



Doi: 10.46793/MAK2026.107M

WOMEN'S EDUCATION AND ECONOMIC INCLUSION IN BRICS+: TREND ANALYSIS 1991-2022

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Abstract: This paper analyses the position of women in BRICS+ member countries through the prism of education and their integration into the labour market in the period 1991-2022, using World Bank data (2024). The research focuses on the interrelationship between these parameters, viewing education as the foundation of social mobility and economic progress, gender equality as a precondition for sustainable social development, and women's participation in the labour market as an indicator of the actual level of integration and economic inclusion. By applying descriptive and comparative analysis, different trends in the gender gap are identified, indicating that higher participation of women in education is associated with a higher level of their economic inclusion. The aim of the paper is to highlight the importance of education and the equal inclusion of women in economic activity, as well as the potential that these processes have for improving social cohesion and long-term economic growth within the BRICS+ group. The results show that the development of institutional mechanisms to support women in the labour market is necessary and confirm that gender equality is a key precondition for sustainable economic development and social stability within BRICS+.

Keywords: BRICS+, Women, Education, Labour market, Inclusion

INTRODUCTION

Although BRICS was not initially focused on social and gender issues, in recent years the importance of gender equality for sustainable development and stable economic growth has been increasingly recognized (UNDP, 2023; Dugarova, 2019). In this context, the role of women as agents of change has gained more space in strategic documents, forums and initiatives of BRICS and the expanded BRICS+.

Women make up a significant part of the working-age population, but their position in the economy is often precarious, due to limited access to leadership positions, entrepreneurial resources and financial instruments (ILO, 2021). In addition, unpaid domestic and care work, which is largely performed by women, further reduces their scope for economic empowerment (Kabeer, 2012).

Although member states have adopted numerous laws and strategies aimed at reducing the gender gap and improving the position of women in the labour market, the effects of these measures often remain limited due to deep-rooted socio-economic and cultural barriers

(OECD, 2020). At the same time, women in BRICS+ countries are increasingly entering the spheres of innovation, entrepreneurship and public policy, thereby contributing to the construction of a more inclusive and sustainable economic model.

However, in all these countries there is still a clear contradiction between the increasing participation of women in education and public policies, and the persistent inequality in the economic sphere. The key problem remains the invisibility of unpaid domestic work and the limited participation of women in the formal labour market.

Increasing the rate of female labour force participation is not only a matter of social justice but also an economic imperative, especially in the context of ageing populations and declining birth rates in BRICS+ countries (Barro and Sala-i-Martin, 2004).

Taken as a whole, it can be concluded that gender equality is one of the key drivers of sustainable development. Starting from these circumstances, the aim of this paper is to analyse the position of women in BRICS+ countries through the prism of education and their integration into the labour market, examining the trends and challenges that shape the gender gap in the period 1991-2022. The paper seeks to underline the importance of systemic support for women in education and employment as a precondition for accelerated economic growth and the strengthening of social cohesion within the BRICS+ group.

RESEARCH METHODS AND DATA SOURCES

The paper applies both qualitative and quantitative research methods. The qualitative analysis is based on a structured review and interpretation of relevant scientific literature, policy documents and official reports related to education, gender equality and the position of women in the labour market in BRICS+ countries.

The quantitative part of the research is based exclusively on secondary data for the period 1991-2022, obtained from the World Bank World Development Indicators database (2024), complemented by selected aggregated data from national statistical offices. The analyzed indicators reflect key dimensions of women's educational attainment and economic inclusion, including female literacy rates, completion of primary, secondary and tertiary education, labour force participation rates, employment-to-population ratios and female unemployment rates.

The research employs methods of descriptive statistics, focusing on the presentation and interpretation of long-term trends in the selected indicators, as well as comparative analysis, enabling cross-country comparisons within the BRICS+ group. The results are presented graphically to facilitate clearer interpretation of structural differences and dynamics over time. Due to incomplete time-series coverage for certain indicators across countries, graphical analysis was complemented and partially replaced by a structured descriptive comparison, summarized in Table 1.

No primary data collection, such as surveys or questionnaires, was conducted. The analysis relies entirely on official aggregated secondary statistical sources, ensuring consistency, international comparability and methodological transparency.

RESULTS AND DISCUSSION

Over the past decades, women in Brazil have been achieving higher levels of education than men, as reflected in the higher number of female graduates and high rates of female participation in secondary and higher education. Despite this educational progress, economic equality remains a challenge, as women are under-represented in the formal labour market, more often engaged in the informal sector and, on average, paid less than men for the same or similar jobs.

Already at the beginning of the 20th century, the Soviet Union provided women with access to education, employment and the right to vote, which led to a strong inclusion of women in economic activity. Today, Russia has a relatively balanced policy in the areas of health, education and employment.

Over the past ten years, India has been implementing intensive measures to empower and support women, particularly through education and employment in modern sectors such as information technology and entrepreneurship.

China, as the world's second-largest economy, has systematically improved the status of women through policies focused on health, education and the workforce. The result is a high level of female participation in the economy and in public policy.

Since the end of apartheid, South African women have become more visible in political and public life, and their participation in science and technology has increased. However, economic aspects of equality lag behind: women of lower socio-economic status continue to face limited access to resources and the labour market.

The new BRICS members are also gradually changing their social structures towards greater inclusion of women. With its Vision 2030 strategy, Saudi Arabia has doubled the number of women in the workforce and introduced the principle of equal pay (Government of Saudi Arabia, 2016). Egypt, through its National Strategy for the Empowerment of Egyptian Women 2030 (National Council for Women Egypt, 2017), is investing in education and microfinance programmes, while the UAE records high levels of female participation in higher education and public institutions (UAE Gender Balance Council, 2020). Despite formal restrictions, Iran and Ethiopia have seen notable progress in women's education and activism, although their participation in the economy is still predominantly concentrated in informal sectors.

Taken as a whole, it can be concluded that gender equality is one of the key drivers of sustainable development. Systemic support for women in education, health, entrepreneurship and public policy can significantly accelerate economic growth and strengthen social cohesion within the BRICS+ group.

Women's Education - the Foundation of Economics Inclusion

Education is the foundation of economic and social development, as it directly affects women's opportunities to be included in formal economic activity, to reduce poverty and to create high-quality human capital. World Bank data (2024) for BRICS+ countries in the

period 1991-2022 show that women’s literacy rates and completion of different levels of education are strongly correlated with their position in the labour market.

In order to analyze long-term trends in basic educational inclusion, Figure 1 presents the female literacy rate (population aged 15 and above) in BRICS+ countries over the period 1991-2022.

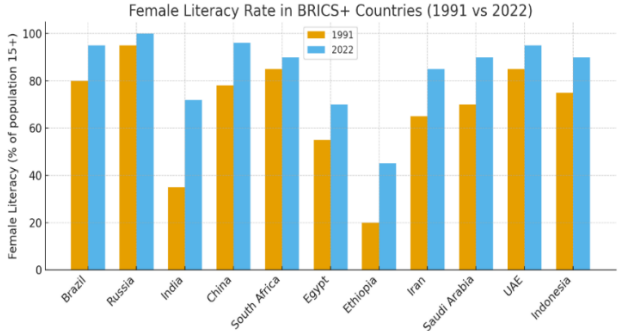


Figure 1. Female literacy rate in BRICS+ countries, 1991-2022. Source: World Bank, World Development Indicators (2024)

As shown in Figure 1, female literacy (15+) in the BRICS+ group shows a clear polarization. Russia and China have near-universal literacy (99-100%), reflecting long-standing institutional support and equitable access to schooling. Brazil has recorded significant growth – from around 87% in the early 2000s to over 95% in 2022. In contrast, India and Ethiopia continue to lag behind: India, despite rising from around 34% to around 69%, faces marked regional and gender inequalities, while Ethiopia has advanced from less than 20% to around 40-45%, which still indicates a very low level of educational inclusion. South Africa and Egypt are in the middle range (around 70-90%), while Saudi Arabia and the UAE, under the influence of modernization reforms, have reached female literacy levels above 90%. A similar stratification pattern is observed when analyzing women’s educational attainment beyond basic literacy, particularly at primary and lower secondary levels.

When viewed through the share of women aged 25 and over with at least primary and lower secondary education, an even clearer stratification is observed. Russia almost completely achieves universal coverage of primary education (around 100%) and very high coverage of lower secondary education (over 98%). Brazil and South Africa show continued growth, from around two-thirds of the population at the beginning of the 2000s to over 85% in the last decade, which can be attributed to public policies and social programmes aimed at reducing the educational gap. India and Indonesia remain at lower levels (30-50% for lower secondary), indicating persistent barriers to girls’ access to education, particularly in rural areas. Middle Eastern countries (Egypt, Iran, Saudi Arabia, UAE) record dynamic trends, with accelerated growth in the last decade.

In upper secondary and tertiary education, the differences are even more pronounced. Russia maintains a leading position with over 90% of women having completed upper secondary education and over 50% with tertiary education. Brazil and South Africa have seen strong increases in upper secondary completion rates (to around 56% and over 60%,

respectively), while Saudi Arabia and the UAE, influenced by development strategies and growing investment in female education, have reached over 70% for upper secondary and over 50% for tertiary education (in the case of the UAE). Egypt and Iran are progressing more moderately, while India, Indonesia and especially Ethiopia remain at relatively low levels, with Ethiopia recording a negligible share of women with tertiary education (below 1%).

Overall, the educational indicators suggest that higher levels of women’s education are strongly linked to their economic position. Countries with the highest levels of secondary and higher education completion among women (Russia, the UAE, and, to some extent, China and Brazil) simultaneously record more stable female employment rates and a smaller gender gap in the economic sphere. In contrast, in countries where women’s access to education is limited (Ethiopia, India, and partly Indonesia), women are more likely to remain in the informal sector or outside the labour market. Therefore, education in BRICS+ countries must be seen as a key precondition for women’s economic inclusion and deeper social transformation.

Table 1 summarizes the key trends observed in female educational attainment across BRICS+ countries. The results indicate strong stratification between states with near-universal coverage of secondary and tertiary education (Russia, UAE, partly China and Brazil) and those where access to education for women remains structurally limited (Ethiopia, India, Indonesia).

Table 1. Comparative overview of women’s educational attainment trends in BRICS+ countries (1991-2022)

Country	Primary education-completion trend	Secondary education-completion trend	Tertiary education-completion trend
Russia	Near-universal coverage, stable	Very high, stable	Strong and continuous growth
China	High and improving	High, broad coverage	Moderate but visible growth
Brazil	Strong progress, major improvement	Moderate but increasing	Consistent growth
India	Significant progress but still low	Low completion, major regional gaps	Low inclusion
S. Africa	Stable but unequal	Solid growth but socio-economic disparities	Moderate increase
Egypt	Moderate and improving	Gradual expansion	Moderate growth
Iran	Good improvement in access	Steady expansion	Slow to moderate growth
S. Arabia	High improvement due to reforms	Strong increase	Rapid growth, especially last decade
UAE	High and stable	Very high	High & accelerating (women > men)
Ethiopia	Very low, slow improvement	Very low	Minimal inclusion
Indonesia	Moderate progress	Low-moderate	Low

Source: Author’s calculation based on World Bank - World Development Indicators (2024)

Women’s Labour Force Participation and Employment

World Bank data (World Development Indicators, 2024) on women’s labour force participation, employment and unemployment in BRICS+ countries over the period 1991-2022 (World Bank, 2024) indicate deep structural differences in the degree of women’s economic integration.

To assess the extent to which educational progress has translated into economic inclusion, Figures 2-4 present key labour market indicators for women in BRICS+ countries, including labour force participation, employment and unemployment, comparing the initial year (1991) and the most recent available year (2022).

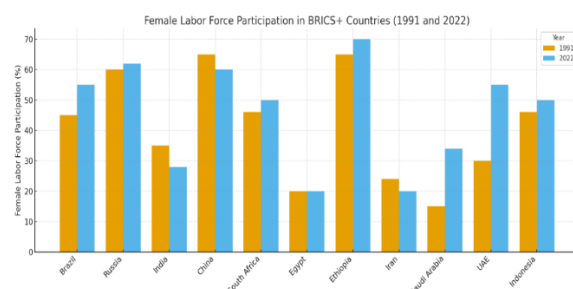


Figure 2. Female labour force participation in BRICS+ countries, 1991 and 2022.
Source: World Bank, World Development Indicators (2024)

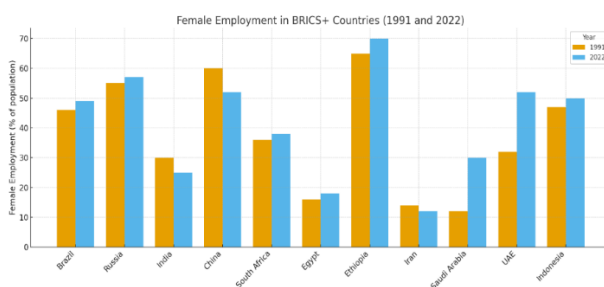


Figure 3. Female employment in BRICS+ countries, 1991 and 2022.
Source: World Bank, World Development Indicators (2024)

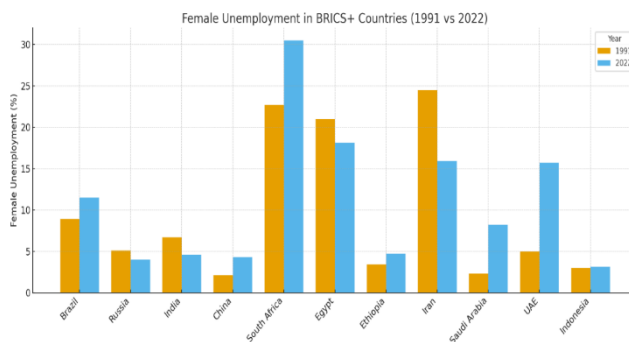


Figure 4. Female unemployment in BRICS+ countries, 1991 and 2022.
Source: World Bank, World Development Indicators (2024)

While significant progress has been made in some countries, persistent barriers still exist in others that limit women's full participation in the formal economy.

With regard to female labour force participation (Figure 2), Russia stands out as the most stable example, with over 60% of women in the labour force throughout the observed period, a legacy of Soviet policies of high inclusion. Brazil has recorded a gradual increase – from around 44% at the beginning of the period to over 55% in recent years. China shows a slightly declining trend (from around 68% to around 63%), which can be linked to demographic changes and economic restructuring. India remains at the lowest level, with a decline from around 34% to below 30%, which points to strong cultural and socio-economic barriers despite rising educational attainment (Kabeer, 2012). South Africa fluctuates around 50% with pronounced oscillations, while Egypt and Iran record persistently low rates (15-23%). Saudi Arabia and the UAE are examples of reform policies: Saudi Arabia has raised women's participation from around 15% to more than 30%, and the UAE from around 30% to significantly higher levels, in line with modernisation agendas.

Employment-to-population ratios further highlight these differences (Figure 3). Russia continues to record high levels of female employment (above 55%), reflecting a more stable institutional framework and a long tradition of women's participation in the economy. Brazil maintains relatively stable values of around 45-50%, while China reached one of the highest rates (around 65%) in the early 2000s, followed by a subsequent decline. India remains at a very low level (20-30%), reflecting a combination of traditional gender roles and the under-integration of women into the formal sector. South Africa fluctuates between 30-38%, while Egypt and Iran maintain persistently low rates (10-18%). Saudi Arabia has increased female employment from around 13% to almost 30%, and the UAE from around 30% to over 50%. Ethiopia, with rates above 70% in some years, is a specific case in which high employment levels reflect the dominance of agricultural and informal sectors rather than high-quality economic inclusion.

Data on female unemployment rates (Figure 4) confirm the existence of structural weaknesses in labour markets across several BRICS+ countries. South Africa has consistently recorded one of the highest female unemployment rates in the world (often over 25%), indicating chronic labour market dysfunction. Egypt and Iran also have high levels (18-20%), while Brazil has seen fluctuations - from around 8% in the 1990s to over 12% in the last decade. In contrast, Russia has maintained moderate levels (5-10%), with a decline after 2010, indicating relatively more effective institutional mechanisms. India and Indonesia have formally low unemployment rates (4-6%), but these indicators mask the fact that a large number of women work in the informal sector without adequate social protection. Saudi Arabia has reduced female unemployment from over 20% to around 11% in the last decade, while the UAE records the lowest levels in the group (2-3%).

Overall, these indicators point to a deep gap between educational achievements and the actual economic integration of women in many BRICS+ countries. While some countries (Russia, Brazil, UAE) are showing progress in transferring educational gains to the labour market, in others (India, Egypt, Iran, Ethiopia) women remain structurally marginalised at the fringes of economic activity. This confirms that improving education, although necessary, is not sufficient without simultaneously building institutional mechanisms for

equal access to employment, combating discrimination and recognising unpaid work as part of economic contribution. These findings are consistent with the conclusions of the BRICS Report on Gender Equality and Women's Empowerment (BRICS, 2021), which highlights the gap between educational progress and actual labour market integration of women across member countries.

CONCLUSION

The analysis of education, female labour force participation and employment in BRICS+ countries has shown that significant progress has been made in recent decades, but that deep-rooted differences between countries and regions persist. The data clearly confirm that education is a prerequisite for greater participation of women in economic and social activity (Barro and Sala-i-Martin, 2004): countries with higher levels of completed primary, secondary and tertiary education also have higher female labour force participation rates. However, education alone is not sufficient to ensure full economic integration of women.

Despite rising educational achievements, many BRICS+ countries still experience low levels of women's economic inclusion, high unemployment rates and limited access to the formal labour market. This points to structural and institutional barriers that education alone cannot overcome. Cultural norms, gender stereotypes, unpaid domestic work and insufficient institutional support (family policies, access to finance, anti-discrimination mechanisms) are obstacles that limit the full realisation of the potential of the female workforce.

The data show that countries which have achieved universal literacy and high secondary education coverage (Russia, China, the UAE) have also created more stable conditions for women's economic inclusion. In contrast, countries such as India, Egypt and Ethiopia, where a significant share of the female population still does not complete primary or secondary education, have extremely low rates of female labour force participation. This confirms the key assumption of this paper - that education is a necessary but not sufficient condition for women's economic emancipation.

The gap between educational attainment and real employment opportunities remains deep, indicating the existence of multiple and long-standing cultural, institutional and economic barriers. Women continue to be over-represented in informal sectors, bear the burden of unpaid domestic and care work, and have limited access to leadership positions and entrepreneurial resources.

Based on the analysis conducted, it can be concluded that reducing the gender gap in the labour market requires stronger institutional support for women, the development of childcare infrastructure and greater access to financial instruments. Incentives for formal employment, equal-pay-for-equal-work campaigns and measures that stimulate female entrepreneurship, especially in rural areas, are needed. Raising awareness about the value of unpaid work is also of utmost importance - by including domestic and care work in economic statistics and designing policies that distribute care more evenly between men and women. Linking education to employment, improving the quality of education and

greater integration of women into sectors with high added value (digital economy, science, technological innovation) can significantly improve their economic position.

In conclusion, the paper shows that the economic development of BRICS+ countries can only be sustainable and inclusive if macroeconomic growth is coupled with systemic gender equality policies. The integration of women into the formal economy is not only a matter of social justice, but also a factor of competitiveness, innovation and long-term growth. As a grouping that is increasingly shaping the global economic order, BRICS+ has the potential to become an example of a new development model - one in which economic dynamism goes hand in hand with social inclusion and equality. Recent BRICS+ policy documents also emphasise the importance of integrating gender equality objectives into broader economic development strategies (BRICS+, 2024).

REFERENCES

- Barro, R.J., Sala-i-Martin, X. (2004). *Economic Growth*. Second edition, Cambridge, MA, MIT Press, London.
- Dugarova, E. (2019). *Gender Equality as an Accelerator for Sustainable Development*. UN Women Discussion Paper, Report, GIEPS Institute.
- ILO (2021). *Women in the Labour Market: Trends and Policy Responses*. Geneva: International Labour Organization.
- Kabeer, N. (2012). *Women's Economic Empowerment and Inclusive Growth: Labour Markets and Enterprise Development*. IDA Working Paper, School of Oriental and African Studies, UK.
- OECD (2020). *The Role of Education in Supporting Women's Labour Market Participation*. Paris: OECD Publishing.
- UNDP (2023). *Gender Inequality and Human Development Report*. New York: United Nations Development Programme.
- World Bank (2024). *World Development Indicators*. Washington, DC. <https://databank.worldbank.org/source/world-development-indicators>
- BRICS (2021). *BRICS Report on Gender Equality and Women's Empowerment*. Moscow: BRICS Gender Working Group. <https://bricswomen.com/wp-content/uploads/2024/04/BRICS-WOMEN-ANNUAL-REPORT-2021.pdf>
- BRICS+ (2024). *Annual Report on Social Development and Gender Equality*. Beijing: BRICS Secretariat <https://bricswomen.com/wp-content/uploads/2024/10/BRICS-Womens-Business-Alliance-Annual-Report.pdf>
- Government of Saudi Arabia (2016). *Saudi Vision 2030*. Riyadh: Ministry of Economy and Planning.
- National Council for Women Egypt (2017). *National Strategy for the Empowerment of Egyptian Women 2030*. Cairo.
- UAE Gender Balance Council (2020). *Gender Balance Guidelines*. Abu Dhabi.