**Fortifying National Systems for the Age of AI**

**Anurag Agrawal**

As the world stands on the brink of an AI revolution, it is imperative for low- and middle-income countries to craft national systems that not only harness the power of artificial intelligence but also reflect the values and realities of their unique contexts. Fortifying such systems demands attention to local needs, equity in data representation, and a robust framework of data solidarity, all while balancing privacy and preventing misuse.

**The Local Context: A Foundation for Relevant AI**

AI systems designed without regard to local contexts risk being irrelevant or, worse, harmful. LMICs often contend with challenges like under-resourced health systems, diverse linguistic and cultural landscapes, and a prevalence of informal economies. National AI strategies must prioritize context-aware applications, such as AI-driven diagnostics tailored for endemic diseases, or natural language processing tools adapted to regional dialects. Localized solutions not only increase efficacy but also foster trust and adoption among communities.

**Equity in Data Representation**

Global AI development often reflects data priorities of high-income countries, leading to inequities in outcomes when deployed in LMICs. To rectify this, LMICs must ensure their populations are equitably represented in global datasets. This involves capturing data across diverse geographies, genders, and socio-economic groups to prevent biases that perpetuate inequality. Initiatives like creating local data hubs and participating in international data collaborations are critical to building AI systems that serve all segments of society.

**Data Solidarity and engagement with young people**

Data solidarity—the ethical and collaborative management of data—is central to AI’s success in LMICs. It requires an understanding of the potential for harm by both data misuse and non-use.  Collaboration requires trust and an understanding that efforts will be made for harm prevention and redressal. In particular a new digital native generation needs to be engaged in these discussions

Fortifying national systems for AI in LMICs is not just a technological challenge but a socio-political one. By grounding AI in local realities, advocating for equitable data representation, and fostering data solidarity, LMICs can navigate the AI age with resilience and agency. In doing so, they can ensure that AI serves as a bridge to equitable development rather than a chasm of disparity.