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Empowering India: Leveraging Computer Technology for Sustainable Development

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Abstract: *In India's rapidly evolving sustainable development scenario, computer technology plays a pivotal role across various sectors, from environmental conservation to economic growth and social equity. The Digital India initiative epitomizes India's commitment to digital transformation, emphasizing the development of digital infrastructure, services, and literacy. IoT-enabled smart agriculture has been a game-changer, revolutionizing farming practices by optimizing resource utilization and promoting sustainability. On the economic front, platforms like UPI have catalyzed financial inclusion, fostering a shift towards a cashless economy and bolstering small businesses. This digital revolution has not only promoted economic growth but has also bridged economic disparities, promoting inclusive development. Socially, telemedicine services have had a transformative impact by enhancing healthcare access, particularly in remote and underserved areas. Online consultations have reduced healthcare costs and improved health outcomes, contributing significantly to achieving health-related Sustainable Development Goals. However, despite these advancements, challenges such as the digital divide, cybersecurity threats, and infrastructure limitations continue to pose obstacles. Through a mixed-methods approach, this study offers insights into the strategies, challenges, and opportunities in integrating computer technology into sustainable development practices in India. Collaborative efforts among policymakers, businesses, and communities are essential to address these challenges effectively. Strategic interventions focusing on digital literacy, cybersecurity, and infrastructure development will be crucial for harnessing the full potential of computer technology in India's journey towards a sustainable and inclusive future.*

Keywords: Computer technology, Sustainable development, India, Environmental conservation, Economic growth, Social equity, Smart agriculture, Digital governance, Telemedicine, Financial inclusion, Digital divide, Cybersecurity threats, Infrastructure limitations, Mixed-methods approach, Qualitative analysis, Quantitative analysis, Collaborative efforts, Policymakers, Businesses, Communities

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