Digital Public Infrastructure for Climate and Health

Building climate health resilience through coordinated investment in digital public infrastructure and digital public goods.

The Digital Public Infrastructure for Climate and Health (DPI4CH) Initiative, led by Digital Square at PATH with funding from Wellcome and The Rockefeller Foundation, in support of the World Health Organization (WHO) and World Meteorological Organization (WMO) Climate and Health Joint Programme (Joint Programme office), supports the identification and sharing of digital public infrastructure (DPI) and digital public goods (DPGs) to enhance climate- and health-informed data systems.

Launched in 2024, the DPI4CH initiative developed a three-year Action Plan to operationalize the Joint Programme's implementation plan, which integrates climate and health data for decision-making across sectors. The project, via leadership from WHO and WMO, also created standardized use cases — one a digital adaptation kit for a heat health alert system, the other on climate impacts to vector-borne disease — that show how to operationalize climate-informed health services at country-level to addresses climate-health data and information challenges. Last, to accelerate the use of digital tools at the intersection of climate and health, PATH Digital Square created the **Global Goods Guidebook Climate Services for Health Annex**.

By equipping governments, funders, and implementers with scalable, open-source solutions, this initiative strengthens health systems against the escalating health threats posed by climate change.

Advancing climate-informed DPI for health

Climate change is a growing health challenge, particularly for vulnerable populations already facing health and economic disparities. DPI, interoperable systems that support inclusive service delivery and effective governance, is crucial to the integration of climate and health data, allowing policymakers and health leaders to make informed decisions. By combining satellite data, weather patterns historical data, and health sector insights through integrated, open-source tools, decision makers can better predict disease outbreaks, respond to changing health needs, and mitigate the impact of extreme weather events that impact individuals, communities, and national economies.

"Digital tools and technologies will be pivotal game-changers in scaling solutions to climate and health—but we need the collective effort of the global community to make this vision a reality." - Joy Shumake-Guillemot, Lead, WMO-WHO Climate and Health Joint Programme

Expanding the Global Goods Guidebook for Climate and Health

The **Global Goods Guidebook Climate Services for Health Annex*: Harnessing Digital Tools for Climate Resilient Communities*** was developed through an Open Call (March–May 2025) to identify, curate, and share integrated digital health tools that are adaptable to different countries and contexts to help address key health system challenges impacted by changing climate and weather.

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These new Global Goods combine meteorological, climate, and health data to improve prediction and response to disease patterns, outbreaks, and other health priorities. The three newly approved Global Goods (DHIS2 Climate App, EWARS-csd, and GeoPrism Registry) met the criteria in the updated climate-health Global Goods Maturity Model. The Annex also highlights several emerging innovations that show promise.

As a compendium of mature, open-source software and services adaptable across countries and contexts, the Annex provides policymakers, procurement officials, and health leaders with a practical resource to identify, implement, and scale digital tools that strengthen climate-resilient health systems while reducing the health and economic impacts of climate change.

Supporting the capacity of the WMO-WHO Climate and Health Joint Programme

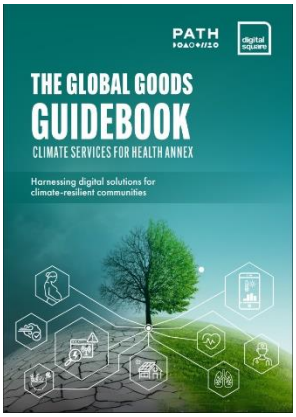
The Joint Programme office is a collaborative effort to strengthen, harmonize, and leverage resources and opportunities to empower and support WHO Member States and partners through interagency cooperation. In line with this effort, Digital Square at PATH supports the Joint Programme office to advance knowledge sharing and integration of climate health sciences and services for human health related to climate change, extreme weather and climate, water, air quality, solar radiation, and other environmental hazards.

Advocating for global investment in DPI for climate health

By addressing the intersection of climate change and health in global fora such as the Brazil G20 Health Working Group, the UN General Assembly (UNGA), and the Global Digital Health Forum (GDHF), the DPI4CH initiative underscores the importance of DPI for Health (DPI-H) in mitigating climate change risks and adapting to its impacts, especially in countries at highest risk of loss and damage. We call on donors and country leaders to prioritize funding for digital climate health solutions and advocate for DPI-focused investments to build robust health systems that respond and adapt to the changing climate.

Partnering for enhanced climate resilience

This initiative reflects a strong, multi-sectoral partnership between Digital Square at PATH, The Rockefeller Foundation, Wellcome, the WHO–WMO Climate and Health Joint Programme, and others, aligning efforts across sectors to drive knowledge sharing for coordinated action to protect human health.



By bridging meteorological science and public health systems through open-source digital public goods, the Annex empowers countries to anticipate outbreaks, safeguard vulnerable populations, and build climate-resilient services. It serves as both a resource and a call to action for the global community to invest in sustainable, equitable, intelligent climate-informed solutions for strong digital public health infrastructure. Explore the **Global Goods Guidebook Climate Services for Health Annex**. For more information, contact Heidi Good, Project Lead.

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