

CanWaCH
Canadian Partnership for
Women and Children's Health



CanSFE
Partenariat canadien pour la
santé des femmes et des enfants

Strengthening Health Systems with Responsible AI: Global South Perspectives

September 24, 2025



IDRC • CRDI

International Development Research Centre
Centre de recherches pour le développement international

Canada



Knowledge. Innovation. Solutions.

Savoir. Innovation. Solutions.



IDRC • CRDI

International Development Research Centre
Centre de recherches pour le développement international

Canada

Canada's International Development Research Centre (IDRC)

Created in 1970 as part of Canada's foreign affairs and development efforts, we champion and fund research, innovation, and solutions to address developing countries' most pressing challenges.

Strategy 2030 core objectives

- Invest in **high-quality research and innovation** in developing countries to better inform decisions and approaches to key development challenges.
- **Share knowledge** for greater uptake and use to significantly increase the **reach and impact** of work by IDRC and its grantees.
- **Mobilize alliances** for impact so that Canada, through IDRC, will increase its global leadership role in research for development.

AI4D Vision for Development

Southern Leadership

Research, Evidence, and Support



Digital Foundations

Inclusive digital access is an essential prerequisite to be able to capitalize on the benefits of AI.



AI Policy and Governance

Locally driven research to inform international norms and standards, regional and national AI strategies, and AI and data policies, including macro level research on social, economic, and political implications.

AI Fundamentals



Talent and Skills

High level training and curricula



Data

Liberating, creating and sustainable use of data ecosystems



Compute

Local access to sustainable compute



Innovation

Generative AI

Generative AI use cases for advancing development objectives

Predictive AI

Building on experience piloting AI use cases, with a focus on working with local innovation networks.



Scale

Innovations address locally relevant challenges at the appropriate scale. Capacity is built within Southern public and private sector organizations to co-invest and collaborate in R&D and engage in global AI debates.

Towards an inclusive responsible AI ecosystem that improves the quality of life for all in Africa and beyond.

Cross-cuts



Global Partnerships

Funders and other stakeholders coordinate, collaborate and/or co-design programming to optimize resource utilization and maximize impact.



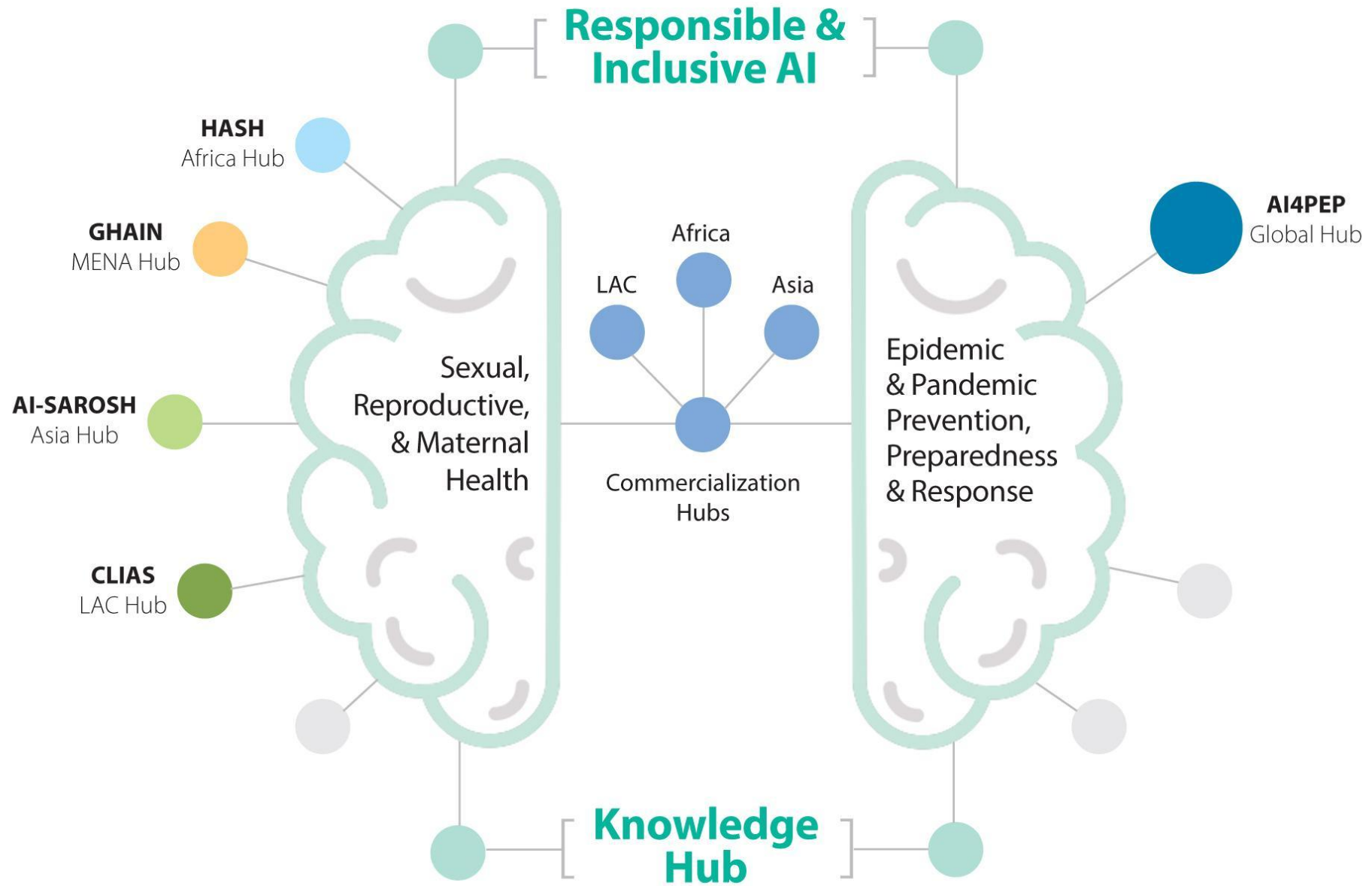
Responsible AI

Responsible AI is a framework of principles for developing and deploying AI safely, ethically and in compliance with growing AI regulations. Core principles are inclusive, rights-based and sustainable.



Gender and Inclusion

AI4D will recognize and address forms of exclusion in programming, including gender, sexual orientation, disability, age, class, race, caste, ethnicity, migration status, religion and other intersectional identities.





We're collaborating with local governments, research institutions and communities to ensure AI is implemented sustainably and equitably.



MODERATOR
Chaitali Sinha
Senior Program Specialist, Global Health
IDRC, Ottawa



SPEAKER
Nour El Arnaout
Associate Director
American University of Beirut, Lebanon



SPEAKER
Mohammed Imran
Primary Healthcare Global,
Pakistan



SPEAKER
Cintia Cejas
Instituto de Efectividad Clínica y Sanitaria,



SPEAKER
Rosalind Parkes-Ratanshi
Infectious Diseases Institute,



SPEAKER
Martin Balaba
Infectious Diseases Institute,

RESEARCH

15 Research projects on SRMH



KNOWLEDGE GENERATION

8 white papers
11 articles
15 webinars
2 guidelines



KNOWLEDGE COMMUNITY

2 Knowledge groups:

- Regulation and policies
- Data

+200 participants
1 Forum

Grupo de Trabajo de Datos y Métodos	Última publicación
<p>Grupo de Trabajo de Datos y Métodos</p> <p>Este espacio esta dirigido para aquellos participantes del Grupo de Trabajo de Datos y Metodos. Este espacio se centrara en discusiones sobre las buenas practicas en el uso de los datos en salud</p> <p>8 debates - 23 publicaciones</p>	<p>LA IA y la pérdida de hab ...</p> <p>hace 4 días - drbonitasinibaldi@gmail.com</p>
Grupo de Trabajo de Políticas y Regulación	Última publicación
<p>Grupo de Trabajo de Políticas y Regulación</p> <p>El Grupo de Trabajo en Regulación y Políticas Públicas en IA del CLIAS se dedicará a analizar los desafíos regulatorios y de política pública asociados al uso de la IA en América Latina y el Caribe (LAC).</p> <p>23 debates - 75 publicaciones</p>	<p>Medical data as Public go ...</p> <p>hace 2 días - Dr. Francisco Rosero-Villarreal</p>
Recursos CLIAS	Última publicación
<p>Recursos adicionales</p> <p>Aquí encontraras información relevante sobre la documentación y metodologías de presentación. También podrás hacer consultas a la comunidad de investigadores.</p> <p>1 debate - 1 publicación</p>	<p>Q&A sobre la IA en la sal ...</p> <p>hace 4 días - Dr. Martin Saban</p>

SCALABILITY

14 media articles
1 In-person meeting
2 scaled up projects
Meetings with key stakeholders



7

CHATBOTS

PERÚ
COLOMBIA
ARGENTINA
ECUADOR

- PREP FOLLOW UP
- INFORMATION AND COUNSELING FOR ADOLESCENTS
- VPH SELF-SAMPLING COUNSELING
- ABORTION COUNSELING FOR TELEHEALTH
- POSTPARTUM FOLLOW

4

CLINICAL DECISION SUPPORT SYSTEMS

COLOMBIA
ARGENTINA
MÉXICO

- PREECLAMPSIA
- MATERNAL MORBIDITY
- PCD + CONSULTAS DE SALUD SEXUAL
- POSTPARTUM DEPRESSION AND ANXIETY

3

COMPUTER VISION TOOLS

ARGENTINA
MÉXICO
GUATEMALA

- ULTRASOUND PREGNANCY FOLLOW UP
- COLPOSCOPY CLASSIFICATION
- PAP CLASSIFICATION

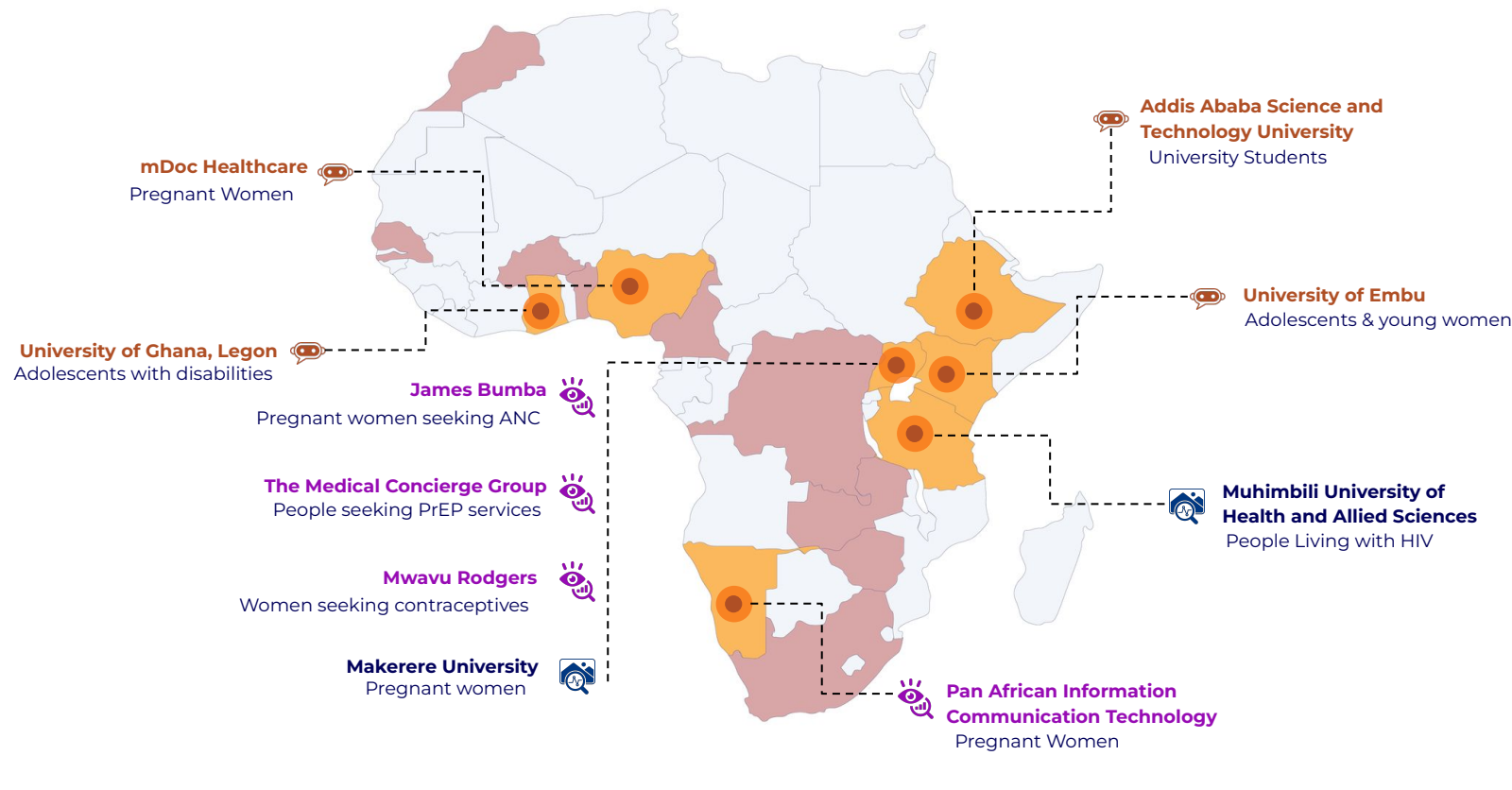
1

BIAS & AUDIT TOOL





ARGENTINA

- GENDER BIASES ANALYSIS IN LLM

HASH Phase One Subgrantees & Network



LEGEND

-  Chatbot
-  Image analysis algorithm
-  Predictive analysis tool
-  HASH network member



IDRC · CRDI

Co-creation of multi national conversational agent



University of Embu

500

test end users - Beshte Chatbot for women with HIV



University of Ghana, Legon

Teenchat and chatbot for adolescents with disabilities

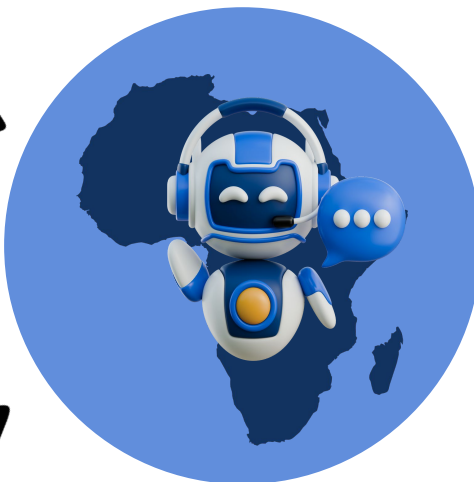


Addis Ababa Science and Technology University

200

end users- An STD monitoring and assistance chatbot

One Common Goal:
A SRH Multi-country Conversational Agent



Vision - Improved SRH outcomes for all Africans by making SRH information accessible and inclusive

Sunbird, COCIS & IDI

Key Features

- Phone Feature
- Offline functionality
- Sign language support
- Multi-lingual capability (English, Kiswahili, Luganda, Amharic, & Akan)



An open-source validated African specific SRH-dataset

Scale

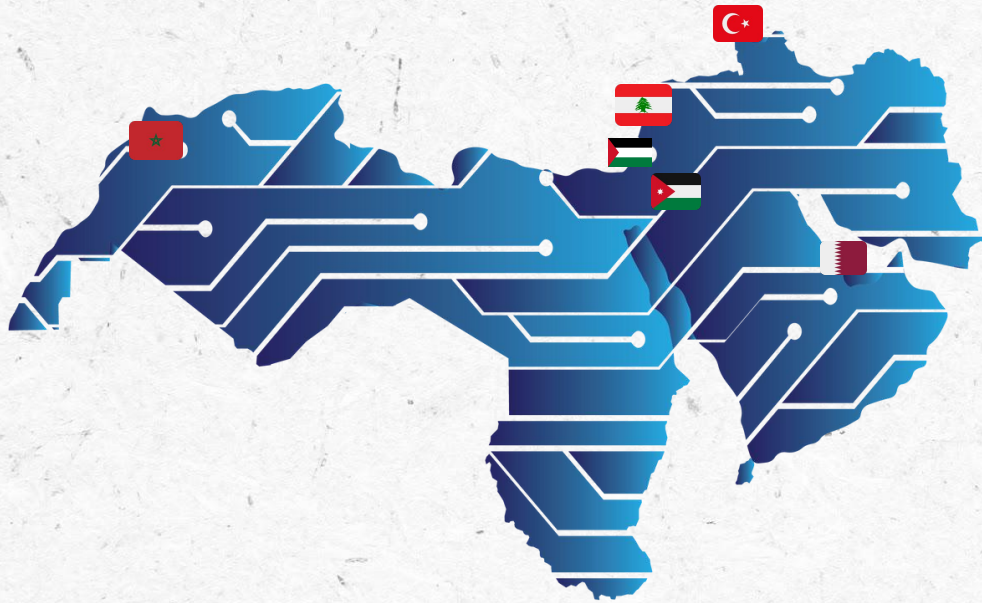
Target



25,000

adolescents & young people in 4 countries by 2026

SELECTED PROJECTS



Saving mothers' lives using AI in Morocco



Scaling the use of family planning mobile application and counseling on the use of modern family planning methods among postpartum women in the West Bank: a randomized clinical trial



Utilizing a responsible AI-based Chatbot to Enhance Sexual, Reproductive, and Maternal Health Outcomes in Lebanon: A comprehensive approach



Harnessing Artificial Intelligence for Adolescent Empowerment: A Holistic Initiative to Enhance Sexual and Reproductive Health, Counter Gender-Based Violence, and Mitigate Child Marriage in Jordan's Refugee and Host Communities



HERA AI - Predictive Health Interface



FADA: Fetal Abnormality Detection Algorithm

Supported by



In partnership



GHAIN MENA HUB: EMPOWERING RESEARCHERS



Sub-granting Scheme

Providing financial support to advance 6 responsible AI projects in global health.



Capacity Strengthening

Building skills and knowledge through:

- 6 One-on-one coaching sessions
- 1 Closed AI technical training
- Quarterly meetings
- In-person Workshops
- Webinar series



Dissemination of Findings

Amplifying visibility of projects through social media, conferences, and events.



Resource Mobilization

Exploring avenues for additional funding to sustain and scale the responsible AI solutions.

Supported by



In partnership



AI-SAROSH | AI for Sexual Reproductive and Maternal Health in South Asia



Our Objective: Strengthen access, reliability, and accountability in SRH and maternal health services



Development and Evaluation of an AI-Based Predictive Model for Postnatal Depression in Pakistan: Bridging the Gap in Early Detection and Intervention



Development SuSastho AI: An enabled solution to improve the health and well-being of the adolescent population in Bangladesh



AI-powered task-shifting for high-quality fetal ultrasound service in community healthcare settings



AI-based risk predictive tool for early diagnosis and treatment of Gestational Diabetes



Ma (Mother) Mental Health: Artificial Intelligence-Enabled Detection of Perinatal Depression



Artificial Intelligence Supported Cervical Screening (AISCs)



AI/ML-based Risk Stratification and Management of Pregnant Mothers (mCareSK)



AI/ML-based Pregnancy Risk Categorization (mCareAI)



AI-Powered Population-based Birth Cohort Study in the Western Province of Sri Lanka

AI-SAROSH ON THE GLOBAL MAP



Challenges: Data scarcity, model imbalance, ethical approvals, and limited rural access.

Knowledge Sharing

- **Co-Design Workshop** with all AI-Sarosh projects for cross-learning and alignment.
- **Quarterly Progress Review Meetings**
- **6 peer-reviewed publications**, 8 blogs/articles/videos, features in local/national media campaigns
- **7 Conferences & Global Engagements**

Policy & Recognition:

- Contributions to **Nepal's National Responsible AI Policy** (NAAMII & Wiseyak).
- Support to **Bangladesh's Digital Health Strategy 2023–2027** (mPower).
- **Govt. of Nepal formally recognized** Wiseyak's AI-driven cervical cancer screening.

Digital Presence:

- Website revamp
- Active presence on Facebook, LinkedIn, YouTube, Instagram.
- Thematic campaigns, e.g., World Suicide Prevention Day.
- **Inside The Project Series** spotlighting solutions and journeys at end of Phase I.

Capacity Building

- **24 researchers** supported with grants; **1 PhD in progress**.
- **1,635 graduates and 518 postgraduates** trained (majority women).
- **12 + Skill Development Workshops** on AI ethics, chatbots, maternal health AI, multimodal federated learning, VLMs.

Key Learnings from Phase I

- **Diversity and representativeness of data** are critical for building reliable and fair AI models in LMIC settings.
- **Ethical approvals and local regulatory processes take longer** than anticipated, requiring early planning and flexibility.
- **In-person engagement** with sub-grantees and communities yields deeper insights than virtual interactions alone.
- **Responsible AI in health must combine technical innovation** with human-in-the-loop approaches to ensure trust, safety, and adoption.

Future Directions & Regional Integration

- **Scaling and pilot testing** sub-grantee projects across South Asia
- Deepening **South-South collaborations** to strengthen responsible AI innovation, cross-country learning, and evaluation in maternal, reproductive, and adolescent health
- Building **open-access repositories** to document **LMIC-led AI use-cases**, showcasing contextual performance, user feedback, and systems integration learnings
- Collaborating with ministries and implementing partners to **embed AI tools into national digital health strategies, service delivery frameworks, and supervision systems**



**Strengthening Health
through Responsible AI**
An emergent research landscape

<https://hdl.handle.net/10625/63893>



**Renforcer les systèmes de santé
en tirant parti de solutions
qui font appel à l'IA responsable :**
Un paysage de recherche émergent

Canada



**Fortalecimiento de los sistemas de salud
mediante el aprovechamiento de soluciones
de inteligencia artificial responsable**
Un panorama de investigación emergente

Canada



IDRC · CRDI

International Development Research Centre
Centre de recherches pour le développement international

Canada

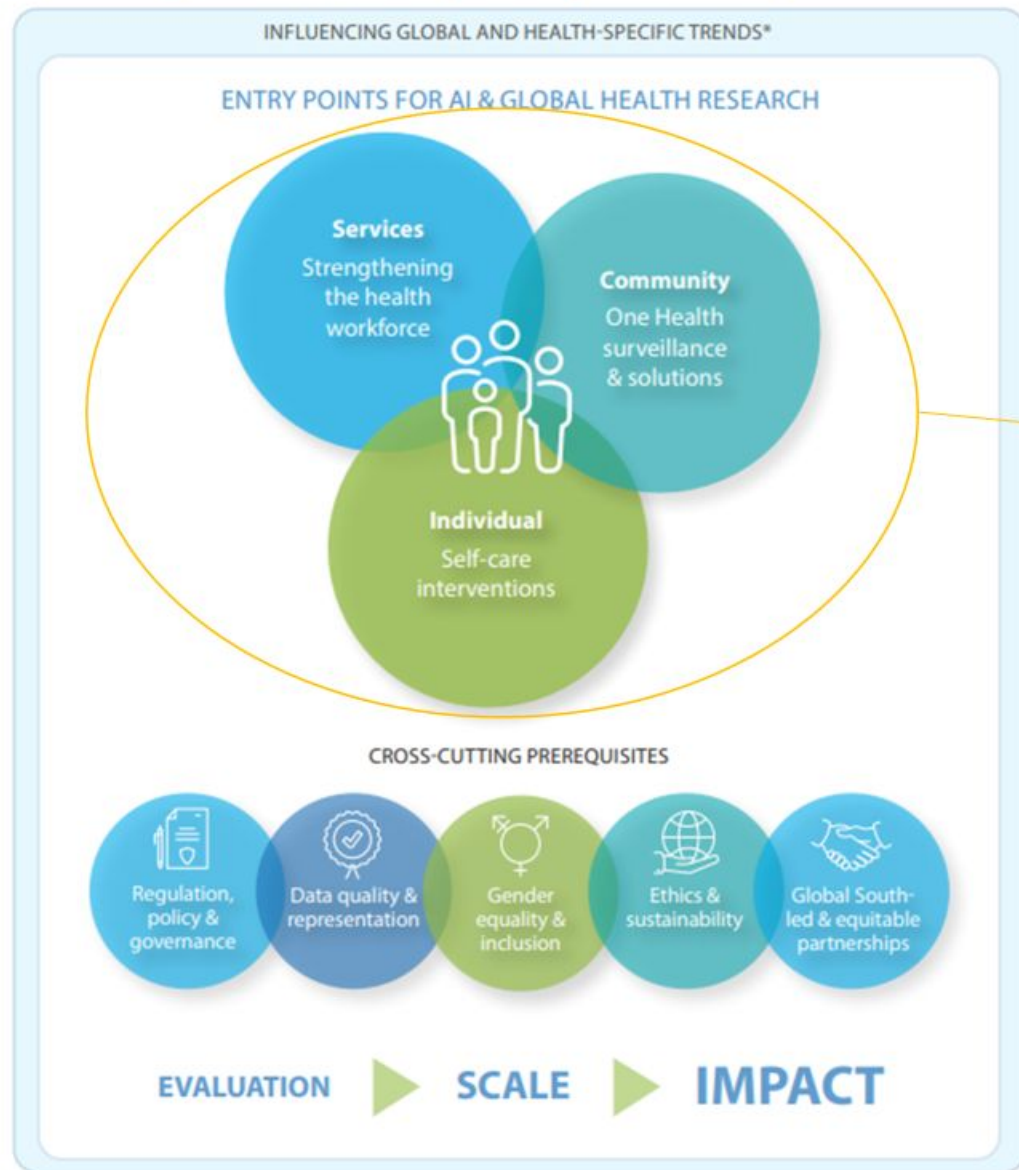
Process of Developing the Emergent Research Landscape

Key informant interviews: Adolfo Rubenstein, Institute for Clinical Effectiveness and Health Policy (Argentina); Araba Sey, Research ICT Africa (South Africa); Bilal A. Mateen, PATH (UK); Chris Seebregts, Jembi Health Systems (South Africa); Cintia Cejas, Institute for Clinical Effectiveness and Health Policy (Argentina); Deshen Moodley, University of Cape Town (South Africa); Jude Kong, University of Toronto (Canada); Kanika Karla, WHO (India); Mohammad Imran Khan, PHC Global (Pakistan); Neal Lesh, Dimagi (US); Patricia Mechael, HealthEnabled (US); Rebecca Distler, OpenAI (US); Rosalind Parkes-Ratanshi, Infectious Diseases Institute, Makerere University (Uganda); Sameer Pujari, WHO (Switzerland); Sathy Rajasekharan, Jacaranda Health (Kenya/Canada); Shadi Saleh, American University of Beirut (Lebanon); Tigest Tamrat, HRP-WHO (Switzerland).

Reviewers: Alain Labrique, WHO (Switzerland); Alvin Marcelo, University of the Philippines (Philippines); Brian Wahl, Yale School of Public Health (US); Catalina González Uribe, Universidad de los Andes (Colombia); Derek Ritz, ecGroup Inc. (Canada); Peiling Yap, HealthAI (Switzerland); Matthew Smith, IDRC (Canada); Montasser Kamal, IDRC (Canada); Nina Schwabe, Spark Street Advisors (US); Rajat Khosla, PMNCH-WHO (Switzerland); Rohit Malpani, WHO (Switzerland); Smisha Agarwal, Johns Hopkins School of Public Health (US); Trudie Lang, The Global Health Network (UK).

The case studies presented in this discussion paper feature innovative work carried out by researchers funded by IDRC and the UK government's Foreign, Commonwealth and Development Office. Their expertise and efforts are laying the foundation for advances in responsible AI solutions in a global health context.

Figure 1: Emergent research landscape for responsible AI and global health



ENTRY POINTS FOR AI & GLOBAL HEALTH RESEARCH



* **Global:** Polycrisis, growth in computational power, big data, use of AI (specifically ML), emergence of generative AI, mis- and disinformation, pushback on social and gender rights, concentration of power and wealth, gender-based violence, emerging and existing conflicts, mass displacement, climate crisis. **Health-specific:** Strained health systems, digital health (including AI), self-care, preventative care, mental health, adolescent health, sexual and reproductive rights, antimicrobial resistance, vaccination acceptance and coverage, global health security, chronic disease, malnutrition and obesity, emerging and re-emerging infectious diseases, zoonoses, water sanitation and hygiene, air pollution.

Figure 1: Emergent research landscape for responsible AI and global health



IDRC • CRDI

International Development Research Centre
Centre de recherches pour le développement international

Canada

Cross-Cutting Prerequisites

