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Women's Empowerment in Kenya: Developing a Measure

2025

SDGs KENYA FORUM
Coalition for Sustainable Development

UN WOMEN

WOMEN COUNT

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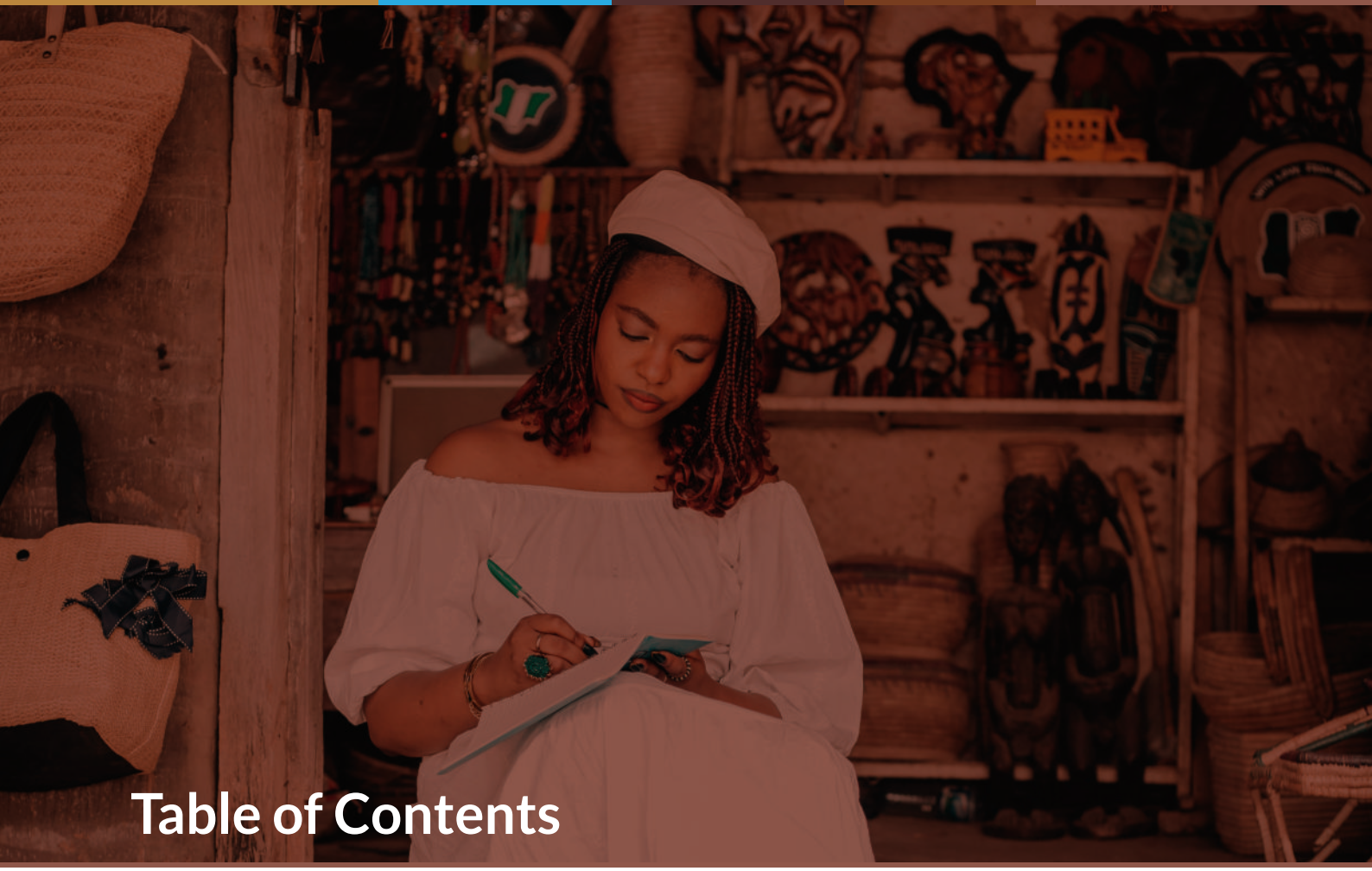


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Acronyms

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFA	Confirmatory Factor Analysis
DHS	Demographic and Health Survey
EFA	Exploratory Factor Analysis
FGM	Female Genital Mutilation
FPE	Free Primary Education
GBV	Gender-based Violence
GPI	Gender Parity Index
ICRW	International Centre for Research on Women
ILO	International Labour Organisation
KDHS	Kenya Demographic Health Survey
MAD	Minimally Acceptable Diet
MTCT	Mother-to-Child Transmission
PDHS	Pakistan Demographic and Health Survey
SDG	Sustainable Development Goal
UN	United Nations
UNICEF	United Nations Children's Fund
UN WOMEN	United Nations Entity for Gender Equality and Empowerment of Women
WE	Women Empowerment
WEI	Women Empowerment Index

Foreword

The Kenya National Bureau of Statistics (KNBS) is pleased to present the report on Women Empowerment in Kenya, which was developed in close collaboration with UN Women and UNICEF Kenya. This report is a timely and critical contribution to the national efforts to address gender equality, and women empowerment. As the principal agency for official statistics in Kenya, KNBS remains committed to generating and availing high-quality data that informs policy, planning, and development programming.

Women's empowerment plays a vital role in advancing gender equality and driving sustainable development. To better understand the situation of women in Kenya, this study adopted the Kabeer Framework and utilized data from the 2022 Kenya Demographic and Health Survey (KDHS). The study focused on five key domains for women in union namely; decision-making, attitudes toward violence, control over sexual relations, economic empowerment, and digital empowerment. The same domains, apart from the control over sexual relations, were used to estimate women's empowerment levels among women not-in-union. Subsequently, the Women's Empowerment Index (WEI) was developed by identifying women who scored at least 80 per cent of total weighted indicators across the domains.

Women's empowerment is a powerful catalyst for social change. Empowered women gain greater control over their lives, improve their own well-being, and strengthen their families and communities. Despite significant progress in recent years, gender inequality remains a challenge, particularly in rural areas and among certain vulnerable groups. Empowered women tend to have healthier, better-educated children, reinforcing the link between a woman's empowerment and the well-being of the next generation.

As established in the analysis, 40.6 per cent of women in Kenya are considered "empowered". Women in urban areas, those with higher levels of education, and those from wealthier house holds tend to be more empowered, highlighting significant disparities that need to be addressed. The trend analysis shows that there have been improvements in nearly all the indicators measuring women empowerment between 2014 and 2022. The analysis also established a clear link between women's empowerment and better outcomes for their children's future. Empowered women are more likely to ensure their children receive essential services and are less likely to be multi-dimensionally poor.

The report further provides recommendations aimed at fostering greater empowerment for women in Kenya. These include improving access to education (especially for girls and young women in rural areas), promoting digital literacy and access to technology, and ensuring that women have stronger agency. In addition, the report calls for targeted support for women in vulnerable situations such as those living with disabilities, the elderly, and widows who are often left behind in empowerment initiatives.

The State Departments and KNBS are grateful for the valuable technical and financial contributions from our partners across Government, academia, development partners, and civil society organisations in the development of this report. The report reflects a shared commitment to using evidence as a tool for inclusive development and policy action.

It is our hope that this report will serve as a resource for policymakers, planners, and practitioners as we collectively work toward achieving gender equality and women empowerment in Kenya.



Dr. Bonface Makokha
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State Department for Gender
Affairs and Affirmative Action

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This report is the product of a collaborative effort between the Kenya National Bureau of Statistics (KNBS), the United Nations Children's Fund (UNICEF), and UN Women. I extend my sincere appreciation to all the teams and individuals whose invaluable contributions made this work possible.

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Macdonald G. Obudho, PhD, EBS, MBS

Director General
Kenya National Bureau of Statistics





To construct the Women's Empowerment Index (WEI), each of the domains was assigned equal weights, and the weight of the domain was then distributed equally to each of its constituting indicators. In this report, a woman is considered empowered if she scores in at least 80 percent of the total weighted indicators of empowerment.

Executive summary

In Kenya, the empowerment of women is a powerful catalyst for social change. As women gain greater control over their lives, they not only improve their own well-being but also strengthen their families and communities. However, despite significant progress in recent years, gender inequality remains a challenge, particularly in rural areas, and among vulnerable groups. This report dives into an analysis of women's empowerment in Kenya, using data from the 2022 Kenya Demographic and Health Survey (KDHS) to reveal the patterns and trends that shape women's lives. Through this lens, empowered women tend to have healthier, better educated children, reinforcing the link between a woman's empowerment and the well-being of the next generation. The goal of this report is to understand the current state of women's empowerment and provide recommendations to advance a more inclusive and equitable society.

To understand the nuances of women's empowerment in Kenya, this study draws on the Kabeer framework, which looks at three key dimensions: agency (the ability to make decisions), resources (access to and control over resources), and achievements (what women can do with these resources). Econometric analysis notably principal component

analysis and confirmatory factor analysis using data from the 2022 KDHS were carried out to identify domains of women's empowerment and the constituting factors of each. For women in union, the econometric model identified five domains of empowerment: (a) Attitudes towards wife beating, (b) House-hold decision-making, (c) Control over sexual relations, (d) Economic, and (e) Digital Empowerment domain. For women not-in-union, the domain on control over sexual relations was excluded.

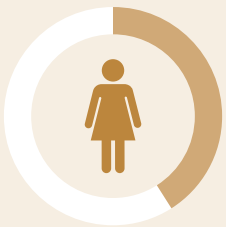
To construct the Women's Empowerment Index (WEI), each of the domains was assigned equal weights, and the weight of the domain was then distributed equally to each of its constituting indicators. In this report, a woman is considered empowered if she scores in at least 80 percent of the total weighted indicators of empowerment. Even though empowerment is measured separately for women in-union and women not-in-union, the results are presented jointly for all women age 15-49 years. The study includes a trend analysis comparing women empowerment indicators between KDHS 2014 and 2022 to assess change over time.

The analysis also utilized a logistic regression model to explore how women's empowerment relates to child well-being: specifically, looking at outcomes on access to health services, nutrition, education, and protection. By connecting women's empowerment with these child vulnerabilities, the study aims to explain how improving women's empowerment can directly influence their children's future.

The findings reveal that 40.6 per cent of women in Kenya are considered "empowered". Women in urban areas, those with higher levels of education, and from wealthier households tend to be more empowered, highlighting significant disparities that need to be addressed. The trend analysis shows that there were improvements in nearly all the indicators measuring women empowerment between 2014 and 2022. Moreover, the study established a link between women's empowerment, and better outcomes for their children. Empowered women are more likely to ensure children receive essential services - like sleeping under insecticide-treated mosquito nets, attend school and that their children are less likely to be multi-dimensionally poor. These results indicate that empowering women and girls is a step towards improving the health and future of communities.

The report provides recommendations to foster greater empowerment for women in Kenya. These include improving access to education, especially for girls and young women in rural areas, promoting digital literacy and access to technology, and ensuring that women have a stronger voice in household and community decision-making. The report also emphasises the importance of changing harmful social norms, particularly those related to gender-based violence. Additionally, the study recommends targeted support for women in vulnerable situations such as those with disabilities, the elderly, and widows. The data gaps in development of a ro-bust WEI indicates there is need to expand data collection to include indicators on knowledge of legal rights, access to assets, and mental well-being. The report further proposes inclusion of qualitative data to better understand lived experiences of women, especially those from rural and marginalized communities. These improvements on data collection will allow for future studies to present a fuller, more complete and detailed description of women's empowerment.

In conclusion, this study affirms that empowering women is about giving them the tools and opportunities to shape their own future through the creation of a society where women have the agency, resources, and support to thrive.



40.6%

of women

The findings reveal that 40.6 per cent of women in Kenya are considered "empowered"



80%

In this report, a woman is considered empowered if she scores in at least 80 percent of the total weighted indicators of empowerment.

01 Introduction



1. Introduction

Women's empowerment (WE) is a global issue with varying contexts and challenges across different regions. It encompasses economic participation, education, political representation, health and legal rights, violence and safety, and cultural and social norms. Contextualising the measure of women's empowerment for a country allows for the implementation of more specific and efficient policies. In Kenya, women play a central role in communities, economies, and the nation's future, but continue to face significant challenges that hinder their full participation in social, political, and economic life.

1.1 Objective of the study emerging trends, and assess the impact of previous pol-icies and interventions

In 2020, the first national Women Empowerment Index (WEI) was developed in Kenya as a tool to measure and track the progress of women's empowerment across the country. This study seeks to provide policymakers, development agencies, and advocacy groups with current data to guide strategies for furthering gender equality and improving women's status in Kenya. The WEI will provide a data-driven framework to assess the current state of women's empowerment and identify areas requiring targeted interventions. The index is essential for advancing gender equality and creating an environment where women can thrive in all aspects of life and contribute to sustainable and inclusive national development.

1.2 Background and context of women's empowerment in Keny

Kenyan women have been marginalized over time and often confined to traditional gender roles by societal norms. These deeply entrenched patriarchal structures, coupled with limited access to education, financial resources, and access to productive resources, have perpetuated gender inequality. Although national policies and laws support gender equality, their implementation, particularly at the sub-national level, remains a challenge.

Progress in Legal and Policy Frameworks

The 2010 Constitution of Kenya (Article 27) provides for equality and freedom from discrimination, including the inclusion of women in leadership roles and representation in political decision-making processes through gender quotas, among other mechanisms. Kenya's commitment to international frameworks such as the United Nations Sustainable Development Goals (SDGs), the Convention on the Elimination of All Forms of Discrimination Against

Women (CEDAW), the Beijing Platform for Action, the Convention on the Rights of the Child, the African Union's Agenda 2063, and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (Maputo Protocol) calls on state parties to promote women's empowerment.[1] A key initiative in this effort is the **SDG-5 Strategy on Gender Equality and the Empowerment of All Women and Girls (2020–2025).**[2] The strategy focuses on nine broad areas: a) Strengthening policy, legislative, and institutional frameworks; b) Socioeconomic empowerment; c) Leadership and decision-making; d) Gender mainstreaming in policies and budgets; e) Elimination of gender-based violence (GBV); f) Elimination of harmful practices; g) Access to sexual and reproductive health services; h) Gendered research, data collection, and analysis; and i) Coordination and stakeholder engagement.

Progress in Education, Health, and Economic Empowerment

There has been significant progress in advancing gender equality and women's empowerment across various sectors. Initiatives such as the **Free Primary Education (FPE)** program have significantly increased girls' enrolment in schools, while women's health programmes have improved maternal health outcomes. There has also been significant progress made in **affirmative action funds,** which have enhanced access to credit for women, youth, and persons with disabilities, and fostered entrepreneurship.[3]

Despite these efforts and progress in education and health care, women still face persistent socio-cultural and economic barriers that hinder their access to resources, opportunities for advancement, and decision-making power. Women remain underrepresented in many key leader-ship and political positions at both the national and county levels. [4]

In Kenya, Gender-Based Violence (GBV) is a significant challenge, affecting women and girls. [5] Social and cultural norms that perpetuate violence, early marriages, and harmful practices such as Female Genital Mutilation (FGM) continue to undermine women's empowerment.[6] Additionally, women, particularly in rural areas and the informal sector, face economic challenges such as financial exclusion (e.g., limited access to credit), land ownership, unequal pay, limited market access, exclusion from decision-making, and entrepreneurial opportunities, which restrict their ability to improve their livelihoods and contribute to national economic growth.[7]

Measurement and Evidence of Women's Empowerment

Several studies have been conducted to assess women's empowerment in Kenya, highlighting both the progress made and the ongoing challenges. The **Kenya Demographic and Health Survey (KDHS)** provides critical data on maternal health, gender-based violence (GBV), and the barriers women face in accessing healthcare.[8] The **Gender Parity Index (GPI)**, developed by the Ministry of Education, tracks gender equality in education, illustrating persistent disparities between boys and girls, particularly at secondary and higher levels of education.[9]

Research from the **International Centre for Research on Women (ICRW)** has identified key barriers to women's economic empowerment, such as limited access to financial resources, land ownership, and entrepreneurial opportunities.[10] Furthermore, the **Kenya Economic Survey Reports (2020–2024)** provide insights into women's labour force participation, wage gaps, and access to credit, showing persistent economic disparities that limit women's empowerment. The **2021 Kenya Time Use Survey Report** revealed the unequal distribution of unpaid domestic and care work, which disproportionately affects women.[11]

In 2020, the **first comprehensive report on measuring women's empowerment in Kenya** was published, using data from the Kenya Demographic and Health Survey 2014.[12] The findings revealed that less than one-third (29%) of women were empowered. Since the publication of the **WEI in 2020,** Kenya has made progress in advancing gender equality and women's empowerment.[13]

1.3 Structure of the report

The report is organised into three main sections. Section 1 provides the background to women's empowerment in Kenya; section 2 outlines the methodology, including a step-by-step overview of the approach used to construct the WEI and data, section 3 presents the findings; including the descriptive analysis, trend comparisons, the index, and linkages between women's empowerment and child vulnerabilities, and finally, section 4 presents actionable

[1] African Union. n.d.
[2] UN Women 2021.
[3] WHO 2020.
[4] UN Women 2023.
[5] KNBS and ICF 2023.
[6] UNICEF Kenya. n.d.
[7] International Labour Organization (ILO). n.d.
[8] KNBS and ICF 2023.
[9] Ibid.
[10] International Centre for Research on Women (ICRW). 2018.
[11] Kenya National Bureau of Statistics (KNBS). 2024.
[12] Kenya National Bureau of Statistics (KNBS). 2021.
[13] KNBS, UNICEF, and UN Women 2020.

02 Methodology



2.1 Methodological components of the study

The methodology for this study consists of the following components:

a. **Description of women empowerment indicators in Kenya:** A descriptive analysis was conducted using data from the 2022 Kenya Demographic and Health Survey (KDHS). The analysis highlighted gender disparities across key domains of women's empowerment, including attitudes toward gender-based violence, access to resources, household decision-making, control over sexual relations, and economic participation. Disaggregation by marital status, age, education, wealth, and residence is applied where relevant to identify key patterns and inequalities.

b. **Trend analysis:** Where applicable, indicators of women's empowerment that are avail-able in both the 2014 and 2022 KDHS datasets are analysed over time. This comparison allowed for an assessment of progress or deterioration in key dimensions of empowerment over the past decade.

c. **Computation of the Women's Empowerment Index (WEI):** A composite index was developed to summarize overall empowerment levels, based on selected indicators grouped into domains. This index enabled comparative analysis across population sub-groups and provided a synthetic measure of empowerment.

d. **Linkages between women's empowerment and child vulnerabilities:** The final component of the study explored the relationship between levels of women's empowerment and child outcomes. The study also identified potential associations between empowerment domains and key indicators of child well-being as detailed in section 3.3.

2.2 Conceptual framework

Measurement of women's empowerment has evolved overtime, reflecting its inherently multi-dimensional and context-specific nature. Early approaches often relied on

a single indicator such as educational attainment, labour force participation, or marital status to serve as proxies for empowerment. In contrast, recent methodologies adopt a multi-domain perspective, estimating empowerment at the individual, household, and societal levels. Quantitative analyses increasingly draw on Demographic and Health Survey (DHS) data, employing techniques such as **Factor analysis and regression modelling** to construct composite indices. These indices cover domains that include among others, decision-making, autonomy, attitudes toward gender-based violence, psychological well-being, and economic participation. Emerging frameworks, such as the Survey-based Women's Empowerment (SWPER) Index, Soharwardi et al.'s (2020) Women's Empowerment Index (WEI), and indicators of digital empowerment (e.g., mobile phone ownership and access to mobile financial services), have further enriched the measurement. (See Annex 2 for a comprehensive review on the measurement of women's empowerment).

Despite this proliferation, no single standard exists, and definitions vary considerably across studies. To bring conceptual clarity to this diversity, this study adopted Kabeer's (1999) and was informed by the WEI developed in 2020 for Kenya. The framework conceptualizes empowerment as the expansion of people's ability to make strategic life choices. Kabeer's framework is widely acknowledged in the field and consists of three interrelated dimensions: resources (preconditions), agency (process), and achievements (outcomes) (See Figure 1).[14]

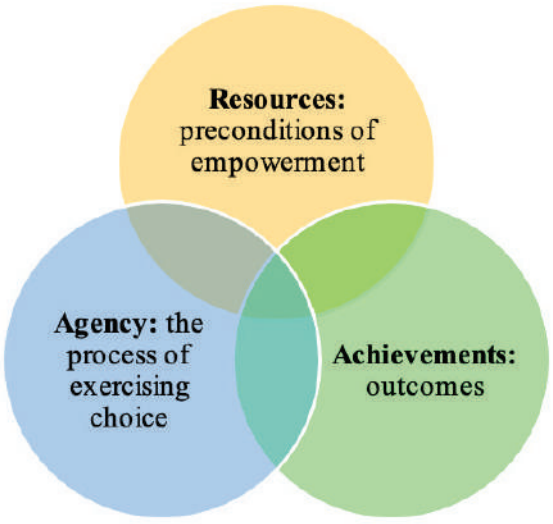
Resources or preconditions for empowerment encompass economic resources (e.g., income), as well as human, and social resources that facilitate decision-making. These resources are shaped by various institutions, including the family, market, and community.[15]

Agency, or the process of exercising choice, is defined by the ability of a woman to set her goals and take action to achieve them. This domain is often measured through decision-making power. Kabeer (1999) emphasizes that the meaning, motivation, and purpose behind actions are equally significant in this domain. Contemporary research often distinguishes between *instrumental agency* (e.g., household decision-making) and *intrinsic agency* (e.g., attitudes towards issues affecting women's well-being). Both the *resources* and *agency* domains are integral to Sen's (1985) capability approach, which underscores the potential individuals must lead lives they value. This approach highlights the multidimensional nature of women's empowerment.[16]

Achievements, or outcomes, refer to the extent to which women realize their potential and whether these achievements lead to transformative changes. Common indicators of achievements include child survival, immunization, contraceptive use, and the utilization of antenatal care services.[17]

To illustrate this framework, consider the example of antenatal care. The *resources* or precondi-tions for empowerment would include a woman's knowledge of the importance of antenatal care for her and her child's health during pregnancy, childbirth, and post-birth. The *agency* domain would involve the woman's ability to decide whether to use antenatal care services. The *achievement* domain would focus on the actual utilization of antenatal care, which leads to reduced health risks for both the woman and her child during pregnancy, delivery, and postpartum.

Figure 1: Kabeer's conceptual framework of women's empowerment (1999)



[14] Kabeer 1999.
[15] Ibid.
[16] Sen n.d.
[17] Kabeer 1999.

2.3 Steps for WEI construction

2.3.1 Stakeholder consultations and contextualisation

The first step in developing a women's empowerment measure for Kenya involved selecting indicators from the KDHS 2022, a survey that captured various dimensions of women's empowerment relevant to the country's context. The contextualization process consisted of two stages: (a) a review of international and national policy and legal frameworks, including declarations and conventions,[18] and (b) consultations with national stakeholders and development partners in Kenya, which kicked off in November 2024. The stakeholders included the KNBS and other Ministries, Departments and Agencies, Civil Society Organizations and Independent Commissions, Academia, UN Women, and UNICEF, who were involved in the selection and definition of indicators (See Annex I). During the computation of the WEI, only those indicators that met the following criteria were retained in the analysis: (a) relevance to the Kenyan context according to the legal and policy frameworks, and (b) alignment with the existing literature and Kabeer's conceptual framework of women's empowerment.

2.3.2 Data and sample

This study utilized data from the 2022 Kenya Demographic and Health Survey (KDHS) for computation of WEI. The empirical analysis focused on women ages 15 - 49 years and was conducted separately for two groups: women in-union (married women and those living with a partner) and women not-in-union (single women, widows, divorcees, and separated women). The group of women in union included a sample of n=18,312 women/girls, while the group of women not in union consisted of n=13,844 women/girls. Only women who completed the long questionnaire of the KDHS were included in the analysis for both groups.

The 2022 KDHS addresses some of the limitations of the previous Women's Empowerment Index, which was based on the 2014 KDHS. One of the key limitations of the 2014 data was lack of county-level representativeness, which restricted the 2020 WEI's disaggregation to county levels. In contrast, the 2022 KDHS allows data disaggregation at the county level and introduces new variables not available in the 2014 survey, particularly in the domain of "Attitudes towards wife-beating." The new variables examine whether wife-beating is justified in three specific circumstances: if a woman refuses to cook, comes home late, or is unfaithful to her partner.

Additionally, the 2022 KDHS provided data on other relevant variables, such as ownership of a mobile phone (smartphone), having a bank or financial institution account, the use of bank accounts in the last 12 months, frequency of internet use, menstrual hygiene, and preventive health care measures undertaken by women (e.g., testing for cervical or breast cancer). The inclusion of these new variables enhances the index by capturing broader dimensions of women's empowerment, ultimately strengthening the robustness of the index's measurement.

2.3.3 Variables

The Exploratory Factor Analysis (EFA) incorporates variables that capture various dimensions of women's empowerment. These dimensions include economic; human and social resources; household and sexual/reproductive decision-making; attitudes toward wife-beating; and digital empowerment. Each domain is represented by a set of indicators coded as binary variables, where a value of 1 signifies that a woman is empowered in a specific indicator, and 0 indicates she is not. The domains and their corresponding indicators are outlined in detail below.

Economic domain

This domain includes three indicators: paid employment, ownership of a house or land, and possession of a bank account, drawing on Kabeer's (1999) "resources" component of empowerment. A woman is considered empowered in paid employment if she is employed continuously throughout the year and receives payment, while those in seasonal or occasional employment (regardless of the type of employment) or unpaid work are considered disempowered. For house or land ownership, a woman is regarded as empowered if she owns property solely or jointly with her husband/partner or holds a title deed in her name. For the bank account indicator, a woman is deemed empowered if she has her own bank account. [19]

[18] Constitution of Kenya (2010), the Maputo Protocol (2003), the Decade on African Women (2010-202), Sustainable Development Goals and targets, the Universal Declaration on Human Rights (1948), the Convention on the Elimination of All Forms of Discrimination Against Women -CEDAW (1979), the Convention on the Political Rights of Women (1953), the Declaration on the Elimination of Violence Against Women, and the Women's Empowerment Principles (1993).

[19] This indicator applies only to women aged 18 and above, as those aged 15 to 17 are not legally allowed to operate a bank account independently.



Human and social resources

The second domain, human and social resources, grounded in Kabeer's (1999) resources component of empowerment, encompasses indicators such as educational attainment, media exposure, family planning information, knowledge of modern contraception, understanding of HIV/AIDS prevention and transmission, awareness of breast self-examination for lumps and breast cancer, and possession of health insurance cover. A woman is considered empowered in educational attainment if she has completed secondary or higher education. For media exposure, empowerment is indicated if she has accessed at least one form of media - newspaper, radio, television, or internet - at least once in the week preceding the survey; lack of such expo-sure signifies disempowerment. Regarding knowledge of modern contraception, a woman is deemed empowered if she is aware of modern methods, while knowledge limited to folkloric, or traditional methods, reflects disempowerment. For family planning information, empowerment is determined if the woman has heard, seen, or discussed family planning through at least one source in recent months. Comprehensive knowledge of HIV/AIDS signifies empowerment if she: (i) has heard of HIV/AIDS, (ii) understands prevention methods like abstinence, consistent condom use, and monogamy with an uninfected partner, (iii) refutes common misconceptions about transmission (e.g., through witchcraft, mosquito bites, or sharing food), (iv) knows that healthy-looking individuals can carry HIV, and (v) recognizes that HIV can be transmitted dur-ing pregnancy, childbirth, and breastfeeding. Women lacking knowledge in any of these areas are considered disempowered. Awareness of self-examination for breast lumps and breast cancer

Regarding knowledge of modern contraception, a woman is deemed empowered if she is aware of modern methods, while knowledge limited to folkloric, or traditional methods, reflects disempowerment. For family planning information, empowerment is determined if the woman has heard, seen, or discussed family planning through at least one source in recent months.

is an indicator of empowerment if the woman knows she can perform such examinations herself. Lastly, a woman is empowered in the health insurance indicator if she possesses health insurance; otherwise, she is categorized as disempowered.

Household and sexual/reproductive decision-making

The indicators in this domain are derived from the agency[20] component of Kabeer's (1999) conceptual framework of empowerment. In the taxonomy of Malhotra, Schuler, and Boender (2002), these indicators fall under the socio-cultural and familial/interpersonal domains, while in Miedema et al. (2018), they correspond to the instrumental agency component of empowerment. For women in union, the indicators included in the Exploratory Factor Analysis (EFA) are birth spacing and limiting, decision-making power on large household purchases, personal healthcare, visiting family or relatives, control over husband's/partner's earnings, ability to refuse sex, and freedom to ask a partner to use a condom during sexual intercourse.

A woman in union is considered empowered in birth spacing and limiting if she has no unmet need for family planning and can manage her reproductive choices according to her preferences. Conversely, she is considered disempowered if she cannot control childbearing or space pregnancies to her satisfaction. For the four indicators of decision-making at the household level, a woman in union is considered empowered if she makes the decision herself or jointly with her partner and disempowered if the decisions are taken by her husband/partner or by someone else (without consulting her). A woman in-union who can refuse sex is considered empowered; those who cannot refuse, are unsure, or can refuse only under specific conditions, are consid-ered disempowered. Similarly, women who can ask their partner to use a condom during sexual intercourse are empowered, while those who cannot, are unsure, or can only make the request under certain conditions, are disempowered.

For women not-in-union, this domain includes birth spacing and limiting, with the same definition applied as for women in union.

Attitudes toward socio-cultural norms

The indicators related to attitudes toward socio-cultural norms are based on the agency component of Kabeer's (1999) conceptual framework of empowerment. According to Malhotra, Schuler, and Boender (2002), these indicators fall within the socio-cultural domain, while Miedema et al. (2018) categorize them under the intrinsic agency component of empowerment. The five indicators assess attitudes toward Gender-Based Violence (GBV), specifically whether a woman justifies wife-beating in the following situations: i) if the wife goes out without telling her husband, ii) if the wife neglects the children, iii) if the wife argues with her husband, iv) if the wife refuses to have sex with her husband, v) if the wife burns the food, vi) if the wife refuses to cook, vii) if the wife comes home late, and viii) if the wife is unfaithful. Women who believe wife-beating is justified in any of these situations are considered disempowered, while those who oppose it are considered empowered. Finally, women who believe that female genital mutilation (FGM) should be stopped are regarded as empowered, while those who think it should continue, are unsure, or are indifferent, are considered disempowered. These indicators apply to both groups of women.

Digital empowerment

The indicators for digital empowerment draw on the work of Suri & Jack (2016), Aker & Mbiti (2010), and Duncombe & Heeks (2002). The domain of digital empowerment includes two key indicators: ownership of a mobile phone and the use of a mobile phone for financial transactions. A woman is considered empowered in the mobile phone indicator if she owns a mobile phone. Similarly, a woman is deemed empowered if she uses a mobile phone for financial transactions. Women who do not meet these criteria are considered disempowered.

2.3.4 Empirical analysis and results on WEI indicators

The descriptive statistics in Table 1 summarize all the indicators included in the Exploratory Factor Analysis (EFA). Following the EFA, orthogonal rotation was applied to identify the empowerment domains (factors or latent variables) that are best explained collectively by specific groups of indicators. Indicators that do not meet the statistical criteria were retained in the model only if strong evidence from the literature supported their importance for measuring women's empowerment, and if stakeholders reached a consensus on their inclusion. Subsequently, a Confirmatory Factor Analysis (CFA) is conducted to evaluate the model's validity and generalizability.

[20] Except for birth spacing and limiting which is an achievement/outcome indicator.

Table 1: Indicators of women's empowerment: Summary statistics

Variable	Women in union		Women not in union	
	% empowered	% missing	% empowered	% missing
Domain: Economic				
Woman is in continuous, paid employment	34.0	0.0	69.9	0.0
Woman owns house/land alone or jointly with her husband/partner or has a title deed on her name	58.7	0.0	10.6	0.0
Woman has a bank account	30.6	0.0		
Domain: Human and social resources				
Woman has completed secondary education or higher education (or is still attending school)	38.9	0.0	70.5	0.0
Woman has exposure to media	80.9	0.0	77.5	0.0
Woman has exposure to family planning information	94.9	0.0	90.0	0.0
Woman has knowledge of at least one method of modern contraception	99.6	0.0	97.6	0.0
Woman has knowledge about HIV/AIDS prevention and transmission, including Mother-to-Child Transmission of HIV (MTCT)	64.4	0.0	50.0	0.0
Woman is aware that she can examine her breast for lumps and breast cancer	47.6	0.0	40.9	0.0
Woman has a health insurance	66.5	0.2	77.3	1.0
Domain: Household and sexual/reproductive decision-making				
Woman has no unmet need for family planning (birth spacing and limiting)	86.1	0.0	97.9	0.0
Woman decides alone, or with partner about large household purchases	79.1	0.0		
Woman decides alone, or with partner about her healthcare	86.7	0.0		
Woman decides alone, or with partner about visiting family or relatives	82.9	0.0		
Woman decides alone, or with partner about where/how husband's earnings will be spent	58.9	4.2		
Woman decides alone, or with partner whether to use or not use contraception	92.3	0.0		
Woman can refuse sex with her husband/partner	76.8	0.0		
Woman can ask partner to use condom during sexual intercourse	72.0	0.0		
Domain: Attitudes towards socio-cultural norms and phenomena				
Woman thinks that wife-beating is not justified if the wife goes out without telling her husband	84.4	0.0	87.2	0.0
Woman thinks that wife-beating is not justified if the wife neglects the children	75.5	0.0	76.5	0.0
Woman thinks that wife-beating is not justified if the wife argues with her husband	80.4	0.0	83.4	0.0
Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband	84.3	0.0	87.4	0.0
Woman thinks that wife-beating is not justified if the wife burns the food	92.9	0.0	93.6	0.0
Woman thinks that wife-beating is not justified if the wife refuses to cook	79.5	0.0	82.1	0.0
Woman thinks that wife-beating is not justified if the wife comes home late	79.6	0.0	82.3	0.0
Woman thinks that wife-beating is not justified if the wife is unfaithful	63.2	0.0	68.0	0.0
Woman thinks that FGM should be stopped	89.5	0.0	89.8	0.0
Domain: Digital Empowerment				
Woman has a mobile phone	86.3	0.0	66.5	0.0
Woman used a mobile phone for financial transactions	87.1	0.0	68.0	0.0

Table 2 and Table 3 present the findings from the Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). For women in-union, empowerment indicators are organized into five distinct domains: (a) Attitudes toward wife-beating, (b) Household decision-making (familial/interpersonal), (c) Control over sexual relations, (d) Economic and (e) Digital empowerment domains. In contrast, for women not-in-union, indicators are divided into four domains: (a) Attitudes toward wife-beating, (b) Human and social resources, (c) Digital empowerment domain

For both groups, indicators measuring women's attitudes toward Gender-Based Violence (GBV), specifically their justification of wife-beating across eight scenarios, are consolidated into a single domain labelled as "attitudes toward wife-beating." For women in-union, indicators reflecting instrumental agency in household and sexual/reproductive decision-making are divided into two domains, consistent with previous studies. The household decision-making (familial/interpersonal) domain included: (a) Decision-making regarding large household purchases or managing how the husband's/partner's earnings are spent, (b) Decisions about personal healthcare and, (c) Visiting family or relatives. The control over sexual relations domain comprised: (a) A woman's ability to refuse sex with her partner/husband and (b) Her ability to request condom use during intercourse.

The economic domain for both women in-union and those not-in-union include educational attainment and employment status. For women in-union, the indicator on having a bank account also loaded onto any domain. Among women not-in-union, three indicators that aligned with the conceptual framework are grouped under the human and social resources domain: (a) Knowledge of modern contraceptive methods, (b) Exposure to family planning information, and (c) Attitudes towards FGM. It is to be noted that attitudes toward FGM are included in this domain, despite conceptually being linked to the household and sexual/reproductive decision-making domain. For women in union, the domain as well as its indicators are not retained by the model.

Digital empowerment is measured through two key indicators: (a) ownership of a mobile phone and, (b) usage of a mobile phone for financial transactions. These indicators are positively associated with women's empowerment across various domains, particularly for women in-union. These findings underscore the importance of digital tools as enablers of women's independence, economic participation, and access to critical information, further highlighting the need for policies aimed at bridging digital gaps, particularly in rural areas and among disadvantaged groups.

The other indicators did not load onto any of the latent variables in the factor analysis.



Table 2: Confirmatory factor analysis on women's empowerment latent domains identified through EFA, women in union

Indicator	Women in union (N=9431)				
	F1 Attitudes toward wife beating	F2 Household decision-making	F3 Control over sexual relations	F4 Economic	F5 Digital Empowerment
Woman thinks that wife-beating is not justified if the wife goes out without telling her husband	0.8098*				
Woman thinks that wife-beating is not justified if the wife neglects the children	0.7211*				
Woman thinks that wife-beating is not justified if the wife argues with her husband	0.7717*				
Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband	0.8021*				
Woman thinks that wife-beating is not justified if the wife burns the food	0.9097*				
Woman thinks that wife-beating is not justified if the wife refuses to cook	0.7626*				
Woman thinks that wife-beating is not justified if the wife comes home late	0.7484*				
Woman thinks that wife-beating is not justified if the wife is unfaithful	0.5886*				
Woman decides alone or with partner about large household purchases or on where/how husband's earnings will be spent		0.8410*			
Woman decides alone or with partner about her healthcare		0.8402*			
Woman decides alone or with partner about visiting family or relatives		0.8194*			
Woman can refuse sex with her husband/partner			0.7189*		
Woman can ask partner to use condom during sexual intercourse			0.6428*		
Woman has completed secondary education				0.3217*	
Woman is in continuous, paid employment				0.2955*	
Woman has a bank account				0.2663*	
Woman has a mobile phone					0.8378*
Woman used a mobile phone for financial transactions					0.8227*

Table 3: Confirmatory factor analysis on women's empowerment latent domains identified through EFA, women not in union

Indicator	Women in union (N=6914)			
	F1 Attitudes toward wife beating	F2 Human and social resources	F3 Economic	F4 Digital Empowerment
Woman thinks that wife-beating is not justified if the wife goes out without telling her husband	0.8478*			
Woman thinks that wife-beating is not justified if the wife neglects the children	0.7480*			
Woman thinks that wife-beating is not justified if the wife argues with her husband	0.8134*			
Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband	0.8455*			
Woman thinks that wife-beating is not justified if the wife burns the food	0.9210*			
Woman thinks that wife-beating is not justified if the wife refuses to cook	0.7982*			
Woman thinks that wife-beating is not justified if the wife comes home late	0.7868*			
Woman thinks that wife-beating is not justified if the wife is unfaithful	0.6443*			
Woman has knowledge about modern contraception		0.9656*		
Woman has exposure to family planning information		0.8711*		
Woman thinks that FGM should be stopped		0.8413*		
Woman has completed secondary education			0.6812*	
Woman is in continuous, paid employment			0.6678*	
Woman has a mobile phone				0.6258*
Woman used a mobile phone for financial transactions				0.6284*



2.3.5 Constructing the Women's Empowerment Index

Once the indicators were grouped into domains using Principal Component Analysis (PCA) and Confirmatory Factor Analysis (CFA) as described above, the Women's Empowerment Index (WEI) was developed by assigning equal weights to each domain identified through the factor analyses. Within each domain, the weight was then evenly distributed across its corresponding indicators. A woman is classified as empowered if she scores in at least 80% of the total weighted indicators **(See Table 4).** For ease of interpretation, the index is represented as a binary variable: a value of 1 indicates empowerment in at least 80% of the weighted indicators, while a value of 0 indicates empowerment in less than 80% of the indicators. National-level results in the subsequent section are also presented for alternative thresholds.

Table 4: List of domains, indicators and weights used to construct the Women's Empowerment Index (WEI), KDHS 2022

Domain	Women in union	Women not in union
Attitudes toward wife beating	Woman thinks that wife-beating is not justified if the wife goes out without telling her husband (1/40)	Woman thinks that wife-beating is not justified if the wife goes out without telling her husband (1/32)
	Woman thinks that wife-beating is not justified if the wife neglects the children (1/40)	Woman thinks that wife-beating is not justified if the wife neglects the children (1/32)
	Woman thinks that wife-beating is not justified if the wife argues with her husband (1/40)	Woman thinks that wife-beating is not justified if the wife argues with her husband (1/32)
	Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband (1/40)	Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband (1/32)
	Woman thinks that wife-beating is not justified if the wife burns the food (1/40)	Woman thinks that wife-beating is not justified if the wife burns the food (1/32)
	Woman thinks that wife-beating is not justified if the wife refuses to cook (1/40)	Woman thinks that wife-beating is not justified if the wife refuses to cook (1/32)
	Woman thinks that wife-beating is not justified if the wife comes home late (1/40)	Woman thinks that wife-beating is not justified if the wife comes home late (1/32)
	Woman thinks that wife-beating is not justified if the wife is unfaithful (1/40)	Woman thinks that wife-beating is not justified if the wife is unfaithful (1/32)
Human and social resources		Woman has knowledge about modern contraception (1/12)
		Woman has exposure to family planning information (1/12)
		Woman thinks that FGM should be stopped (1/12)
Household decision-making (Familial/ Interpersonal)	Woman decides alone or with partner about large household purchases or about where/how husband's earnings will be spent (1/15)	
	Woman decides alone or with partner about her healthcare (1/15)	
	Woman decides alone or with partner about visiting family or relatives (1/15)	
Control over sexual relations	Woman can refuse sex with her husband/partner (1/10)	
	Woman can ask partner to use condom during sexual intercourse (1/10)	
Economic	Woman has completed secondary education or is still in school (1/15)	Woman has completed secondary education or is still in school (1/8)
	Woman is in continuous, paid employment [21] (1/15)	Woman is in continuous, paid employment [22] (1/8)
	Woman has a bank account (1/15) [23]	
Digital Empowerment	Woman has a mobile phone (1/10)	Woman has a mobile phone (1/8)
	Woman used a mobile phone for financial transactions (1/10)	Woman used a mobile phone for financial transactions (1/8)

[21] Girls of school age are considered as empowered in this indicator if they are still in school.

[22] Girls of school age are considered as empowered in this indicator if they are still in school.

[23] This indicator applies only to women aged 18 and above, as those aged 15 to 17 are not legally allowed to operate a bank account independently.

2.3.6 Limitations of Data

Although the KDHS 2022 was the most comprehensive dataset available for this study, the analysis and the definition of the Women's Empowerment Index (WEI) were limited by the sampling methodology and questionnaire design that informed the data collection. The 2025 WEI report lacks comparability with the 2020 WEI report due to the use of different domains and indicators of empowerment as a result of improved measurement and the expanded set of variables available in the KDHS 2022 dataset compared to KDHS 2014. Therefore, the analysis of women's empowerment in this report is informed by more relevant and comprehensive data and improved methods, providing a robust measure of empowerment.

Secondly, the KDHS does not capture many domains of women's empowerment identified in the literature as crucial, such as psychological well-being, legal knowledge, and participation. Important indicators like emotional distress, self-confidence, self-esteem, and self-empowerment were not included, despite their relevance to understanding women's empowerment. Additionally, knowledge of legal rights related to women's empowerment, such as rights to inheritance, property ownership, and protection against domestic violence, was missing. Similarly, questions about perceptions of whether these rights are enforced were not asked in the 2022 KDHS. Participation in community and public life, an area already included in several global gender equality indices, was also not covered.

Moreover, for women not in union, particularly those age 15-24, the survey did not measure their ability to make decisions (instrumental agency). The KDHS focuses on measurement of decision-making within unions, primarily regarding the husband/partner's role. However, research shows that women's agency is often constrained not only by their partners but also by other family members (e.g., parents, siblings, and in-laws), and the community at large. For both unmarried women and young women, critical aspects of decision-making, such as HIV testing or decisions about children's lives, were also not included in the questionnaire.

In addition, the KDHS excludes data on women aged 50 years and above whose experiences and empowerment dynamics could provide valuable insights. Older women often play influential roles within households and communities, and their inclusion in such studies could enrich the understanding of empowerment across life stages. The KDHS also lacks data on perceptions within women's families and communities regarding women's roles, their participation, and characteristics of an empowered person, as well as the empowerment of other family members (spouses, parents, siblings, and children). These factors have been shown in the literature to be associated with women's empowerment.

2.4 Linkages between women's empowerment and child vulnerabilities

Research demonstrates a strong positive relationship between women's empowerment and child well-being. When women are empowered and able to reach their full potential, their children thrive. Conversely, when women face restrictions in enjoying their rights and unequal opportunities, their children experience poor well-being outcomes.[24] Factors that limit women's empowerment such as low maternal education, living in extended families, and early marriage are linked to poor child well-being outcomes. In contrast, women's empowerment is positively associated with early child cognitive development, growth, learning, and nutrition.[25]

A substantial body of research focuses specifically on the connection between women's empowerment and child health. Studies across different regions reveal that key dimensions of empowerment, including decision-making autonomy, socio-economic status, and attitudes toward Gender-Based Violence, are strongly associated with improved child health outcomes.[26] Higher levels of empowerment correlate with better child nutrition, immunization rates, and overall health.[27] A comprehensive review on women's empowerment and child health in Sub-Saharan Africa[28] highlights that different aspects of empowerment can have varied impacts on child health depending on socio-economic factors. Additionally, gender-based violence significantly harm children's physical

[20] World Vision International 2021.
[25] Bliznashka et al. 2021.
[26] Abreha, Walelign, and Zereyesus 2020; Ibrahim, Tripathi, and Kumar 2015; Panday 2020.
[27] Abreha, Walelign, and Zereyesus 2020; Ibrahim, Tripathi, and Kumar 2015.
[28] Abreha and Zereyesus 2021.

and mental well-being, while empowering mothers in decision-making helps protect children from abuse. [29] A mother's mental health is also critical, as children of mothers with poor mental health often struggle to reach emotional milestones and cope with life's challenges.[30]

Beyond health, women's empowerment plays a crucial role in enhancing children's access to education, thereby reducing their vulnerabilities. Empowering women through education, access to information, and household decision-making power has been shown to improve children's educational opportunities.[31] When women have greater control over resources and decision making autonomy, they are more likely to seek health care services, provide better child care, and prevent gender based violence.[32] Consequently, their children are more likely to survive, receive quality child care, and access quality education.

The study findings suggest that promoting women's empowerment through gender responsive policies and strategies can significantly enhance children's health, education, and overall well-being, ultimately addressing child vulnerability.[33] The study utilized logistic regression analyses to explore the strength and direction of the relationship between women's empowerment and indicators of child vulnerabilities using KDHS 2022. The same logistic regression model, as outlined in Volume 1 of this report, is employed including the WEI as an independent variable in order to determine the relationship between the WEI and the different vulnerabilities facing children.[34] The logistic regression model for Regression 1 is expressed as follows:

$$\log\left(\frac{P(Y=1)}{1-P(Y=1)}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_k X_k + \epsilon$$

Where:

- **Y** is the binary dependent variable indicating whether the child is facing vulnerabilities (e.g., not fully immunized, did not use ITN, stunted, did not receive vitamin A supplement, not-exclusively breastfed or did not meet the minimum acceptable dietary requirements of WHO, not attended school in the past year, birth is not registered or has Multiple Overlapping Deprivation Analysis (MODA) poor (deprived in at least 3 dimensions).
- **P(Y=1)** is the probability of the event that Y=1 (i.e., the child suffers from the vulnerability).
- **β0** is the intercept.
- **β1, β2, …, βk** are the coefficients for the independent variables (e.g. sex and age, orphanhood status, living arrangements, wealth status, education level of adults).
- $\mathbf{X_1}$ is the WEI (The WEI was coded as a binary variable with '1' indicating that the woman is empowered and '0' indicated that the woman is not empowered).
- $\mathbf{X_2, \ldots X_k}$ are the independent variables (i.e. the potential markers of vulnerability).
- **εi** is the error term.

The main aim of the regression is to find how women's empowerment affects each of the indicators of child vulnerability. This analytical approach will shed light on how initiatives aimed at empowering women might shape the well-being of children, facilitating more targeted and effective interventions, promoting both women's empowerment and reducing child vulnerabilities.



Beyond health, women's empowerment plays a crucial role in enhancing children's access to education, thereby reducing their vulnerabilities.

[29] World Vision International 2021.
[30] Ibid.
[31] Supaat and Denson 2019.
[32] Pratley 2016.
[33] Abreha, Walelign, and Zereyesus 2020; Supaat and Denson 2019.
[34] Refer to Volume 1 of this report for the detailed methodology and full regression results.

03 Findings of the Study



Divorced, separated, or widowed women and those age 30 – 49 years face higher rates of violence. Women with no education report higher levels of physical violence (35.9%) compared to those with secondary (30.8%) or more than secondary education (23.3%).

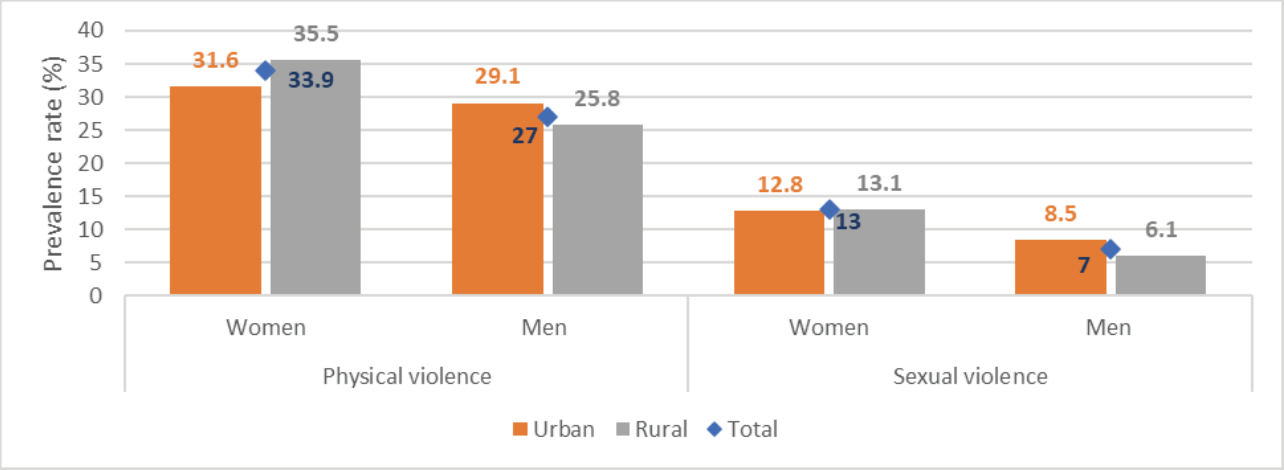
The findings are structured around into four main components, namely, descriptive statistics of key women's empowerment indicators; a trend analysis of empowerment indicators available in both the 2014 and 2022 KDHS to assess progress over time; the Women's Empowerment Index (WEI); and the nexus between women's empowerment and child vulnerabilities based on selected child well-being outcomes.

3.1 Descriptives statistics and trends in empowerment indicators

3.1.1 Attitudes towards wife-beating

This indicator explored the perception of society towards wife-beating focusing on different categories and circumstances under which it occurs. The findings shows that one-third of women age 15–49 have experienced physical violence since the age of 15 (33.9%), while 13.0% have faced sexual violence in their lifetime (See Figure 2). In comparison, 27.0% of men reported experiencing physical violence, and 7.0% reported sexual violence. Notably, the prevalence of violence among women is slightly higher in rural areas (35.5%) than in urban areas (31.6%), whereas for men, urban areas show higher rates.

Figure 2: Percentage of women and men age 15 – 49 years who have experienced some form of violence, at national level and by area of residence



Source: KDHS 2022

Table 5 presents the percentage of women who experienced physical or sexual violence, disaggregated by marital status, age, education level, and wealth quintile. Divorced, separated, or widowed women and those age 30 – 49 years face higher rates of violence. Women with no education report higher levels of physical violence (35.9%) compared to those with secondary (30.8%) or more than secondary education (23.3%). However, the pattern is less consistent for sexual violence, with only a slight decline among women with higher education.

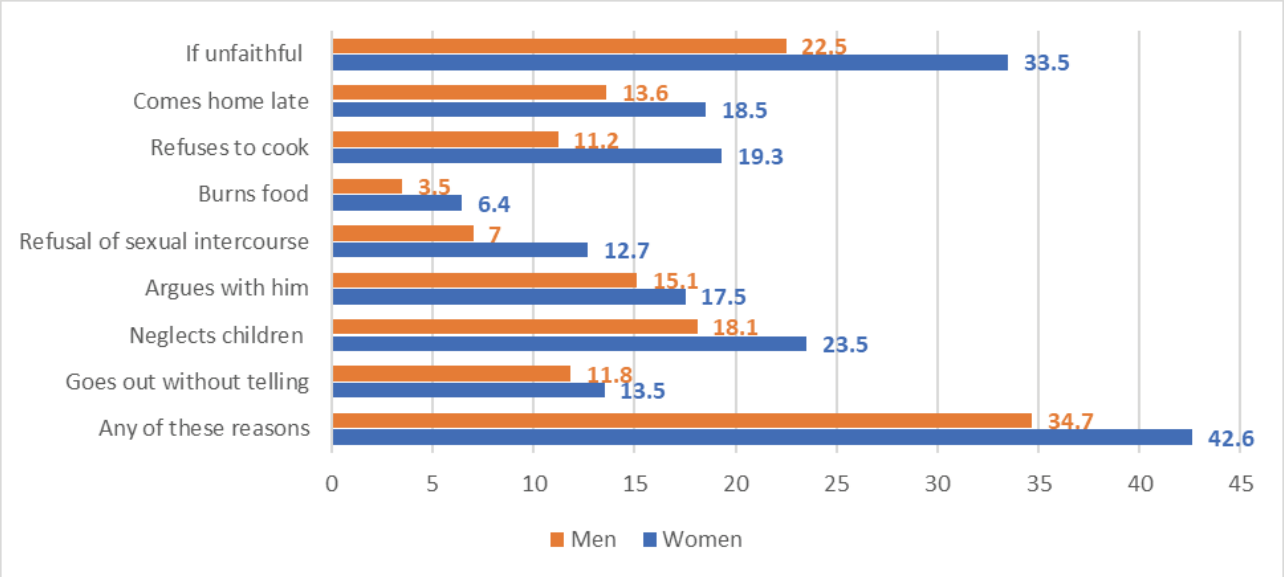
Table 5: Prevalence of physical and sexual violence among women aged 15-49 years

		Physical violence	Sexual violence
Marital status	Never married	19.8	8.4
	Married	37	12.9
	Divorced/separated/widowed	58.4	26.5
Age groups	15-19	19.5	7.2
	20-24	29	11.3
	25-29	36.9	13.1
	30-39	40.2	15.2
	40-49	41.7	17.5
Education level	None	35.9	8
	Primary	42.7	16.2
	Secondary	30.8	11.7
	More	23.3	11.2
Wealth quintile	Lowest	36.9	12.7
	Secondary	36.7	14.8
	Middle	36.8	12.9
	Fourth	33.6	13.7
	Highest	28.1	11.3

Source: KDHS 2022

The findings showed that 42.6% of women and 34.7% of men agree that wife-beating is justified under the specified reasons **(See Figure 3).** The main circumstances under which wife beating was considered acceptable include infidelity, neglect of children, refusing to cook, and coming home late.

Figure 3: Percentage of women and men age 15 – 49 years who agree that a husband is justified in beating his wife for specific reasons



Source: KDHS 2022

3.1.2 Trends in attitudes towards wife-beating

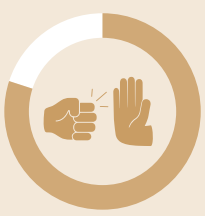
Table 8 presents the indicators related to attitudes toward wife beating. The trend analysis from 2014 - 2022 on attitudes toward wife-beating reveals a significant shift in perceptions among women. The data indicates a growing disapproval of the justification of wife-beating under various circumstances, signalling a shift in attitudes toward gender-based violence.

In 2014, a notable percentage of women, both in-union and those not-in-union, believed that wife-beating was justified in certain situations. For instance, the proportion of women in unions who found it unjustified for a husband to beat his wife for going out without telling him increased from 71.8% in 2014 to 84.5% in 2022.

Furthermore, the percentage of women in-union who believed wife-beating was unjustified increased from 73.2% in 2014 to 80.3% in 2022. This increase indicates a growing recognition of women's autonomy, and a rejection of gender-based violence.

Women's attitudes toward justifications for wife-beating related to sexual refusal also improved significantly. In 2014, 77.3% of women in-union reported that it was unjustified for a husband to beat his wife if she refused sex, a perception that increased to 84.1% in 2022. This indicates a growing awareness and rejection of the use of gender-based violence to enforce sexual relations.

Overall, the analysis paints a picture of positive social change in the disapproval of gender-based violence in various forms, reflecting an important shift toward realizing gender equality and women's empowerment. This positive change is notable particularly among women in unions - indicating changes in family and marital dynamics.



80.3%

of women

The percentage of women in-union who believed wife-beating was unjustified increased from 73.2% in 2014 to 80.3% in 2022

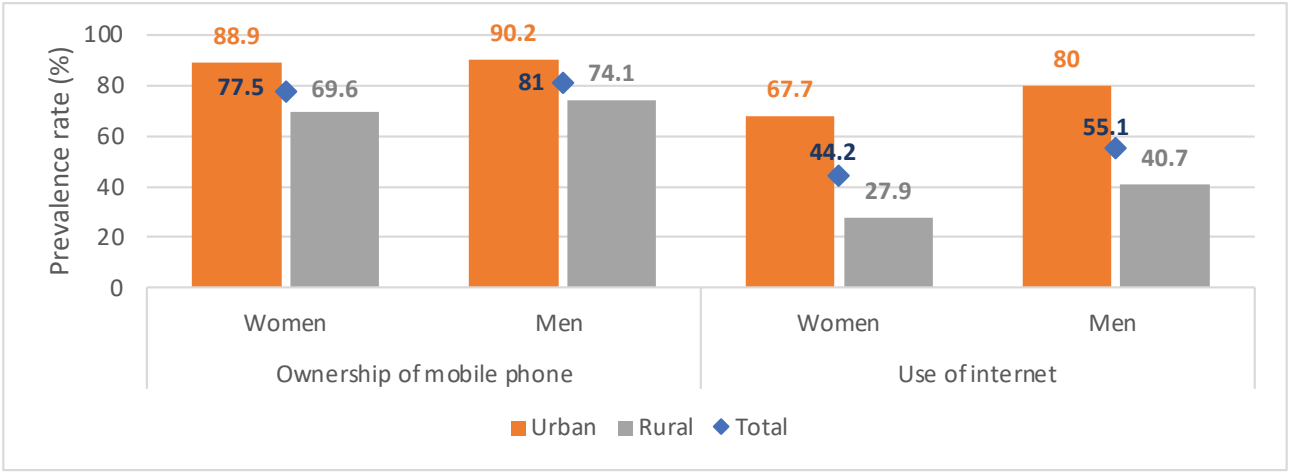
Table 8: Trends in attitudes toward wife beating., 2014-2022

	Women in union		Women not in union	
	DHS 2014	DHS 2022	DHS 2014	DHS 2022
Woman thinks that wife-beating is not justified if the wife goes out without telling her husband (1/25)	71.8	84.4	75.4	87.2
Woman thinks that wife-beating is not justified if the wife neglects the children (1/25)	59.8	75.5	62.6	76.5
Woman thinks that wife-beating is not justified if the wife argues with her husband (1/25)	73.2	80.4	77.6	83.4
Woman thinks that wife-beating is not justified if the wife refuses to have sex with her husband (1/25)	77.3	84.3	80.7	87.4
Woman thinks that wife-beating is not justified if the wife burns the food (1/25)	90.2	92.9	89.8	93.6

3.2 Human and social resources

This indicator focuses on access to mobile phone ownership and internet use as a form of women empowerment and is disaggregated by sex, and area of residence. Analysis showed that access to human and social resources varies significantly by sex and area of residence. The analysis showed that 81.0% of men own a mobile phone compared to 77.5% of women **(See Figure 4).** Similarly, internet usage was higher among men (55.1%) compared to women (44.2%). Urban women were more likely to access these resources than their rural counterparts, with a significant disparity in internet usage at 67.7% and 27.9%, respectively. Further, wealth influences access to mobile phone or internet use. Women in higher wealth quintiles are more likely to own a mobile phone or use the internet.

Figure 4: Mobile phone ownership and internet use, by sex and area of residence



Source: KDHS 2022

School attendance rates highlight gender and geographic disparities. While net primary school attendance is high for both boys and girls (about 85–87%), secondary school attendance drops significantly, particularly for boys (45.4%) compared to girls (52.7 %) **(see Table 6)**. Attendance rates improve with wealth and urban residence.

Table 6: Percentage of children of primary school age (6-13 years) and secondary school age (14-17 years) attending school

		Net attendance primary		Net attendance secondary	
		Girls	Boys	Girls	Boys
	Total	87.0	85.5	52.7	45.4
Area of residence	Urban	90.1	87.6	59.7	56.5
	Rural	85.8	84.7	50.2	42.2
Wealth quintile	Lowest	75.0	74.5	30.6	23.4
	Secondary	89.6	88.7	50.4	42.4
	Middle	90.6	89.5	59.6	49.7
	Fourth	91.1	89.0	62.4	59.3
	Highest	92.6	90.2	68.1	71.0

Source: KDHS 2022

Analysis of the highest level of education attained by women and men age 15-49 years is presented in Figure 7. The findings revealed that approximately 40 per cent of men and women in this age group have attained secondary or higher level of education. However, women exhibit a slightly lower attainment of secondary or higher education compared to men. In addition, illiteracy was more prevalent among women (9.1%) than men (6.2%), with the highest illiteracy rates found among individuals from the lowest wealth quintile.

Figure 7: Highest level of education achieved among women and men (15-49 years

		Net attendance primary		Net attendance secondary	
		Girls	Boys	Girls	Boys
	Total	87.0	85.5	52.7	45.4
Area of residence	Urban	90.1	87.6	59.7	56.5
	Rural	85.8	84.7	50.2	42.2
Wealth quintile	Lowest	75.0	74.5	30.6	23.4
	Secondary	89.6	88.7	50.4	42.4
	Middle	90.6	89.5	59.6	49.7
	Fourth	91.1	89.0	62.4	59.3
	Highest	92.6	90.2	68.1	71.0

Source: KDHS 2022

3.2.1Trends in Human and social resources

The past decade has seen remarkable progress in women's access to human and social resources in Kenya, as reflected in data from the 2014 and 2022 DHS surveys **(See in Table 9)**. These findings highlight a growing shift in women's access to media, health information, and their attitudes toward social issues, showing positive developments in women's empowerment.



Table 9: Trend analysis, 2014-2022: Human and social resources

	Women in union		Women not in union	
	DHS 2014	DHS 2022	DHS 2014	DHS 2022
Woman has access to media (1/20)	69.3	79.7	72.4	76.3
Woman thinks that FGM should be stopped (1/20)	82.2	89.5	85.6	89.8
Woman has exposure to family planning information (1/20)	79.6	94.9		
Woman has knowledge about modern contraception (1/20)	96.1	99.6		
Woman has knowledge about HIV/AIDS prevention and transmission, including MTCT (1/12)			21.6	50.0

Access to media

Analysis on access to media among women and men age 15 - 49 shows that access to media by women in union increased from 69.3% in 2014 to 79.8% in 2022. Similarly, access to media by women not-in-union also increased from 72.4% in 2014 to 76.5% in 2022. This increase in media access reflects a broader shift toward enhanced connectivity with more women gaining access to critical information that can empower them economically, socially, and politically.

Attitudes towards FGM

Analysis of women in-union and not-in-union age 15 - 49 who believed that FGM should be stopped increased from 82.2% and 85.6% in 2014 to 89.5% and 89.8% in 2022, respectively. This underscores the growing recognition of women's rights and autonomy and reflects the changing cultural norms surrounding this harmful practice.

Knowledge and access to family planning

According to 2022 KDHS, knowledge of family planning has improved among women age 15 - 49. Access to knowledge of family planning among women in union increased from 79.6% in 2014 to 94.6% in 2022. The increased knowledge of family planning reflects the government's ongoing efforts towards promoting women's sexual and reproductive health rights.

Knowledge on modern contraception among women in-union increased from 96.1% in 2014 to 99.5% in 2022. This increase suggests that family planning programmes have become more effective in ensuring that women have access to reliable contraception methods.

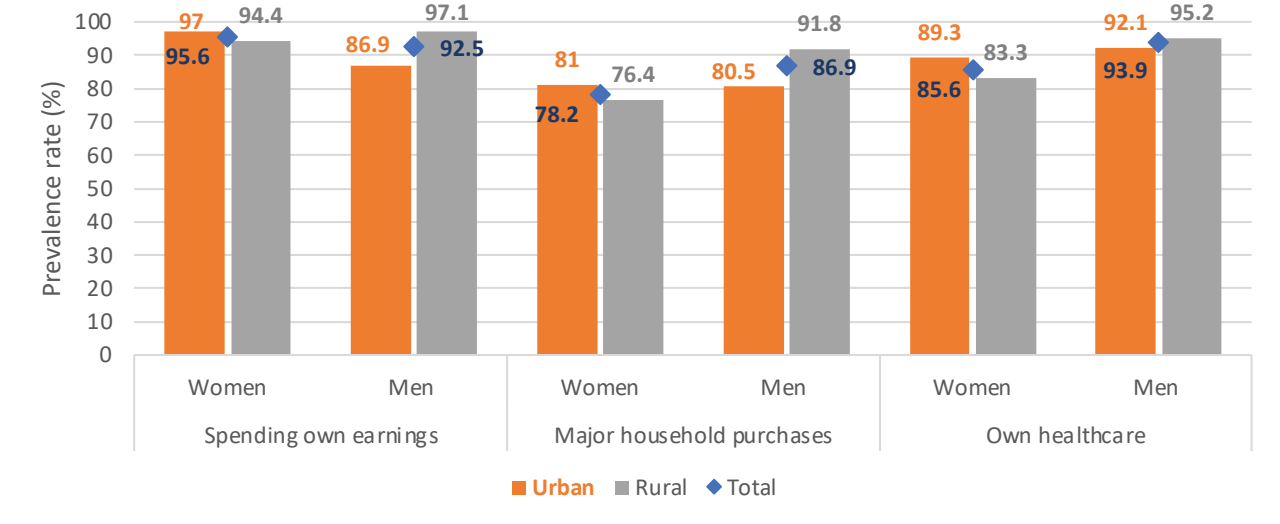
Knowledge of HIV/AIDS prevention and transmission

Knowledge of HIV/AIDS prevention and transmission, including Mother-to-Child Transmission (MTCT has significantly increased among women not-in-union from 21.6% in 2014 to 50.0% in 2022. This increase is attributed to public health advocacy efforts aimed at raising awareness about HIV/AIDS, emphasizing the importance of safe practices, while preventing transmission to future generations.

3.3 Household decision-making

The analysis highlights the extent to which women in households are involved in decision making within the household, and how it compares with men. Significant progress has been made over the years in enhancing women's autonomy in household decision-making. The findings show that married men and women participate in decision making regarding their own earnings, with 95.6% of women and 92.5% of men reporting having participated **(See Figure 5).** However, disparities emerge in other areas. Men are more likely to decide on major household purchases at 86.9% compared to 78.2% for women. Decision making in own healthcare has 8-per-centage-point gap in favour of men.

Figure 5: Participation in household decision-making



Source: KDHS 2022

Table 10: Trend analysis 2014-2022: Household decision-making (familial/interpersonal) for women in union.

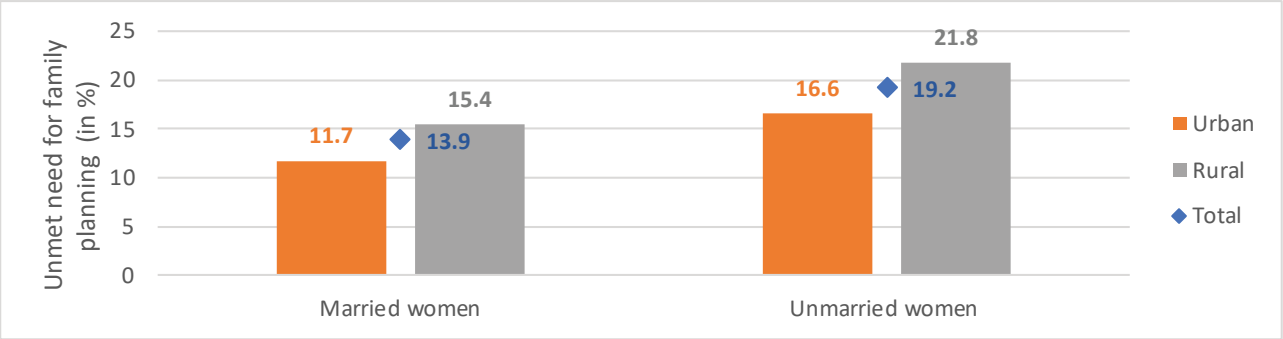
	Women in union	
	DHS 2014	DHS 2022
Woman decides alone or with partner about large household pur-chases (1/20)	71.2	79.1
Woman decides alone or with partner about her healthcare (1/20)	77.3	86.7
Woman decides alone or with partner about visiting family or rela-tives (1/20)	72.5	82.9
Woman decides alone or with partner about where/how husband's earnings will be spent (1/20)	55.5	58.9

3.4 Control over sexual relations

Data from the 2022 KDHS highlights important aspects of women's autonomy in negotiating safer sexual relations as presented in Table 11. Among women in-union, 76.8% reported that they can refuse sex with their husband or partner, while 72.0% reported they can ask their part-ner to use a condom during sexual intercourse. These results show that majority of women have some degree of control over decisions that directly affect their sexual, and reproductive health.

However, disparities remain in access to reproductive health services. As shown in Figure 6, unmet need for family planning is higher among unmarried women (19.2%) compared to married women (13.9%) and is high-er in rural areas. This indicates that while decision-making autonomy has improved, especially among women in-union, barriers related to stigma, accessibility, and social norms continue to limit unmarried women's ability to fully exercise their reproductive rights.

Figure 6: Percentage of married and unmarried women with an unmet need for family planning



Source: KDHS 2022

3.4.1 Trends in control over sexual relations

Significant progress has been made in empowering women, especially in areas that directly affect their sexual and reproductive health. Women in-union (70.9%) reported that they could refuse sex with their husbands or partners in 2014 compared to 76.8% in 2022, marking an increase in women's ability to negotiate safer sexual relations.

Furthermore, there was an increase in women's ability to influence their sexual reproductive health rights, particularly regarding the use of condoms. The ability of women in-union to ask their husband or partner to a use condom during sexual intercourse increased from 67.7% in 2014 to 72.0% in 2022. This indicates a shift towards greater awareness and negotiation power regarding safe sexual practices.

These improvements reflect a broader shift in attitudes towards advocating for women's sexual reproductive and health rights in Kenya. This demonstrates that women are gaining more control over their sexual health and well-being, with policy changes supporting these initiatives.

Table 11: Trend analysis 2014-2022: Control over sexual relations

	Women in union	
	DHS 2014	DHS 2022
Woman can refuse sex with her husband/partner (1/15)	70.9	76.8
Woman can ask partner to use condom during sexual intercourse (1/15)	67.7	72.0

3.5 Economic situation

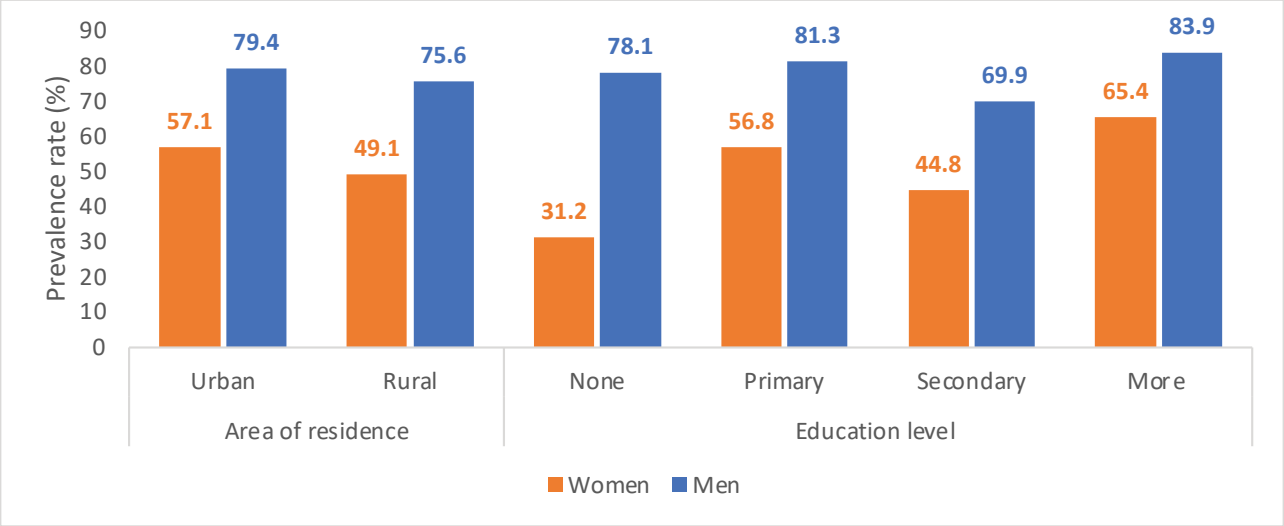
Analysis of economic situation based on 2022 KDHS utilized three key indicators on: paid employment, ownership of a house or land, and possession of a bank account. Each indicator reflected a woman's access to, and control over economic resources necessary for economic autonomy and agency. Paid employment refers to women who are continuously employed throughout the year and receive payment.

According to the 2022 KDHS, 52.3% of women from ages 15–49 were employed, compared to 78.1% of men, showing gender differences in labour force participation **(Figure 8).** The gap runs across all education levels, and area of residence. Among women with no education, only 31.2% are employed compared to 78.1% of men in the same category.

Unemployment is also disproportionately high among women. 47.7% of women are not employed compared to 21.9% of men. The unemployment rate is higher among younger women (15–29 years) and those in the lowest wealth quintile, indicating structural barriers to economic participation.

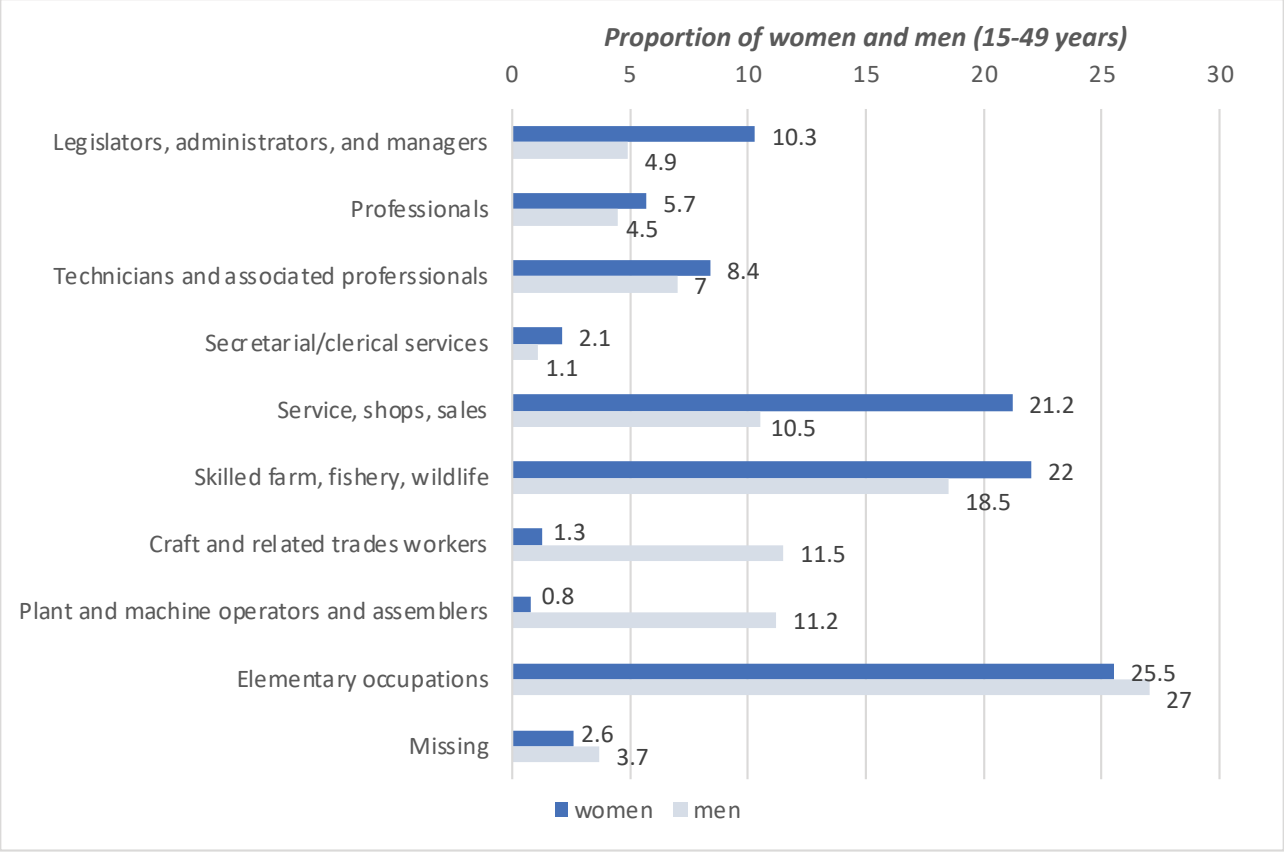
Figure 9 shows the gendered occupational segregation, with most women concentrated in informal or lower-paying jobs that may not meet the threshold of year-round paid employment, and remain underrepresented in leadership, and formal sector roles.

Figure 8: Labour force participation of women and men (in age 15-49 years)



Source: KDHS 2022

Figure 9: Proportion of women and men age 15-49 employed in the 12 months prior to the survey, by occupation

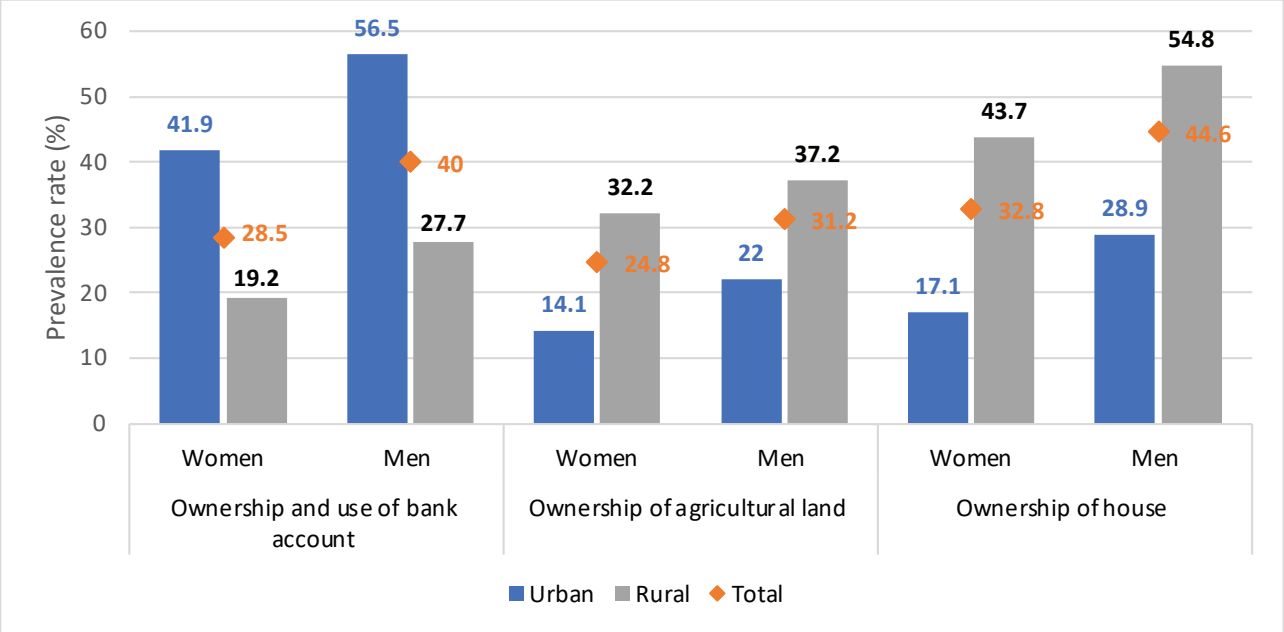


Source: KDHS 2022

Analysis of ownership to assets was assessed on whether a woman owned a house or land, either alone, or jointly with a spouse/partner, or holds a title deed in her name. The data shows that 32.8% of women owned a house compared to 44.6% of men **(See Figure 10).** At least four out of ten women in rural areas reported owning a house, compared to about two out of ten women in urban areas.

The findings depict persistent gender and geographic disparities on possession of a bank account. In urban areas, 56.5% of men reported having a bank account compared to 27.7% of women in rural areas. Ownership of a bank account among women was lower compared to men. This disparity was similar among those living in urban areas compared to their rural counterparts. This suggests that many women remain financially excluded from formal financial systems, limiting their ability to save, invest, or access credit independently, and, therefore, are less empowered.

Figure 10: Proportion of women and men age 15-49 years according to ownership of assets



Source: KDHS 2022

The proportion of women in union who completed secondary education nearly doubled, from 20.6% to 38.9%, while women not-in-union increased from 57.3% to 70.5%. In terms of paid employment, the percentage of women in-union declined slightly from 35.8% to 34.0%, while the percentage of women not-in-union increased from 64.9% to 69.9% in 2014 and 2022, respectively. While these trends indicate progress in the measurement of women's empowerment, further efforts are needed to ensure equal access to opportunities for all women.

Table 12: Trend analysis on Economic Situation, 2014-2022

	Women in union		Women not in un-ion	
	DHS 2014	DHS 2022	DHS 2014	DHS 2022
Woman has completed secondary education or more (1/10)	20.6	38.9	57.3	70.5
Woman is in continuous, paid employment (1/10)	35.8	34.0	64.9	69.9



3.6 Other indicators related to women's well-being

3.6.1 Nutrition and Health

The findings show that there were disparities in nutritional and health status among women and men age 15 - 49. Majority of women were overweight (27.5%) and obese (17.3%) compared to men at 14.6%, and 4.2% respectively. Women in rural areas and those in lower wealth quintiles are more likely to be thin, while women in urban areas and those in higher wealth quintiles are more likely to be overweight and obese **(See Table 13).**

Table 13: Nutritional status of women and men age 20-49

		Thin		Normal weight		Overweight		Obese	
		Women	Men	Women	Men	Women	Men	Women	Men
Total	Total	7.3	14.2	47.9	67.0	27.5	14.6	17.3	4.2
Area of residence	Urban	4.9	11.8	42.2	62.9	30.6	18.6	22.3	6.6
	Rural	9.1	16.0	52.3	70.2	25.3	11.4	13.4	2.3
Age groups	15-19*	17.6	43.2	69.2	54.6	11.2	1.9	2.0	0.3
	20-29	9.4	15.9	58.3	74.5	23.5	7.9	8.8	1.7
	30-39	5.5	12.2	41.2	63.6	30.9	18.9	22.5	5.4
	40-49	6.0	13.7	39.4	57.5	29.9	21.4	24.7	7.4
Education level	None	22.6	31.6	51.1	58.6	16.8	9.4	9.4	0.4
	Primary	6.6	15.9	49.8	69.6	26.2	11.9	17.4	2.6
	Secondary	6.4	14.2	47.4	69.2	28.9	12.7	17.3	3.9
	More	5.7	9.7	44.7	61.8	30.6	21.3	19.1	7.3
Wealth quintile	Lowest	18.2	24.8	62.4	70.4	14.9	4.3	4.6	0.6
	Secondary	7.9	18.1	59.8	72.3	23.0	8.6	9.3	0.9
	Middle	7.8	12.9	47.8	72.1	28.5	12.6	15.9	2.4
	Fourth	5.0	12.3	44.0	69.2	31.5	15.6	19.9	2.9
	Highest	2.9	8.4	37.1	55.2	33.0	25.1	27.0	11.3

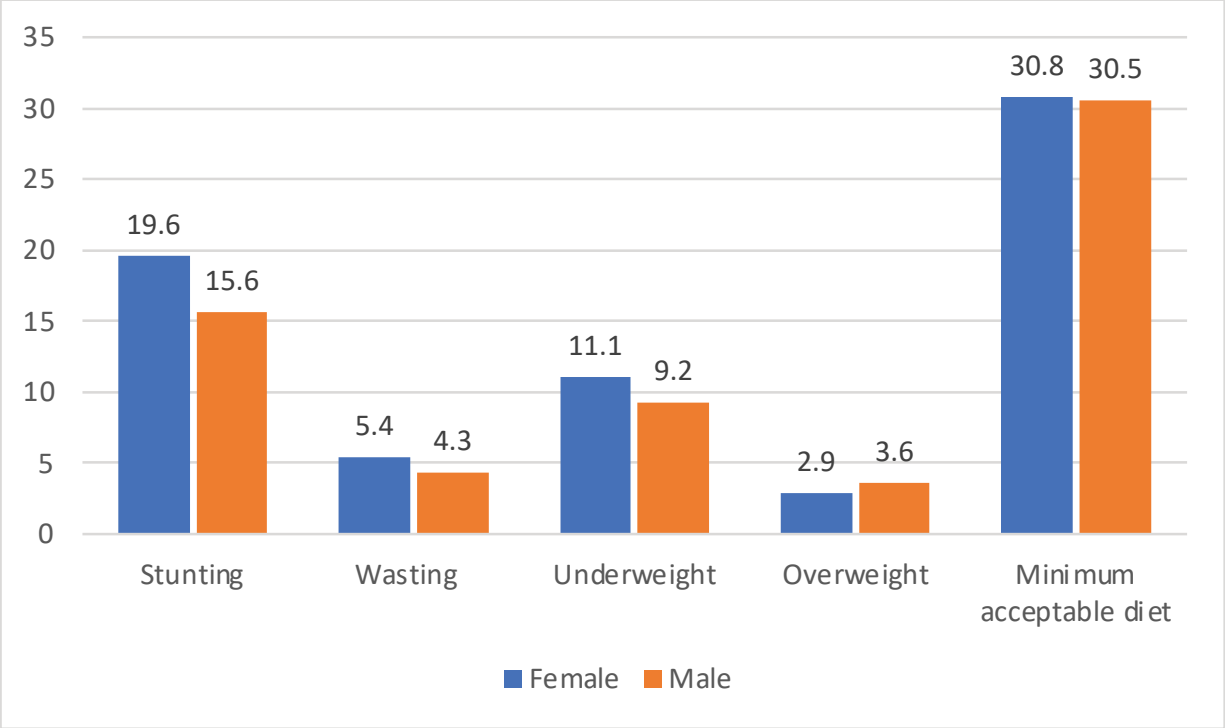
Source: KDHS 2022

*Note: * indicates the nutritional status of women and men age 15-19*

Differences in nutritional status among children under five years of age based on the child's sex is shown in Figure 11. On average, girls are more likely to be stunted, wasted, or underweight compared to boys. The analysis shows that 19.6% of girls are stunted compared to 15.6% of boys. Conversely, 2.9% of girls are overweight compared to 3.6% of boys. Regarding Minimally Acceptable Diet (MAD), there were no significant differences based on the sex of the child.



Figure 11: Nutrition status of children under five, by sex of the child



Source: KDHS 2022

Marital status

Nearly one in every four women aged 15 - 49 (22.4%) were married before the age of 18, compared to 3.4% of men. Among men and women aged 25 – 49, the median age at first marriage for women is 21 years old, compared to the median age for men at 25.8 years old. About 1.4% of women are divorced, 7.9% are separated, and 2.8% are widowed, compared to men at 1.1% divorced, 4.6% separated, and 0.5% widowed as shown in Table 14.



Table14: Marital status of men and women age 15-49 by age

		Early marriage (before 18)		In union		Divorced		Separated		Widowed	
		Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
	Total	22.4	3.4	55.4	45.8	1.4	1.1	7.9	4.6	2.8	0.5
Age groups	15-19	-	-	7.6	0.4	0.1	0	0.8	0.3	0	0
	20-24	12.5	1.8	43.9	14.2	0.5	0.6	5.4	2.6	0.1	0
	25-29	20.3	2.7	71.3	51.2	1.4	1.3	9.6	5.2	0.9	0
	30-34	26.8	4.3	76.4	73.8	1.8	2.3	10.4	7.5	2.3	0.1
	35-39	30.1	5.3	75	83.5	2.4	1.3	11.4	8.1	5.3	0.4
	40-44	26.5	2.6	72.8	83.7	2.8	1.8	11.8	9.1	7	1.6
	45-49	24.7	5.1	68.9	89.5	2.8	1.2	11.6	5.1	11.9	1.8

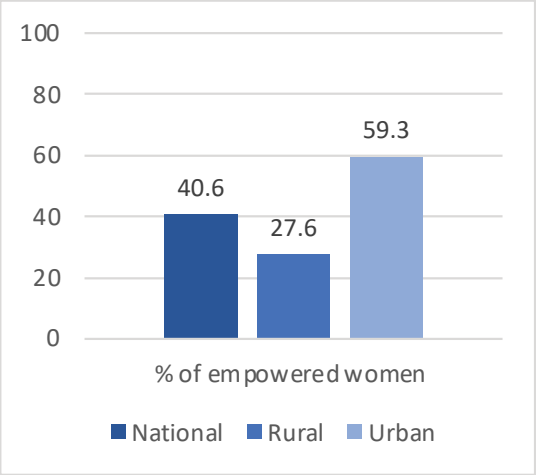
Source: KDHS 2022

3.7 The Women's Empowerment Index

According to Kabeer (1999), Women's Empowerment Index (WEI) is a composite quantitative measure used to assess the extent to which women are empowered in various dimensions of life, namely: resources (pre-conditions), agency (process), and achievements (outcomes). In this study, the WEI was constructed from five equally weighted domains namely: Economic, Human and Social Resources, Household and Sexual/Reproductive Decision Making, Attitudes to-wards Social Cultural Norms and related phenomena, and Digital Empowerment.

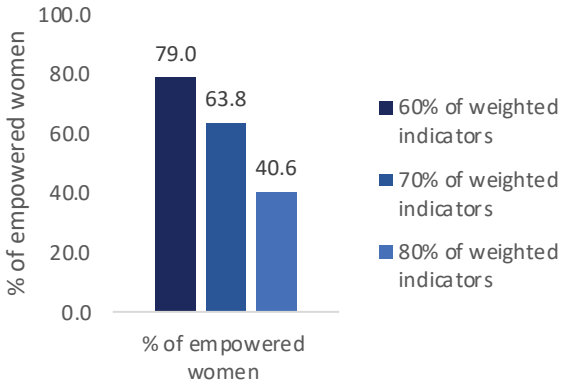
The study established that 40.6% of women in Kenya are empowered,[35] and meets the threshold of 80% of the weighted indicators in all the domains of women's empowerment. The percentage of empowered women in urban areas (59.3%) is more than twice that of women in rural areas (27.6%). To further explore the measurement of empowerment, a sensitivity analysis was conducted using different thresholds set at 60, 70, and 80 percent. When applying a 60% threshold, 79.0% of women were deemed empowered. With a 70% threshold, 63.8% of women were empowered; but this dropped significantly to 40.6% when the threshold was set at 80%. The 80% threshold, used in this report was recommended by policy makers in line with the 2020 Women's Empowerment Study in Kenya.

Figure 12: Incidence of women's empowerment (empowered in 80% of total weighted indicators), national level and by area of residence, 2022



Source: KDHS 2022

Figure 13: Incidence of women's empowerment (empowered in 80% of total weighted indicators), national level, different thresholds, 2022



Source: KDHS 2022

Empowerment levels vary significantly by age. Women age 18 - 24 were the most empowered at 48.0% followed by women age 25-34 at 45.5%. Young girls age 15-17 were the least empowered, while older women age 35-49 also recorded a relatively lower level of empowerment at 37.6%. These findings underscore the need for targeted policy interventions, especially for younger, and older women.

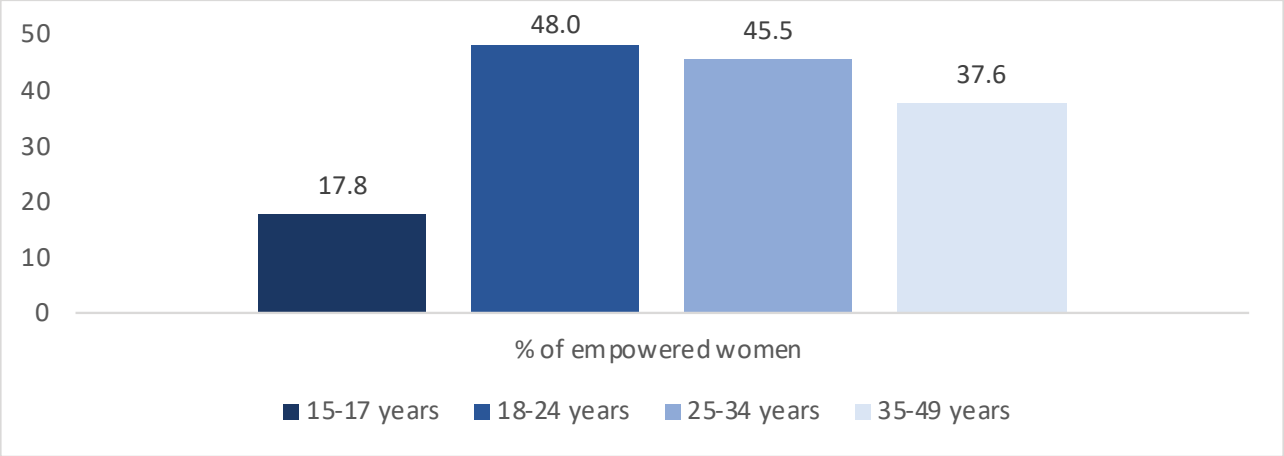


48%

Women age 18 - 24 were the most empowered at 48.0% followed by women age 25-34 at 45.5%.

[35] Levels of women's empowerment are presented separately for women in-union and not-in-union, disaggregated by key characteristics, in Annex III.

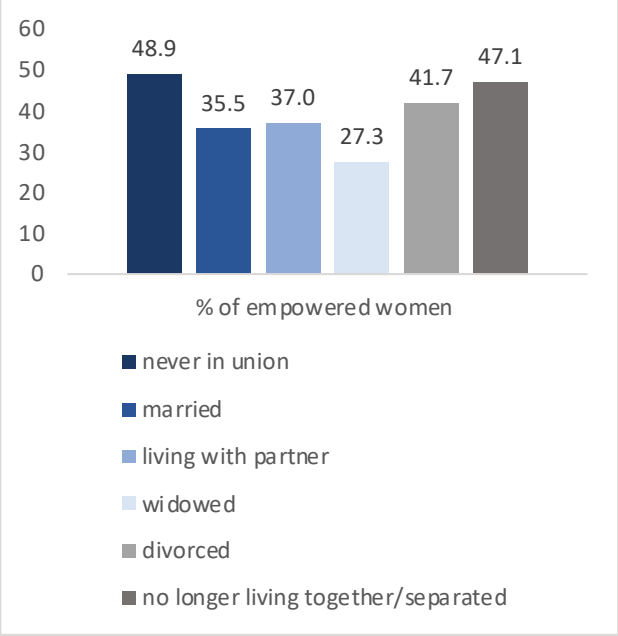
Figure 14: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by age group, 2022



Source: KDHS 2022

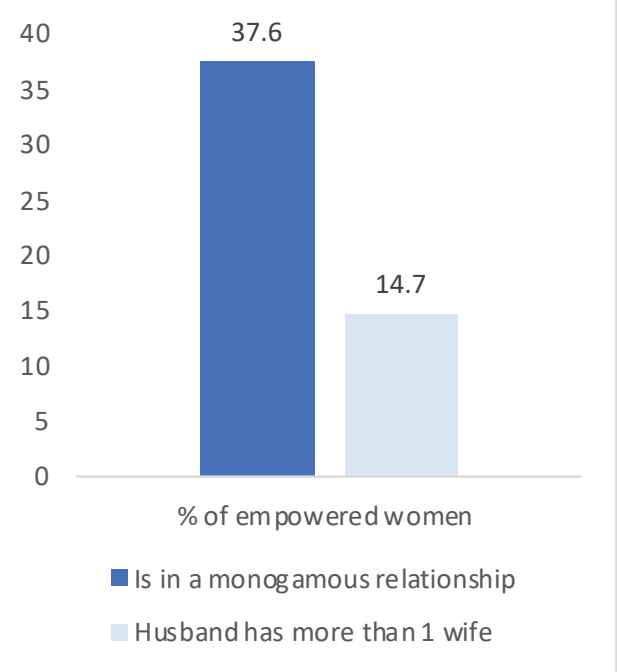
Women's empowerment level also varies by marital status. Women who have never been in marital union had the highest level of empowerment at 48.9%. In addition, widowed women were the least empowered at 27.3% as shown in Figure 15. Women in monogamous marriage were more empowered at 37.6% compared to those in polygamous marriages at 14.7% as shown in Figure 16.

Figure 15: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by marital status, 2022



Source: KDHS 2022

Figure 16: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by type of marriage, 2022

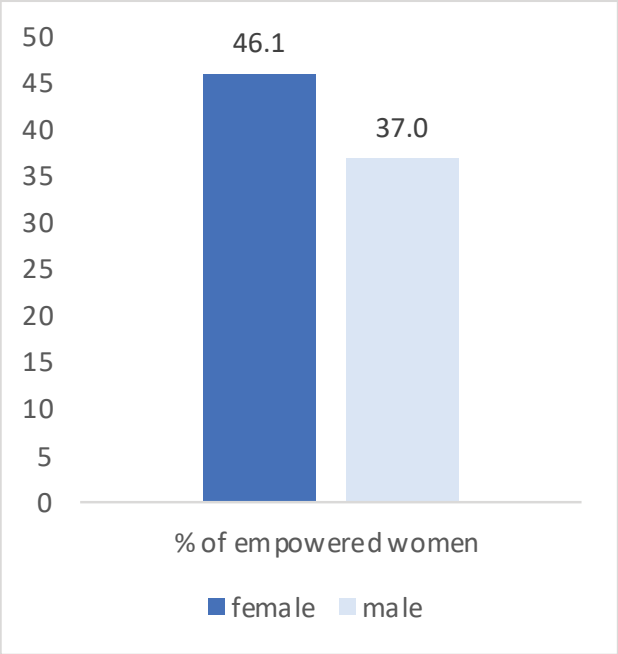


Source: KDHS 2022
Note: These results are for women in union.



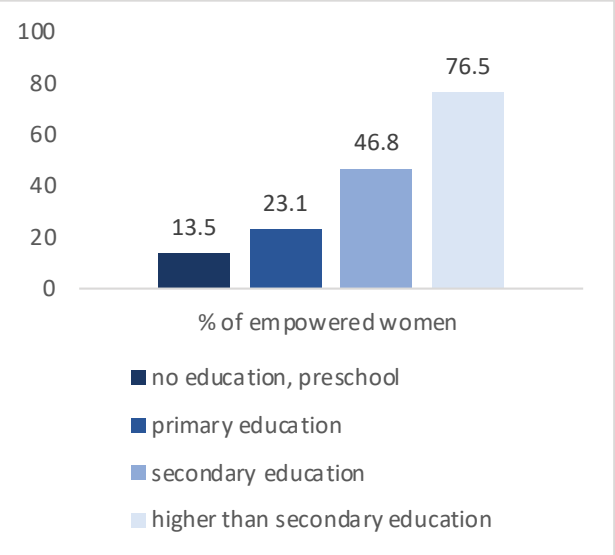
Women's empowerment correlates positively with educational attainment of the household head. Analysis shows that women in female headed households are more likely to be empowered than women in male headed households as shown in Figure 17. Further, women living with a household head who has completed higher than secondary education have a significantly higher rate of empowerment at 76.5% compared to 13.5% of those living with a non-educated house hold head.

Figure 17: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by sex of household head, 2022



Source: KDHS 2022

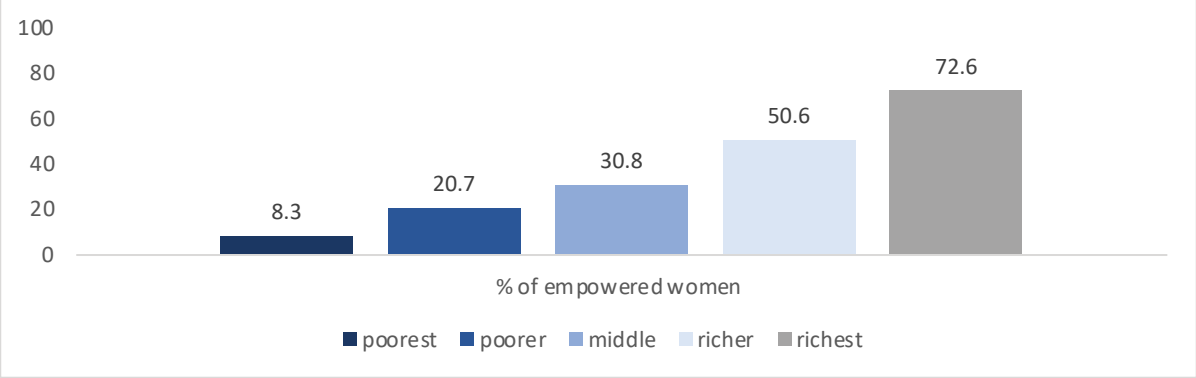
Figure 18: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by education attainment of household head, 2022



Source: KDHS 2022

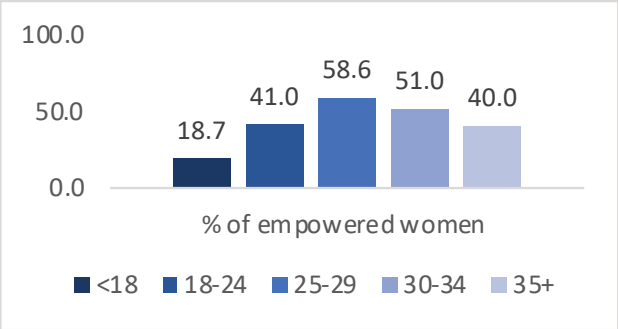
Analysis shows that women's empowerment increases with the wealth quintile. Women in the poorest wealth quintile were the least empowered at 8.3% compared to their counterparts in the richest wealth quintile at 72.6% as shown in Figure 19.

Figure 19: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by wealth quintile, 2022



Source: KDHS 2022

Figure 20: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by age of first cohabitation, 2022

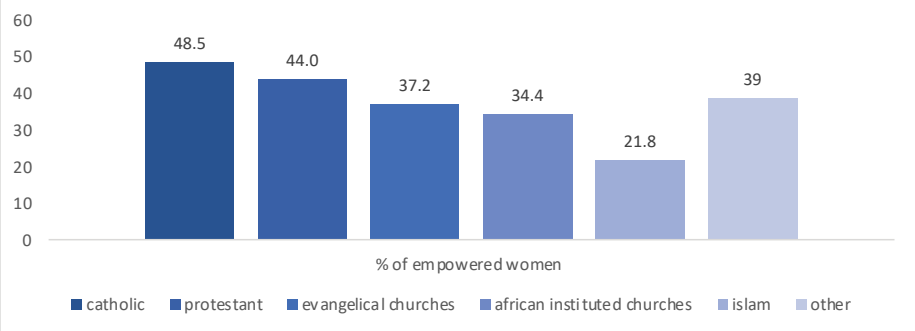


Source: KDHS 2022

he age at which women first cohabit also impacts their empowerment. Women who lived with their partner for the first time before the age of 18 have the lowest empowerment rate (18.7%), whereas those whose age at first cohabitation was between age 25-29 had the highest rate of empowerment (58.6%).

Religious affiliation further shapes women's empowerment as shown in Figure 21. Among religious groups, Catholic women have the highest empowerment rate (48.5%), followed by protestant women, and evangelical churches at 44.0% - 37.2% respectively. Muslim women were the least empowered at 21.8%.

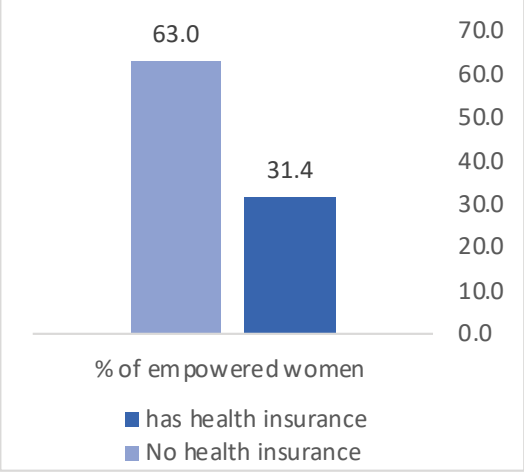
Figure 21: Incidence of women's empowerment (empowered in 80% of total weighted indicators), by religion, 2022



Source: KDHS 2022

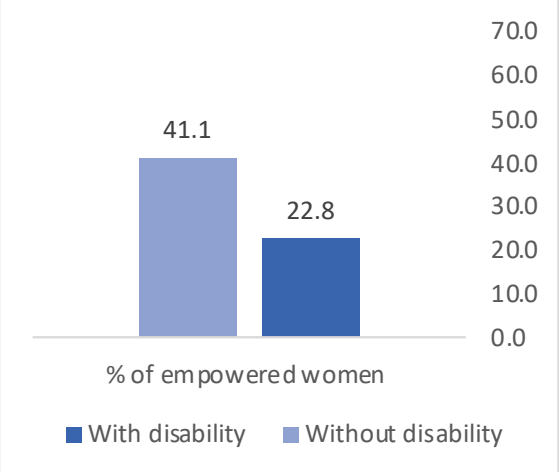
Access to health insurance also impacts women's empowerment. The findings revealed that women who have a health insurance were more empowered at 63.0% compared to those with no health insurance at 31.4% as shown in Figure 22.

Figure 22: Incidence of women's empowerment (empow-ered in 80% of total weighted indicators), by access to health insurance, 2022



Source: KDHS 2022

Figure 23: Incidence of women's empowerment (empow-ered in 80% of total weighted indicators), by disability status, 2022



Source: KDHS 2022

3.8 Women's Empowerment and Child Vulnerabilities

The intersection of women's empowerment and child well-being has long been a critical focus of development studies. Using regression analysis, we explore the relationship between women's empowerment and various child vulnerabilities, including health, nutrition, education, and birth registration outcomes as shown in Table 13.

Table 13: Regression results between Child Vulnerabilities and Women's Empowerment

	Child Vulnerabilities							
	Not fully immunized (age<5)	Non-usage of ITN	Stunting (age<5)	Did not receive vitamin A (age 7-59 months)	Non-exclusive breastfeeding or no Minimum acceptable diet (0-23 months)	Not attended school in the past year	No Birth registration	MODA poor (deprived in at least 3 dimensions)
WEI (ref=. Mother is not empowered)	not significant	-0.04 ***	not significant	not significant	not significant	-0.05 ***	not significant	-0.03 ***

Overall, the analysis revealed that in households where mothers are empowered, some child vulnerabilities were significantly lower, highlighting the positive ripple effects of women's empowerment on child outcomes. The analysis reveals that in households with empowered moth-ers, children are 5% less likely to fail to sleep under an Insecticide-Treated Net (ITN), which is essential for preventing malaria. Empowered mothers are also more likely to have their children attending school. Education is a fundamental right that opens doors to future opportunities, and underscores how empowered women prioritize and support their children's learning and school attendance.

The likelihood of children being multi-dimensionally poor (deprived in at least three dimensions) is 3% lower when mothers are empowered; a broad measure highlighting the transformative potential of women's empowerment in improving overall child welfare. However, women's empowerment does not show a statistically significant effect on some child vulnerabilities, including immunization, stunting, whether the child received vitamin A, exclusive breastfeeding, and meeting the WHO requirements for minimum acceptable diet practices, and birth registration. The evidence underscores the urgent need to centre women's empowerment in policies aimed at improving child outcomes. By investing in women's education outcomes, agency, and access to resources, societies pave the way for healthier, more equitable futures for the next generation.

Based on the study's findings, empowering women directly improves child well-being by reducing key vulnerabilities, such as the likelihood of children lacking insecticide-treated nets, not attending school, and being multi-dimensionally poor.



04 Conclusions and recommendations



The analysis of women's empowerment in Kenya, which was based on the 2022 KDHS presents a detailed examination of key empowerment indicators, highlighting significant progress in various domains. **Nearly all indicators related to women's empowerment, both for women in-union and women not-in-union, showed improvement between 2014 and 2022.** Empowerment was measured through five domains for women in-union (attitudes toward wife-beating, household decision-making, control over sexual relations, economic, and digital empowerment) and four domains for women not-in-union (attitudes toward wife-beating, human and social resources, economic, and digital empowerment).

According to the analysis, **40.6% of women were classified as empowered in Kenya.** Empowerment rates were higher in urban areas, among women with higher educational attainment, and those in wealthier households. Furthermore, empowerment is strongly associated with factors such as marital status, age, religious affiliations, access to health insurance, disability status, and household characteristics. The analysis also found that empowering women directly improves child well-being by reducing some child vulnerabilities, such as children not using Insecticide Treated Nets, not being registered at birth, and being multi-dimensionally poor.

4.1 Recommendations for policy and advocacy

a. **Increase Access to quality Education:** Given the positive correlation between educational outcomes and women's empowerment, efforts to improve quality access to education, particularly at secondary level, and higher should be prioritized. This will help narrow the gender gap in educational outcomes and promote empowerment in both rural and urban areas.

b. **Promote Digital Empowerment:** Initiatives aimed at enhancing digital literacy and access to digital mobile phones and internet access to close the gender digital divide, particularly in rural and underserved areas, are fundamental to support women's empowerment. Bridging this digital divide through community technology centres/hubs, affordable internet connectivity

and access, and training will enable women to access information, mobile money financial services, and e-commerce, thereby boosting their socio-economic empowerment.

c. **Focus on Vulnerable Population Groups:** Special attention should be given to the most vulnerable groups, such as women in rural areas, the elderly, those living with disability and widows, who are less likely to be empowered. In addition, targeted interventions should address lower empowerment levels among adolescent girls (ages 15–17) and older women (ages 35–49). Efforts to close data gaps for these groups are essential to ensure evidence-based planning, programming, and policy decision-making. Gender responsive policies that address the unique challenges faced by these groups, including social protection schemes and inclusive community programmes, could help improve their empowerment levels.

d. **Support Women's Household Decision-Making Autonomy:** Empowering women to participate in household decision making about household expenditures, their own healthcare, and sexual relations is a fundamental right towards achieving gender equality. Policies and programmes that enhance women's decision-making power within the family and community should be expanded, focusing on shifting socio-cultural norms that limit women's agency.

e. **Promoting Women's Leadership and Representation:** Support women's participation in leadership, including elected positions, by strengthening the implementation of gender representation laws is crucial for promoting women's empowerment. Additionally, there is a need for targeted interventions in mentorship and leadership training programmes to increase the number of women in leadership and governance. Hence, the use of gender quotas is one of the mechanisms that should be used to offset the obstacles that women face in the electoral process, and to increase women's access to political decision-making.

f. **Address Socio-Cultural Norms that Perpetuate Gender Based Violence:** While there have been improvements in shifting the norms on attitudes toward gender-based violence, there is a need to mobilize both women and men as agents of change in strengthening community ownership of gender equality efforts. Advocacy and sensitization campaigns aimed at changing deep-rooted social-cultural norms that justify wife-beating, and other forms of violence, need to be promoted at both national and county levels.

g. **Enhance Economic and financial inclusion:** Increase economic and financial inclusion opportunities for vulnerable women and other groups with lower empowerment rates to access decent jobs, credit, productive resources such as land and house, entrepreneurial support and enhance advocacy efforts to remove barriers to women's economic opportunities.

h. **Enhance Women's Empowerment for Improved Child well-being outcomes:** There were linkages between women's empowerment and child vulnerabilities in Kenya. Policies should therefore focus on increasing women's educational outcomes, sexual and reproductive health rights, and access to productive resources to improve their economic autonomy and reduce child vulnerabilities.

4.2 Recommendations for future data collection

To enhance the measurement of women's empowerment and address data gaps by undertaking integrated, or stand-alone surveys to capture various key socio-economic indicators on measurement of women's empowerment based on following recommendations:

a. **Recognition of Unpaid Care and Domestic Work:** Incorporate indicators that meas-ure time spent on unpaid care and domestic work (e.g., childcare, elder care, cooking, cleaning), and the availability of support or services to reduce this burden. This will provide a more comprehensive understanding of how domestic and care responsibilities affect women's time use patterns, economic participation, and overall empowerment.

b. **Indicators to Measure Women's Lifecycle Needs and Empowerment:** To measure empowerment across different age groups, it is important to

collect data on indicators that reflect the life-cycle needs and rights of women, such as:

- **Agency and Decision-Making Power:** Include questions to measure the decision-making power of adolescent girls and young women (ages 15-24), and women not-in-union (single, divorced, separated, or widowed).
- **Legal Rights:** There is a need to collect data on women's awareness of their legal rights through surveys such as Social Norms Surveys.
- **Access to Productive Resources:** Gather data on women's access to, owner-ship of, and use of productive resources such as land, housing, businesses, and other assets.
- **Managerial, Leadership and Influence:** Collect data on women's participation in leadership and governance structures and economic activities.
- **Detailed Digital Literacy Assessment:** Collect more detailed data on digital literacy and assessment on the ability to use a mobile phone.

c. **Strengthening Qualitative Data Collection:** Integrate qualitative methods, such as focus group discussions, interviews, and case studies, to capture the lived experiences of women and adolescents. This will provide deeper insights into the barriers to accessing services and opportunities, as well as how social norms and attitudes impact women's empowerment and decision-making.

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Annexes

Annex I: Percentage of empowered women for women in union and not in union dis-aggregated by their characteristics

Table 14: Percentage of empowered women (in 80% of the total weighted indicators) for women in union and not in union disaggregated Residence and County

	Women in union	Women not in union
National	**35.7**	**46.9**
Rural	23.5	33.5
Urban	55.0	64.3
County		
Mombasa	38.1	47.1
Kwale	15.7	29.9
Kilifi	30.4	35.9
Tana River	9.9	25.1
Lamu	24.7	22.6
Taita/Taveta	29.8	58.7
Garissa	1.5	14.9
Wajir	1.0	9.2
Mandera	0.7	4.4
Marsabit	3.6	5.7
Isiolo	25.1	30.3
Meru	30.4	42.3
Tharaka-Nithi	28.5	42.1
Embu	35.3	47.2
Kitui	30.0	32.9
Machakos	46.7	57.3
Makueni	29.6	37.1
Nyandarua	43.7	39.5
Nyeri	63.4	67.7
Kirinyaga	41.8	53.5
Murang'a	23.5	47.3
Kiambu	51.3	67.9
Turkana	12.5	20.1
West Pokot	9.3	29.7
Samburu	13.4	23.5
Trans Nzoia	31.5	37.8
Uasin Gishu	46.4	60.7
Elgeyo/Marakwet	28.0	37.4
Nandi	31.9	41.8
Baringo	21.9	29.1
Laikipia	43.6	49.9
Nakuru	46.8	49.7
Narok	21.4	34.4
Kajiado	44.8	61.5
Kericho	39.8	45.5
Bomet	22.9	22.5
Kakamega	26.2	35.4
Vihiga	17.8	32.4
Bungoma	27.9	30.9
Busia	18.2	31.2
Siaya	26.7	40.1
Kisumu	35.8	61.5
Homa Bay	20.7	35.1
Migori	20.1	22.3
Kisii	24.0	35.0
Nyamira	36.5	40.0
Nairobi City	63.3	69.4

Source: KDHS 2022

Table 15: Percentage of empowered women (in 80% of the total weighted indicators) for women in union and not in union disaggregated by their characteristics

Women's Background characteristics		Women in Union	Women Not in Union
National	**National**	**35.7**	**46.9**
Wealth quintile	Richest	69.7	76.2
	Richer	44.5	58.5
	Middle	25.6	37.2
	Poorer	16.6	25.8
	Poorest	4.6	14.1
Sex of household head	Female	36.1	50.8
	Male	35.6	40.8

Source: KDHS 2022

Table 15: Percentage of empowered women (in 80% of the total weighted indicators) for women in union and not in union disaggregated by their characteristics *Cont'*

Women's Background characteristics		Women in Union	Women Not in Union
Education level of head of household head	Higher Than Secondary Education	74.7	78.8
	Secondary Education	40.0	57.9
	Primary Education	17.5	29.9
	No Education, Preschool	3.4	22.9
Age of head of household head	40-49 Years	34.2	43.9
	30-39 Years	36.7	63.2
	20-29 Years	37.2	59.1
	15-19 Years	12.0	18.2
Woman's number of living children	5+ Children	12.9	23.5
	3-4 Children	33.9	33.6
	1-2 Children	45.2	58.2
	No Children	55.2	45.7
In Monogamous/Polygamous relationship	Husband Has More Than 1 Wife	14.7	
	Is In a Monogamous Relationship	37.6	

Source: KDHS 2022

Annex II: Descriptive statistics WEI

Table 16: Participation in decision making by background characteristics of currently married women or men age 15–49

		Spending own earnings		Major household purchases		Own healthcare	
		Women	Men	Women	Men	Women	Men
	Total	**95.6**	**92.5**	**78.2**	**86.9**	**85.6**	**93.9**
Area of residence	Urban	97	86.9	81	80.5	89.3	92.1
	Rural	94.4	97.1	76.4	91.8	83.3	95.2
Age groups	15-19	85.7	-	64.7	-	72.2	-
	20-24	94.9	94.8	73.3	82.5	80.4	94.6
	25-29	94.9	91.3	77.9	82.9	85.7	91.7
	30-34	96.6	94.8	79.6	88.5	87	95.3
	35-39	95.5	89.2	79.3	84.3	86.3	94
	40-44	96.5	93.1	80.1	89.8	88.1	94.2
	45-49	96.3	94.2	82.3	91.1	90.2	93.8
Education level	None	94.1	91.2	68.9	84.1	72.6	94.8
	Primary	94.7	94.6	76.9	89.4	83.7	95.1
	Secondary	94.8	90.1	77.7	84	86.8	92.7
	More	98.3	92.5	85.6	87	93.2	93.1
Wealth quintile	Lowest	94.3	95.1	71.8	90	77.2	95.3
	Secondary	93.2	95.8	76.2	90.9	82.8	93.5
	Middle	94.2	98	77.1	92.3	85.7	96.2
	Fourth	96.1	90.2	78.8	83.4	88.2	94.5
	Highest	97.5	87.7	84.2	82	91	90.7

Source: KDHS 2022

Annex III: Literature review on the Measurement of Women's Empowerment

Women's empowerment has been measured through a wide variety of approaches, reflecting its multidimensional and context-specific nature. Earlier measurements focused on single indicators—such as education, employment, or marital status, while more recent approaches incorporate multiple domains at individual, household, and societal levels. Quantitative studies increasingly use DHS data, applying methods such as factor analysis and regression models to construct indices covering domains like decision-making, autonomy, attitudes toward violence, psychological well-being, and economic participation. Newer indices such as the Survey-based Women's Empowerment Index (SWPER), the Women's Empowerment Index by Soharwardi et al. (2020), and digital empowerment indicators (e.g., mobile phone use, financial inclusion) further enrich the measurement landscape. This section explores range of different approaches applied for measuring women's empowerment.

Despite this proliferation, no single standard exists, and definitions vary considerably across studies. To bring conceptual clarity to this diversity, this study adopts Kabeer's (1999) widely accepted framework, which conceptualizes empowerment as the expansion of people's ability to make strategic life choices. The measurement of women's empowerment has become increasingly diverse over time. Early conceptualizations and measurements of empowerment were often based on a single indicator, such as women's educational attainment, labour market participation, or marriage characteristics , or focused on a specific group of women, such as those in poverty . However, recent measurements incorporate a wide range of indicators—sometimes as many as 30—at the individual, community, and broader societal levels.

Costa et al. (2023) reviewed 36 studies on the measurement of women's empowerment, published since 2004. . Notably, half of these studies were published since 2019, with a significant concentration from low- and middle-income countries. Twelve of these studies utilized data from Demographic and Health Surveys (DHS) and employed 56 distinct variables, ranging from one to 25 per study, to measure the overall empowerment of women aged 15–49. Among these, one study specifically focused on rural women, two included both married and unmarried women, and one analysed the responses from couples. Factor analysis and principal component analysis were the most common approaches used for data analysis. The study revealed considerable diversity in the definitions and domains of empowerment indicators, reflecting the lack of consensus on what these indicators are intended to measure. Among the remaining 24 studies, ten focused on overall empowerment, while others examined sexual and reproductive health (4 studies), agriculture (3), livestock (1), water and sanitation (2), nutrition (2), agency (1), and psychological empowerment (1).

Malhotra, Schuler, and Boender (2002) categorized the key domains of women's empowerment into six broad areas: 1) Economic, 2) Socio-cultural, 3) Familial/interpersonal, 4) Legal, 5) Political, and 6) Psychological. In contrast, Narayan (2005) emphasized on four fundamental elements of empowerment: 1) Access to information, 2) Inclusion and participation, 3) Accountability, and 4) Local organizational capacity.

Soharwardi et al. (2020) made an attempted to construct a women's empowerment index based on multi-dimensional factors, utilizing data from the DHS of 38 developing economies. This index was based on demographic and socio-economic characteristics and the living conditions of women at the household level. The study used five broad dimensions of empowerment: (i) women's work status, (ii) awareness, (iii) participation in decision-making, (iv) self-esteem, and (v) self-confidence. Multiple regression analysis was employed to estimate the contribution of each factor toward overall empowerment. The study found that higher education and health status of women, husband's education, employment status, and household wealth positively influenced work status, awareness, decision-making, self-esteem, and self-confidence. Factors such as age difference (younger than husband), number of children above five years, and household characteristics (e.g., head of household and locality) were also found to significantly impact women's empowerment.

Abbas et al. (2021) examined the determinants of women's empowerment using secondary data from the Pakistan Demographic and Health Surveys (PDHS) for the years 2012–13 and 2017–18. Their analysis used both binary logistic and multivariable regression models. The

results indicated that a variety of demographic, economic, social, and access-to-information factors were significantly associated with women's empowerment. Women who were older, had higher education, engaged in skilled work, held positions of household leadership, and had access to information reported higher levels of empowerment. Specifically, multivariable regression results indicated that women with a higher level of education, wealth, and who were involved in skilled work were empowered. However, the study revealed that ownership was not significantly associated with the number of children or the sex of the household head

Annan et al. (2021) examined women's power relative to their husbands in 23 Sub-Saharan African countries, exploring its impact on women's health, reproductive outcomes, children's health, and education. This study used a novel measure of empowerment, derived from conflicting reports of intrahousehold decision-making. It was found that well-being outcomes for women and children were often most favourable in cases where women's power was recognized by their husbands. However, when women took power by assigning themselves more decision-making authority than their husbands allowed, it positively affected women's reproductive health and children's health but had negative implications for emotional violence. This finding the study expanded the understanding of the dynamics of intrahousehold power in the context of women's empowerment.

Ewerling et al. (2020) utilized the SWPER index, which was developed in 2017 to measure women's empowerment across three domains: social independence, decision-making, and attitudes toward violence. The study employed DHS data from 62 low- and middle-income coun-tries to assess the external validity and predictive value of the SWPER in relation to maternal and child health interventions and modern contraception use. The study confirmed that the SWPER index was a reliable and valid tool for tracking women's empowerment across countries and over time, demonstrating its utility for global monitoring and comparative analysis.

Mganga et al. (2021) created a women's empowerment index specifically for Tanzania, based on data from three rounds of the Tanzanian DHS (2004–2016). The study identified six domains of women's empowerment: attitudes toward violence, decision-making, social independence, age at critical life events, access to healthcare, and property ownership. Using factor analysis, the study showed that these six domains remained consistent over time, which provides a solid foundation for future empirical research on women's empowerment in Tanzania.

Nahar et al. (2022) conducted a systematic review to identify quantitative studies measuring women's empowerment in developing countries. Their review revealed analysed 17 studies, comparing different approaches to measuring empowerment. That the most measured dimensions of empowerment included household decision-making, financial and economic decision-making, freedom of movement, self-esteem, and sexual and reproductive decision-making.

Obayelu et al. (2020) explored the dimensions and determinants of women's empowerment in rural Nigeria using data from the 2013 Nigeria Demographic and Health Survey (NDHS). The study focused on agency, income, leadership, and workload, constructing an index of women's empowerment. The findings showed that while decisions on spending women's earnings were often jointly made with their spouses, other decisions, such as those concerning household matters, were predominantly made by men. The study also noted that a significant percentage of rural women were disempowered compared to men, with age and education being key determinants of empowerment.

Numerous studies conducted in Kenya and neighbouring countries have contributed to the empirical analysis of women's empowerment. Miedema et al. (2018) analysed DHS data from Ethiopia, Kenya, Rwanda, Tanzania, and Uganda, identifying a three-factor model of empower-ment: (1) women's human/social assets, (2) attitudes toward wife abuse, and (3) women's participation in household decisions. The study used Kabeer's (1999) conceptual framework, classifying indicators into enabling factors (human/social assets), instrumental agency (house-hold decision-making), and intrinsic agency (attitudes toward wife abuse).

Shimamoto and Gipson (2017) examined women's empowerment in Senegal, identifying three key domains: (1) household decision-making, (2) attitudes toward violence, and (3) gender norms for sex negotiation. Similarly, Tadesse et al. (2013) identified five domains in Ethiopia, including acceptance of domestic violence, knowledge

of legal rights, household decision-making, educational attainment, and media exposure.

Heckert and Fabic (2013) proposed a more comprehensive approach to measuring women's empowerment in sub-Saharan Africa through qualitative research and an analysis of DHS ques-tionnaires. They suggested that additional data should be collected in several key domains, such as economic empowerment (measured by women's control over income and resources), legal rights (including knowledge of laws and perceptions of enforcement), decision-making (covering a broader range of topics such as like HIV testing and public participation), and social norms (including attitudes of husbands, kin, and communities).

More recently, digital empowerment is increasingly recognized as a critical aspect of women's empowerment, as access to digital technologies and online platforms can significantly enhance women's ability to make informed decisions, access resources, and participate in socio-economic activities. Digital empowerment enables women to engage in education, employment, healthcare, and political discourse, fostering autonomy and socio-economic inclusion . As highlighted by the International Labour Organisation, digital tools provide women with new avenues for economic participation, particularly in regions with limited access to traditional forms of employment. Furthermore, digital platforms facilitate social connections and collective action, empowering women to challenge gender norms and advocate for their rights. Therefore, integrating digital empowerment into the broader framework of women's empowerment is essential for achieving gender equality in the digital age. M

There is significant literature supporting the use of mobile phone ownership and mobile financial transactions as indicators of women's empowerment. Mobile phones, particularly through mobile financial services, contribute to women's economic empowerment by providing access to markets, employment opportunities, and financial resources. Research has shown that mobile phones enable women to participate in economic activities such as selling products, accessing financial services, and managing household budgets, thereby increasing their financial autonomy. Mobile banking services offer women greater financial inclusion by overcoming barriers to traditional banking, such as lack of access to physical banks or restrictions on women's financial autonomy. These services allow women to manage their finances, save, and make independent financial decisions, increasing their agency within households and communities. In this context, the use of mobile phones and mobile financial services serves as a critical tool for enhancing women's empowerment, offering them women greater control over their financial lives and decision-making power.

In their studies in Kenya, In Kenya, various studies have approached the measurement of women's empowerment using more focused frameworks. Brunson, Shell-Duncan, and Steele (2009) used the term "women's autonomy" interchangeably with empowerment, assessing it through decision-making authority, freedom of movement, and control over resources. Takayanagi (2016) used the economic domain (income generation) and the psychological domain (self-esteem, self-confidence, and self-empowerment). Kulb et al. (2016) followed a similar approach but focused more on emotional stress within the psychological domain. Voronca, Walker, and Edege (2018) used a combination of decision-making participation (instrumental agency) and attitudes toward domestic violence (intrinsic agency) to measure empowerment. Bello et al. (2019) applied the modified Sexual Relationship Power Scale (SRPS), which includes indicators on for relationship control, and decision-making dominance. Pulerwitz, Mathur, and Woznica (2018) utilized SRPS to study empowerment among adolescent girls and young women (15–24 years), and its focusing on its relationship with violence and HIV out-comes. Finally, Omwami (2014) defined women's empowerment in terms of their ability to control fertility, specifically, limiting the number of children women they wanted to have.

Annex IV: List of participants in consultation process

SNo.	Name	Designation	Institutions
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2	Abdulkadir A. Awes	Director, Population and Social Statistics	Kenya National Bureau of Statistics
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12	Leah Wambugu	Assistant Manager	Kenya National Bureau of Statistics
13	Pius Miiri	Statistician	Kenya National Bureau of Statistics
14	Katra Dahir	Statistician	Kenya National Bureau of Statistics
15	Cindy Nambisia	Statistician	Kenya National Bureau of Statistics
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19	Dr. Charity Wamwea	Lecturer	Jomo Kenyatta University of Agriculture and Technology
20	Dr. Nancy Wafula	Deputy Director	Kenya Institute for Public Policy Research and Analysis
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23	Beatrice Kataka	Director	Ministry of Energy
24	Stephen Kaboro	Economist	Ministry of Energy
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26	Dorcas T Achieng	Senior Principal	Ministry of Water, Sanitation and Irrigation
27	Joseph Mwangi	Chief Economist	National Council for Persons with Disability
28	Paul Kuria	Director	National Gender and Equality Commission
29	Prof. Alfred Gwanda	Director	Population Studies Research Institute
30	Mark Keya	Assistant Director	State Department for Social Protection
31	Dr. Jared Masini Ichwara	Director	State Department for Basic Education
32	Festus Wangwe	Director	State Department for Economic Planning
33	Molly Achieng	Principal Economist	State Department for Economic Planning
34	Dorcas Mwangi	Principal Economist	State Department for Economic Planning
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