# Decentralizing climate action in health policies at the subnational level for sustainable action: The case of Ghana

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# Abstract

The World Health Organization developed guidance for building climate-resilient health systems. Translating the framework to action at sub-national levels remains challenging in Low and Middle-Income Countries (LMICs). For instance, Ghana's Ministry of Health(MOH) built capacity on climate change and health by 2015 and subsequently mainstreamed into two successive medium-term health sector strategic plans, approving 10% of the Ministry of Health's (MOH) annual budget for climate-resilient interventions. However, Ghana has not progressed beyond an initial pilot. The study explored how decentralizing health policy can sustainably mainstream climate action at sub-national levels. The study used Ghana's Community-Based Health Planning and Services (CHPS) policy as a case study because it was drafted after Ghana developed its capacity and policy framework, the most geographically spread, accounting for 65% of health facilities, and an essential strategy for attaining UHC. The READ Approach was adopted, using a four-step process of scoping the MOH website and identifying three complementary policies, extracting data using Keywords-in-context, analyzing differences and similarities between the WHO framework and the CHPS policy/guidelines, and distilling findings. The CHPS policy minimally mainstreamed climate-resilient interventions despite in-country capacities and policy. Minimal mainstreaming presents missed opportunities. For instance, CHPS increased by 63% between 2015 and 2020. Furthermore, exploration of the healthcare waste policy (2020) and the National health policy (2020) highlight climate-resilient actions and, if collectively applied, will lead to moderate mainstreaming of climate-resilient interventions in CHPS facilities. However, sub-national stakeholders might not have adequate capacity to synchronize multiple policies. We recommend the "Thick Mainstreaming" approach for LMICs. This approach advocates mainstreaming national policy on climate resilience into sub-national program policies like CHPS with built-in monitoring, accountability, and participatory mechanisms. This approach stimulates appropriate investments by local government actors and collective action on climate change due to trust in the health systems and the willingness to invest in the health sector.

**Keywords**: Decentralization, Health Policy, Community Based Health Planning and Services, Climate Resilience, Environmental sustainability

# Introduction

Climate change will negatively affect the attainment of Universal Health Coverage (UHC) by 2030 ( Pacheco, 2021),) because it compromises critical components of health facilities essential for quality and access to care (Corvalan et al., 2020). The unique role of the health sector as both a first responder during climate emergencies and a key emitter of greenhouse gases(4.4%) globally(Karliner J et al.,2019) makes it a significant actor in the pursuit of climate change mitigation and adaptation

The World Health Organization (WHO), responding to the need for the health sector to play active roles in climate change mitigation and adaptation, developed an Operational framework for building climate-resilient health systems to comprehensively support ministries responsible for health to strengthen core functions to respond to climate change. (WHO, 2015). The WHO (2020) subsequently developed guidance for "Climate Resilient and Environmentally Sustainable Health Care Facilities"(CRESHCF) to support member states' mainstream "resilience and environmentally sustainable" interventions in the operations of health facilities. CRESHCF recommends climate-sensitive interventions in health system components of the health workforce; Water, sanitation, hygiene and healthcare waste, Energy and Infrastructure, technologies, and products (Corvalan et al., 2020).

However, difficulties may arise in implementing supposedly sound climate adaptive actions at the sub-national levels due to practical constraints (Huang et al., 2011). Mogelgaard et al. (2018) identified five gears of policy framework, sustained and persistent leadership, coordination mechanism, information & tools, and supportive financial process as prerequisites for countries to move beyond the intent to implementation. Furthermore, they suggest that policy frameworks will likely speed up implementation if they have in-built enforcement and accountability requirements.

Ghana successfully built capacity on the five gears suggested by Mogelgaard et al. (2018) by 2015 and integrated climate resilience into the National Health Strategy 2014-2017 (Tye and Waslander, 2021). The Ministry of Health (MOH) developed the Community–Based Health Planning and Services (CHPS) policy and implementation guidelines to streamline and enhance its operations in 2016 after a decade of implementation (GHS, 2016). CHPS is the gatekeeper of the Primary Health Care System with responsibility for providing services in a demarcated zone with a population of 5000 people and an essential strategy for attaining UHC (GoG/MOH, 2020). In two decades, CHPS makes up about 65% of the country's public and private health facilities (GHS,2018). Logically, the expectation is that the Ministry of health would translate existing capacity and friendly environment at the national level into policies, guidelines, and programs at the sub-national to guide integration and catalyze autonomous adaptation of the health system. However, the World Bank Group (2021) suggests inadequate integration of climate change concerns into relevant health policies and planning processes at the sub-national levels. The World Bank Group(WBG) position raises questions about how climate change and health integration into two successive medium-term national health strategic plans between 2010 and 2017 trickled down to sub-national policies and programs. The study explored how decentralizing health policy can sustainably mainstream climate action at sub-national levels. The study used CHPS policy as a "case study." The CHPS policy presents a unique opportunity to study this since it was published after Ghana had mainstreamed climate resilience into the health sector medium strategic plan 2014 –2017. The paper highlights critical policy gaps inimical to climate action at the subnational level and recommends actions to improve the development of future policies in LMICs and other jurisdictions with similar circumstances.

# Methods

The READ Approach (Dalglish et al., 2020) was adopted using a four-step process;

(1) We searched for policies and manuals on the MOH website. We identified 31 policies; we screened the policies by reading the summaries of all thirty-one policies and selecting three complementary policies and guidelines whose content was explored to understand grey themes in the CHPS policy and procedures.

(2) We extracted data using Keywords-in-context (Crawford, 2013); themes and categories of the WHO framework were used because it is the global benchmark for climate resilience and environmental sustainability of healthcare facilities. Comparisons between the WHO framework and the CHPS policy were in the context of climate-sensitive intervention components of; health workforce, Water, sanitation, hygiene and healthcare waste, energy and Infrastructure, technologies, and products that are core to building climate resilience. The complementary policies and guidelines were reviewed for additional information regarding grey thematic areas or policy directives of CHPS

(3) We analyzed the differences and similarities between the WHO framework and the CHPS policy/guidelines.

(4) We distilled findings by exploring differences and similarities between the WHO framework and CHPS policy to infer how "climate resilience and environmental sustainability" interventions are mainstreamed into Ghana's CHPS policy.

# Results

Ghana's CHPS policy and implementation guidelines minimally mainstreams climate resilience into its policy actions.

## Health Workforce

Recommended policy actions of an appropriate mix of health staff were entirely in line with WHO recommendations for human resources. However, communication and awareness and human resource capacity development categories do not align with the WHO recommendations. CHPS policy actions primarily focus on medical, transport, and comfort logistics.

## Water Sanitation Hygiene and Health Care Waste

CHPS, as a stand-alone policy mainstream, recommended WHO interventions in health and safety regulation but had minimal policy directives about monitoring & assessments, and risk management; however, the healthcare waste policy (2020) strongly mainstreamed monitoring, assessments, and risk management of healthcare waste interventions. The collective application of both policies enormously improves sustainability actions in the operations of CHPS facilities.

## Energy

Sustainable Energy interventions are partially mainstream WHO recommendations. Health and safety regulations were completely not catered for in the policy interventions. However, elements of risk management, monitoring & assessments are mainstreamed. For example, solar for health facilities, not on the national grid, planned preventive maintenance, waste minimization strategies, and waste segregation align with the interventions recommended by the WHO framework. Therefore, future reviews should inculcate guidelines for the sustainable use of energy services at the CHPS facility. For example, the use of energy-saving appliances and electrical fittings.

## Infrastructure, technology, products, and processes

The CHPS policy partially considered sustainable Infrastructure, Technology, products, and interventions. Recommendations for appropriate sitting and standardized design with locally sensitive technology somehow improve adaptation to specific climate conditions of different geographical locations. However, this can be problematic as the design may not be appropriate for other climatic conditions witnessed across different parts of Ghana. The use of modern technology was limited to radio or phone communication, but the National Health Policy (2020) recommends the adoption of new technology for information management. However, both policies are silent on diagnostic applications like telemedicine that have the potential to enhance reach during emergencies. CHPS procurement processes are governed by the MOH procurement procedures, which do not emphasize green procurement(MOH, 2006).

## Monitoring Indicators

Performance indicators of CHPS are primarily focused on traditional health indicators. The review identified one indicator of climate resilience in the CHPS implementation guidelines; Equity Index (CHO per population ratio). The non –integration of resilient climate indicators into the performance criteria of CHPS will not encourage active health adaptation to climate change. Therefore, it is recommended that climate and environmentally sustainable-sensitive indicators be integrated into health management information systems to promote health resilience to climate change.

# Discussion

The CHPS policy as a stand-alone policy minimally mainstreams CRESHCF actions in the components of health workforce, Water sanitation hygiene and health care waste, Energy and Infrastructure, technology, products & processes. However, applying the CHPS policy with the National health care waste policy (2020) and the National Health Policy(2020) leads to moderate mainstreaming of CRESHCF actions. Applying multiple policies at the sub-national level, which has primary responsibility for constructing, equipping, and managing CHPS facilities, presents challenges among stakeholders and health workers in LMICs who may not have inadequate capacity to distill and integrate climate change and health actions(Hussey et al., 2020).

Ghana's MOH did not adequately mainstream climate change and health into the CHPS policy despite integration into the medium-term health sector strategic plan 2014-2017 and five other national policies (National Climate Change Adaptation Strategy, National Climate Change Policy (NCCP), Ghana National Climate Change, Master Action Programs for Implementation 2015-2020, Ghana Shared Growth and Development Agenda 2014-2017, Integrated Disease Surveillance and Response system. This trajectory points out difficulties in decentralizing climate action at the sub-national level for programs like CHPS, hence the need to focus on developing mechanisms and capacity to translate national policy to sub-national action in Ghana and other LMICs.

The inability of Ghana to decentralize climate action in sub-national health policies presents missed opportunities for sustainable climate action at the sub-national level outlined below:

PHC systems are responsible for policy implementation. Decentralizing climate policy at the sub-national level with adequate performance monitoring and accountability systems to track performance will catalyze climate action at the sub-national level because PHC systems are mandated to report in line with national accountability and reporting mechanism. Decentralization will catalyze autonomous adaptation in health systems and deepen sustainable climate action because of the willingness of local government authorities to invest in the health system (Mogelgaard et al.,2018; Tye and Waslander, 2021).

The rapid growth in CHPS facilities over the last two decades, despite competition for resources and funding constraints(MOH,2020), demonstrates a high level of trust for the health systems by the local level actors. Decentralizing climate action in health sector policies and programs presents an opportunity for the health sector to lead sustainable action in partnership with other relevant health-determining sectors and communities.

This situation calls for a "Thick Mainstreaming" approach for LMICs. This approach advocates mainstreaming national policy on climate resilience into sub-national program policies with built-in monitoring, accountability, and participatory mechanisms. This approach is necessary because it comes with opportunities for holistic investment that considers climate resilience in the health sector in LMICs due to the current trajectory of decentralization. For instance, CHPS facilities increased by 63% in Ghana between 2015 and 2017, representing an absolute increase of 2,086 facilities. The District Assembly, the local government authority, pioneered these investments, accounting for the construction of 47.8% nationally (Yeboah et al., 2020); This presents a missed opportunity to add climate and sustainability dimensions to the physical projects.

# Conclusion

The "Thick Mainstreaming" approach for LMICs is key to decentralizing and sustaining climate action in health at the sub-national level. This approach stimulates appropriate investments by local government actors and collective action on climate change due to trust in the health systems and the willingness to invest in the health sector. This approach allows for systematic integration of climate resilient and environmentally sustainable action in the health sector and supports it in extending its influence to health-determining sectors and community actors to sustain climate action.

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