

ARTIFICIAL INTELLIGENCE IN BANGLADESH: ANTICIPATED SOCIO-ECONOMIC CHALLENGES AND POLICY RESPONSES**Narayan Nath**

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Artificial Intelligence (AI) is transforming global economies and societies, reshaping labor markets, education, and governance. For Bangladesh, a developing country with a labor-intensive economy, AI offers both opportunities and risks. This study identifies the socio-economic challenges Bangladesh may face due to AI adoption, such as unemployment, income inequality, digital divides, and ethical concerns. It also explores mitigation strategies including workforce reskilling, inclusive digital infrastructure, regulatory policies, and innovation promotion. The findings suggest that timely policy interventions are essential to ensure that AI contributes positively to sustainable development without exacerbating inequality.

Keywords:

Artificial Intelligence, Bangladesh, Socio-Economic Challenges, Workforce, Policy, Mitigation

1. INTRODUCTION

Artificial Intelligence (AI) has become the driving force of the fourth industrial revolution. From automation in industries to AI-based governance, its applications are diverse. While developed countries are integrating AI seamlessly, developing nations like Bangladesh face unique vulnerabilities. With over 60% of the workforce employed in low-skilled jobs, sudden automation could disrupt employment and social stability. This paper examines the potential challenges AI poses to Bangladesh and suggests strategies to mitigate them.

2. METHODOLOGY

This research is based on a qualitative review of secondary sources, including academic literature, policy reports, and international case studies. Comparative insights from India, Vietnam, and Indonesia provide lessons for Bangladesh.

3. SOCIO-ECONOMIC CHALLENGES OF AI IN BANGLADESH**3.1 Economic Challenges**

- Job Displacement: Automation in garments, agriculture, and finance threatens millions of jobs.
- Income Inequality: Benefits of AI may remain concentrated in high-tech sectors, leaving low-wage workers marginalized.
- Foreign Dependency: Over-reliance on imported AI technologies may harm economic sovereignty.

3.2 Social Challenges

- Digital Divide: Limited digital access in rural areas may widen inequality.
- Skill Gap: Traditional education systems are inadequate for preparing an AI-ready workforce.
- Ethical Concerns: AI surveillance and data misuse may challenge privacy and human rights.

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4. MITIGATION STRATEGIES

4.1 Economic Mitigation

- Workforce Reskilling & Upskilling: Introduce digital and AI-related courses in universities and vocational institutes.
- Balanced Automation Policy: Encourage industries to combine automation with human labor instead of replacing it entirely.
- Local Innovation: Support local startups and universities in AI research to reduce dependency on foreign technologies.

4.2 Social Mitigation

- Digital Inclusion: Expand internet connectivity and provide affordable devices to rural populations.
- Education Reform: Update curricula with coding, robotics, and data science to create AI-ready graduates.
- Ethical Governance: Establish AI ethics guidelines and strong data protection laws to safeguard privacy.

4.3 National-Level Policy Interventions

- AI Roadmap for Bangladesh: Formulate a national AI strategy with input from academia, government, and private sector.
- Public-Private Partnerships: Foster collaboration between industries and universities for research and job creation.
- Social Safety Nets: Develop unemployment benefits and retraining programs for workers displaced by automation.

5. CONCLUSION

AI has the potential to accelerate economic growth and improve governance in Bangladesh. However, without proactive measures, it could intensify unemployment, inequality, and social instability. The key lies in balancing automation with human employment, reforming education, promoting digital inclusion, and ensuring ethical AI governance. Bangladesh must embrace AI responsibly to secure a sustainable and equitable future.

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