. In the absence of demand creation, carbon credit-funded household water treatment, for example, could potentially lead households to switching from water boiling towards a less safe treatment in order to obtain carbon credit income, leading to negative health impacts. Many projects include WCA as a main target population, yet WCAH outcomes are not always reported. Equally, health benefits can depend on community and household dynamics, including gender dynamics and women’s time use. For example, for community fire management or carbon credit funded community conservation projects, health outcomes are mediated by ecosystem impacts and community governance, which determine revenue reinvestment on WCAH priorities. While carbon credits have potential for financing health-related projects, it should be borne in mind that carbon credits and offsets are controversial tools for climate financing, allowing certain countries and industries to continue polluting.

Financing health goals through ear-marked taxes including carbon taxes and carbon trading scheme revenue: Research suggests that carbon pricing interventions can generate a range of health co-benefits. There is also discussion around earmarking some of these revenues (as has been done for other taxes) to fund health care and related activities such as public infrastructure. However, potential concerns include the risk of longer-term perverse incentives to maintain carbon emissions to ensure a continued stream of carbon tax revenue. There is a need to further explore potential pitfalls and challenges associated with this form of earmarking and how to ensure vulnerable populations including WCA benefit. Other global taxes such as the airline solidarity levy and the financial transactions tax also have the potential to generate revenue which can benefit climate and health goals. However, there is limited evidence on these taxes, though they have the potential to increase the level of international aid funding available.

Joint health-climate financing arrangements

Beyond the targeting of climate finance for health goals and health finance for climate goals, there is also the potential for integrative co-financing models involving the pooling of funds. However, there are limited empirical examples of such initiatives. At the household level, there is potential for adaptive social protection schemes which are designed to offer protection against health and climate risks. The only example identified was of an initiative in Ghana (Box 2). This initiative used social protection as a way of identifying beneficiaries for a fee waiver in a health insurance scheme but did not formally integrate climate and health funds.
Box 2. Integrating social protection and health insurance to increase insurance coverage in Ghana

In Ghana, integrating a fee waiver for the National Health Insurance Scheme (NHIS) with Ghana’s Livelihood Empowerment Against Poverty (LEAP) 1000 cash transfer programme (bimonthly payments to poor households with vulnerable children, orphans or pregnant women) resulted in increased health insurance enrolment among the lowest socio-economic groups. LEAP beneficiaries were enrolled into NHIS, with a waiver of all NHIS fees, including for card processing, premiums and renewals.

At the national level, there is potential for a combined carbon and health tax. Although no empirical examples were found, a hypothetical joint tax was assessed. A joint tax would serve both to discourage consumption of high carbon and unhealthy foods, with positive climate and health outcomes; however determining appropriate taxation levels for joint taxes is a challenge.

At the regional level, the EU Solidarity Fund was established to fill fiscal gaps in responding to floods and earthquakes and was extended to health-related disasters following COVID-19. However, due to substantial COVID-19-related claims, available reserves for climate disasters were depleted. To be sustainable, the fund would require substantially greater capitalization.

There is potential for a joint global contingency fund or greater alignment between existing funds to support cross-national preparedness functions (e.g. WHO All-Hazards Fund, the Pandemic Fund, UNFCCC, Green Climate Fund). Benefits of a joint global fund would include potential efficiency gains and the attenuation of national political sensitivities around responsibility and compensation for climate change which often stalls progress.

D. Constraints to co-financing and recommendations

Despite the substantial effects of climate change on health and the potential for action in the health sector to reduce climate risk, funding remains largely siloed. As a result, there is an urgent need for more effective co-financing of climate action and WCAH. However, there are a number of constraints to co-financing which include:

- Intersectoral action can be seen as a threat to authority and sectoral interests, limiting collaboration.
- A lack of prioritization of health in climate adaptation finance, together with a lack of capacity for integrating climate mitigation and adaptation within health sector plans and budgets, resulting in a resource gap for climate adaptation in the health sector especially in LMIC.
- Co-benefits are not well measured or incorporated into health or climate financing arrangements and there is potential for misalignment between health, mitigation and adaptation goals.
- Difficulty accessing global climate financing for health due to the limited number of accredited health partners within climate adaptation funds. The WHO is currently the only accredited health partner of the Green Climate Fund (GCF), albeit as Readiness Delivery Partner. Other GCF Readiness Delivery Partners, who are also PMNCH partners, include UN Women and UNICEF. In terms of Accredited Entities, who can submit funding proposals to GCF, the only ones which are also PMNCH partners include Agence française de développement (AFD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Save the Children (Australia).
- WCAH needs are often not explicitly recognized or monitored within climate mitigation/adaptation financing.

E. PMNCH’s added value

Despite these constraints, climate hazards and growing awareness of climate change present a policy window: an agenda-setting opportunity, where there is a greater than usual likelihood of initiating advocacy and policy change and shifting or re-configuring financing mechanisms. Recommendations to promote intersectoral action on financing for WCAH and climate, which are relevant to several PMNCH constituencies, include:
Global, regional and national level.

- Position PMNCH as a leading advocacy actor at the intersection of WCAH and climate change (All PMNCH constituencies).
- Advocate both globally and nationally for WCAH goals to be incorporated into the design of co-financing arrangements between health and climate change (All PMNCH constituencies).
- Encourage countries and donors to develop joint WCAH and climate change incentives and purchasing arrangements across the continuum of care can be adapted to encourage climate conscious mitigation/adaptation behaviour (PG, GFM, DF, UNA and ART).
- Consider maximizing the potential for ODA loans, equity, or guarantees being channelled to climate-related action for health/WCAH, combined with grants, to increase resource availability and concessionality (PG, GFM, DF, UNA and NGO).
- Encourage NGOs and public institutions to act as verification and governance partners facilitating access to carbon credits, which can be managed locally, resulting in health and social benefits (NGO).
- Recognize and promote women’s participation in the design and implementation of financing arrangements, as well as in decisions about fund allocation (all PMNCH Constituencies).
- Support national adaptive social protection systems (partly funded by government) to improve livelihoods, including cash transfers and accompanying measures. These can include training, skills development and household asset management, including for women, alternative income sources, expanded access to formal credit, environmental services, etc.. (PG, GFM, DF, UNA and ART)
- Support further piloting and rigorous evaluation of health and climate co-financing initiatives (cash transfers, contingency funds, taxes), to maximise potential synergies and document distributional effects for WCAH. (PG, GFM, DF, UNA and ART)
- Raise awareness of the WCAH co-benefits of effective climate adaption and mitigation action (and vice versa) and advocate for greater climate and WCAH investments (All PMNCH constituencies)
- Support cross-constituency collaboration and explore areas of joint advocacy and action, promoting effective adaptation and mitigation measures and addressing the full gamut of impacts on vulnerable WCA. (All PMNCH constituencies)
- Support the sharing of best practices within and between countries, including co-financing arrangements and incentives for climate conscious behaviour, and underscore the importance of multistakeholder action (PG, GFM, DF, UNA, ART, AY, NGO and PS).
- Advocate for expansion in number of health agencies, especially those related to WCAH, such as PMNCH partners, accredited to access climate funds (PG, GFM, DF and UNA).
- Support initiatives to build capacity for integrating climate mitigation and adaptation within the WCAH plans and budgets at all levels of the health system, including clear WCAH targets in climate financing. Mainstreaming WCAH into climate change adaptation plans can help WCAH actors access adaptation funding (PG, GFM, DF, UNA, AY and NGO).
- Integrate monitoring of WCAH within co-financing initiatives across the continuum of care and especially for the most vulnerable populations (PG, GFM, DF, UNA and NGO).
- Recognize that changing WCAH needs after a natural disaster are likely to be ongoing, requiring long-term adjustments to financing arrangements, rather than short-term emergency response.
- Further evidence is needed regarding the levels and effects of climate adaptation funding in the health sector (and for WCA) in LMICs, as is evidence on the potential effect of climate hazards on financial protection for WCA.

4. Some points for consideration/discussion by the Board

- What synergies could be leveraged between the work on intersectoral financing for WCAH, with a focus on climate change, and the broader work that PMNCH is leading on the investment case for WCAH?
- In relation to generating new country commitments for adolescent well-being and following up on existing commitments for WCAH, how can PMNCH bring a wider intersectoral co-financing lens to this work?