

Chapter 19

AI Strategies for Sustainable Development Goals: Collective Action for Poverty Alleviation

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ABSTRACT

Global poverty is a pressing issue that affects a large portion of the world's population. Understanding the underlying causes of poverty and implementing effective AI strategies for alleviation are crucial steps towards achieving sustainable development goals. The empirical research presented in this study adds valuable insights to the academic discourse on development economics and the interplay between economic growth, poverty reduction, and sustainable development in developing nations. It's through collective action and informed decision-making that we can make a positive impact on combating global poverty. The authors analyze the trends, conflicts and contradictions within the socio-economic-political-cultural systems within the periphery and semi-periphery nations and colonial linkages/legacies with the core nations. The chapter provides also a comprehensive treatment of the subject and recommends new perspectives on poverty alleviation and sustainable development goals.

INTRODUCTION

AI strategies for sustainable development goals, particularly in the realm of poverty alleviation, involve leveraging technology to address systemic challenges and foster collective action. These strategies aim to empower communities, governments, and organizations to implement targeted interventions that uplift individuals and communities out of poverty while promoting long-term sustainability. In the pursuit of global progress, the Sustainable Development Goals (SDGs) stand as a beacon of hope, outlining a roadmap towards a more equitable and sustainable future for all. Central to this vision is the eradication of poverty, a formidable challenge that requires innovative approaches and concerted efforts from diverse stakeholders worldwide. As we stand at the nexus of technological advancement and social responsi-

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bility, the integration of Artificial Intelligence (AI) emerges as a potent tool in our arsenal, capable of catalyzing collective action towards poverty alleviation.

The complexity and scale of poverty necessitate multifaceted interventions that address its root causes while empowering communities and individuals to build sustainable livelihoods. Traditional approaches have made significant strides, yet the magnitude of the challenge demands a paradigm shift. AI presents itself not as a panacea but as a transformative force, offering novel solutions that leverage data-driven insights, predictive analytics, and automation to drive impactful change. At its core, AI embodies the promise of efficiency and optimization, characteristics that are invaluable in resource-constrained environments where every dollar and minute counts. Whether it be optimizing supply chains to ensure the equitable distribution of essential goods and services, or enhancing agricultural practices to increase productivity and resilience in the face of climate change, AI-driven solutions hold immense potential to amplify the impact of poverty alleviation initiatives.

Moreover, AI transcends geographical boundaries, enabling knowledge sharing and collaboration on a global scale. Through platforms that facilitate the exchange of best practices and lessons learned, AI fosters a community of practice wherein stakeholders from diverse backgrounds can coalesce around shared objectives. This collective intelligence not only accelerates progress but also cultivates a culture of continuous learning and adaptation, essential qualities for navigating the complexities of poverty eradication.

However, the integration of AI into poverty alleviation efforts is not without its challenges and ethical considerations. As we harness the power of AI, it is imperative to ensure that these technologies are deployed responsibly, with a keen awareness of potential biases, privacy concerns, and unintended consequences. Furthermore, equitable access to AI technologies must be prioritized to prevent exacerbating existing disparities and ensure that marginalized communities benefit from these innovations. In this dynamic landscape, the development of AI strategies for sustainable development goals demands a holistic approach that encompasses technological innovation, policy coherence, and stakeholder engagement. By forging partnerships across sectors and harnessing the collective wisdom of diverse perspectives, we can unlock the full potential of AI as a force for good in the fight against poverty. This compendium explores the intersection of AI and poverty alleviation, showcasing innovative strategies, impactful case studies, and actionable insights to inspire and inform practitioners, policymakers, and advocates alike. As we embark on this journey towards a more inclusive and sustainable future, let us harness the transformative power of AI to catalyze collective action and advance towards our shared goal of a world free from poverty.

OBJECTIVES

The attainment of the Sustainable Development Goals necessitates a cohesive and concerted effort, embracing an integrated strategy aimed at cultivating more equitable and inclusive societies. The measurement of global poverty demands a nuanced approach that transcends simplistic monetary thresholds. Traditional poverty metrics often rely on income-based measures, epitomized by the international poverty line established by the World Bank, presently set at \$1.90 per day (in 2011 purchasing power parity

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