

ARTIFICIAL INTELLIGENCE AND SOCIAL INEQUALITY

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Abstract—The present paper discloses the association between the Artificial Intelligence and Social Inequality. Knowledge and utilization of AI is highly unequal in the society. Utilization of AI is influenced by vary many factors such as education, economy, employment, socialization, gender, age, generation gap and marginalized groups, rural and urban settings. Secondary data have been used to study artificial intelligence and social inequality. This is based both qualitative and quantitative in nature. This paper also analyses the usages of Artificial Intelligence at global level based on income level of the countries.

Keywords: Artificial Intelligence, Social Inequality, Education, Economy, Socialization.

INTRODUCTION

Artificial Intelligence and social inequality highlight how technological advancement can both reduce and reinforce existing social disparities. AI has greater impact on human society in each and every aspect of our life. AI reaches every field in the society such as marriage, family, education, healthcare, employment, law, religion, communication and political administration. AI offers opportunities for the development of every segment of the population in the society. Social inequality act as an obstacle in accessing information, access to digital resources, internet connectivity, and digital literacy creates a digital division in the society. Socially, deprived sections like women, old age people, rural populations, low-income groups, low educated population often face exclusion from AI benefits. Algorithmic bias, data discrimination, and automation-related job losses further widen inequality in income, opportunities, and social status. Without inclusive policies, ethical regulation, and equitable distribution, AI may deepen social stratification. Hence, ensuring fairness, transparency, and inclusive AI development is essential for social justice.

Review of literature

The literature on AI and inequality builds upon the earlier concept of the digital divide, which initially focused on unequal access to computers, the internet and digital technologies. Lutz (2019) argues that digital inequality has eventually caused due to disparities in accessibility, infrastructural facilities, utility and socio-economic conditions. He suggests that AI and big-data technologies may create new forms of inequality through unequal access, algorithmic decision-making and data-related disadvantages.

Carter, Liu and Cantrell (2020), through a literature review on the intersection of AI and the digital divide, argue that AI may transform existing forms of digital inequality. They emphasize the need to understand AI as a socio-technical phenomenon, where technological developments interact with social and economic structures.

Zajko (2022) examined AI, algorithms and social inequality from a sociological perspective. The study highlights that the benefits and harms of technological developments are not equally distributed. Existing social inequalities can become embedded in technological systems, meaning that AI may reproduce inequalities rather than automatically eliminate them. The study connects AI with broader sociological concepts such as social exclusion, digital inequality and discrimination.

A recent systematic review by Mera Cedeño et al. (2026), covering literature from 2015–2025, identifies an important shift from the traditional digital divide toward algorithmic vulnerability and AI-mediated social stratification. The review identifies education, labour markets and healthcare as major areas in which automated decision-making can contribute to new forms of exclusion.

Gender is one of the most extensively studied dimensions of AI-related inequality. Leavy (2018) and subsequent research have highlighted concerns regarding gender discrimination in machine-learning system.

Many scholarly articles (120 studies) disclosed that there is a gender disparity in AI and machine learning systems which can inherit and propagate gender and racial biases. The review also identified a lack of user-focused and inclusive research as an important gap.

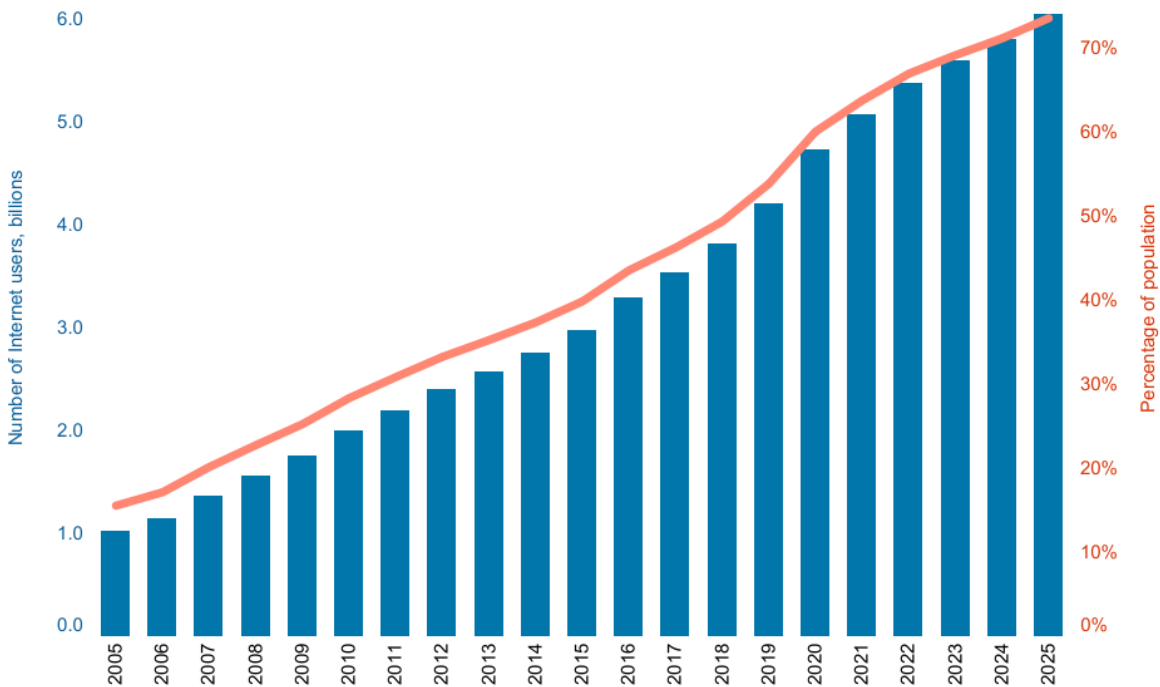
A systematic literature review on AI and diversity and inclusion similarly found that gender is the most prominent diversity dimension addressed in the literature, while other characteristics such as race, ethnicity and language receive comparatively less attention.

Yu (2020) introduced the concept of the “algorithmic divide,” extending the digital-divide framework into the AI era. The study identifies inequalities in awareness, access, affordability, availability and adaptability. It argues that unequal access to algorithmic technologies can result in algorithmic deprivation, discrimination and distortion.

More recently, OECD research has highlighted differences between countries in their capacity to benefit from AI. Low-income and lower-middle-income countries may face barriers such as inadequate digital infrastructure, limited skills, financing constraints and weaker regulatory systems.

Artificial Intelligence and Social Inequality

Individuals using the Internet



Source: ITU

In 2025, 74 per cent of the population in various countries are using online for several purpose at the global level. Internet users level raised from 5.8 billion to 6 billion population in the world. AI users’ size have raised every year from 2.9 per cent to 3.3 per cent. Three fourth of the universal population have connected with AI while remaining portions are connected in offline.

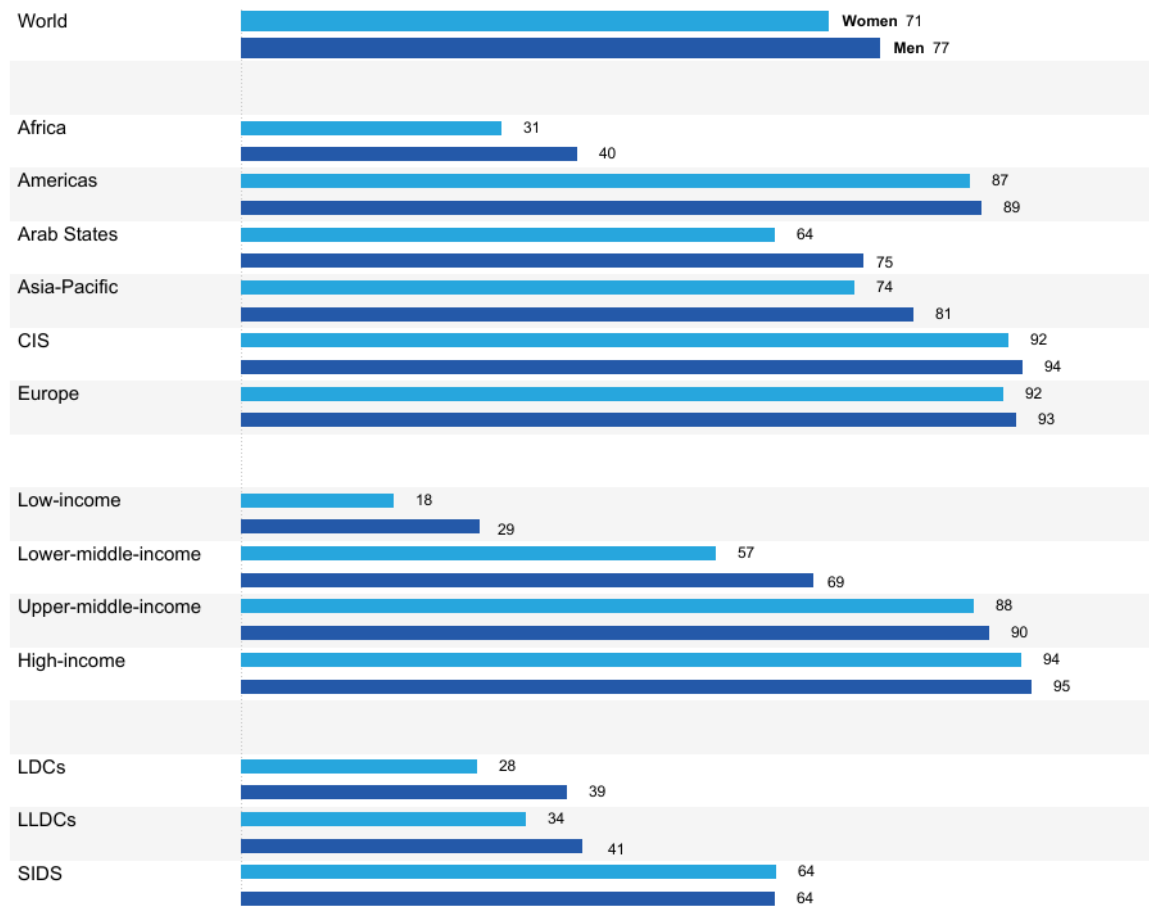
Globally, Internet usage is highly associated with socio-economic conditions of the countries. 94 per cent of the population in the developed countries are high in using Internet while only 23 per cent of the population in the developing and under-developed countries. Population of high-income countries are using Internet due better socio-economic conditions such as education, accessibility, religion, culture, technology and income.

Artificial Intelligence and Social Inequality

At the regional level, 88 per cent to 93 per cent of the population use internet in the Commonwealth of Independent States (CIS), Europe, and the Americas, whereas 77 per cent population used in Asia-Pacific and 70 per cent population use the internet in the Arab States. By contrast, only 36 per cent population use internet in Africa.

Artificial Intelligence and Gender disparities

Percentage of women and men using the Internet, 2025

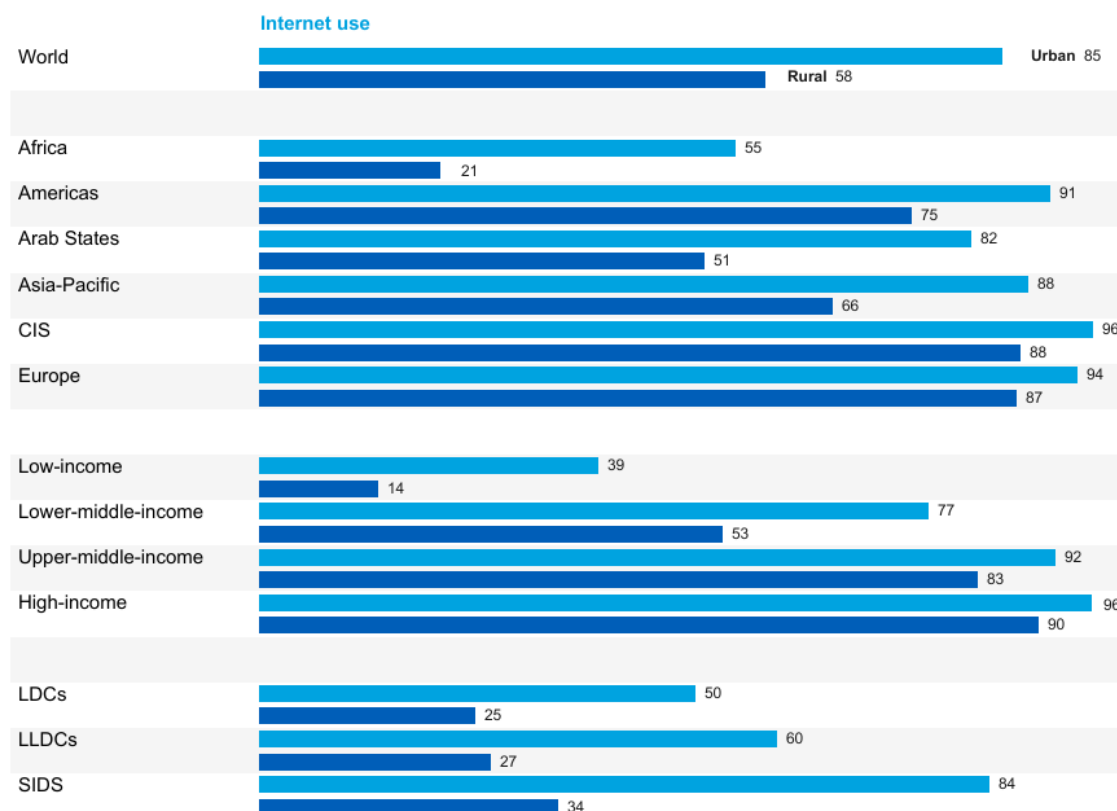


Source: ITU

Universally, major portion (77 per cent) of male use the Internet, while 71 per cent of female use the internet. Internationally, from 2019 to 2025, 45 per cent of female and male Internet user has been raised among which 280 billion men are using than women. Gender disparity is causing less usage of internet among female than male. Internet usage per centage varies from male to female due to influence of many factors such as physical, psychological, social and spiritual factors.

AI and rural and urban social structure

Percentage of individuals using the Internet in urban and rural areas, 2025



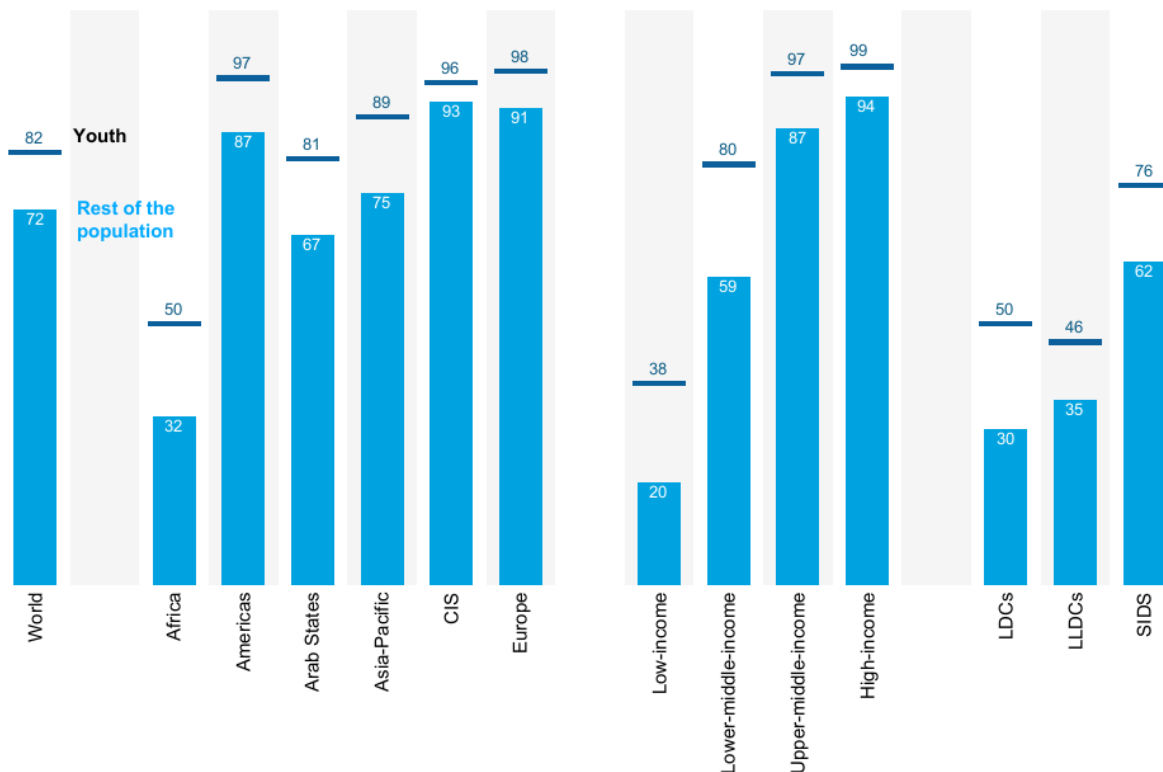
Source: ITU

At the Global level, 85 per cent of urban dwellers use the Internet in 2025, compared to just over half of the rural population (58 per cent). The urban-rural gap in internet usage is declined from 1.6 per cent to 1.5 per cent at the universal level. Urban-Rural gap in internet usage is very less among high income region including in Europe, where the ratio is just 1.1, compared with 2.6 in Africa. In all regions, development has been uncertain over the last four years.

In high-income countries, where 94 per cent of the population uses the Internet, the urban-rural gap has almost been associated, with an average ratio of 1.1. In low-income countries, by contrast, the urban-rural gap remains wide with only one in seven rural dwellers (14 per cent) online, which is little more than one-third the share of urban residents. The prevalence of internet usage is large in high income countries because of easy accessibility, infrastructure facility, upward economical mobility, quality life style, improved socio-economic structure, adaptability in using internet among social institutions, better education system.

AI and Age disparities

Percentage of individuals using the Internet by age group, 2025



Note: "Youth" refers to 15 to 24-year-olds.

Source: ITU

The above diagram unfolds, 82 per cent of people aged 15 to 24 use the Internet, ten percentage points more than among the rest of the population (72 per cent). The generational gap has been gradually shrunk in past four years. 95 per cent of generation gap has been attained in Europe, the CIS region and the Americas region. The generation gap is larger in size among low-income countries. The generation gap in internet usage varies from country to country between the group of 15 to 24 years because of influence of social variables life peer group influence, using social media, establishing and maintaining relationship, employment purpose, entertainment, educational purpose and etc.,

Conclusion

AI usage in society includes improving digital literacy, providing affordable access to AI technologies, offering AI training and skill-development programmes, creating awareness about the benefits and responsible use of AI, integrating AI education into schools and colleges, supporting AI-based services in healthcare, agriculture and employment, and ensuring data privacy, security and ethical use of AI.

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