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Afya Yetu, Bima Yetu

The Introduction of a Maternity Cash Benefit in Kenya

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Executive summary

Maternity protection is essential to prevent and reduce poverty and vulnerability, promote the health, nutrition and well-being of mothers and their children, achieve gender equality and advance decent work. Maternity benefits are of critical importance for the well-being of pregnant women, new mothers, and their families, not least to ensure adequate nutrition and improved adherence to pre-natal and post-natal care during pregnancy and breastfeeding. The absence of income security forces many women to keep working into the very late stages of pregnancy and/or to return to work prematurely after the birth, thereby exposing themselves and their children to significant health risks. Women in the informal economy are particularly vulnerable to the risks of income insecurity and ill health and need to be protected.

Currently, the National Health Insurance Fund (NHIF) in Kenya is mandated to provide social health insurance for workers in the formal economy on a compulsory basis while workers in the informal economy may enrol on a voluntary basis. In addition, NHIF is implementing various subsidy programs for the poor fully financed by the Government of Kenya targeting orphans and vulnerable children, older persons and persons with severe disability and pregnant women. Markedly, the free maternity program, popularly known as the "Linda Mama Program" that provides pregnant women with access to a package of health benefits specifically on maternity care for any pregnant woman without health insurance. Pregnant women need to voluntarily enrol into the Linda Mama programme to benefit from free pre-natal and ante-natal care as well as skilled delivery.

In Kenya there is currently a provision for paid maternity leave for women working in the formal sector through employer liability (i.e., when a female worker who falls under the labour code is pregnant, the employer is liable for paying maternity leave). Employer liability schemes however create disincentives for employers to hire women and incentives to dismiss pregnant employees to avoid paying maternity benefits. Furthermore, the existing provisions on paid maternity leave only cover a small number of women as, based on NHIF data, only around 6.5 per cent of pregnant women are currently employed in the formal sector in Kenya. Hence, among the 1.48 million pregnancies estimated for the year 2022, around 1.38 million (93.5 per cent) did not benefit from any income replacement benefit during confinement, and an estimated 494,733 (33.5 per cent of pregnant women) neither benefitted from free medical maternity care under any of the existing schemes.[1]

NHIF successfully engaged the ILO to provide financial and technical support towards a feasibility study on the design and costing for the introduction of a Maternity Cash Benefit (MCB) in Kenya. The report below presents an assessment of the current workforce structure, the demographic trends, the social health insurance schemes under NHIF and the current laws and provisions on maternity benefits in Kenya. On the basis of this analysis, the report also presents for consideration two alternative policy scenarios for extending maternity income protection to all women in Kenya. The first scenario relies on the current schemes operated by NHIF for extending maternity income protection to all women, whereas the second scenario envisions the introduction of a universal cash benefit for all women currently uncovered. The report further provides a detailed costing to evaluate the financing requirements for introducing a maternity cash benefit for all women in Kenya under the two scenarios.

[1] NHIF data and own calculations.

Scenario 1 – MCB attached to the existing NHIF schemes

In scenario 1, three distinct groups of pregnant women are considered to benefit from the new maternity cash benefit: (i) NHIF-insured women working in the formal economy, (ii) NHIF-insured women working in the informal economy and pregnant spouses of insured males, and (iii) Linda Mama beneficiaries. Under this scenario, it is assumed that women currently uncovered by any scheme have to enrol with the Linda Mama scheme to benefit from the planned non-contributory maternity cash benefit. Under scenario 1, it is further assumed that the employer liability will be replaced by a social insurance scheme, whereby employers and workers in the formal economy, regardless of their sex, would contribute into a separate fund out of which the benefits would be paid. Pregnant women insured through formal employment would continue to receive 100 per cent of their previous salary for 90 days (12.9 weeks) as stipulated in the labour law. Self-employed women enrolled voluntarily including spouses of insured males (informal economy) and Linda Mama beneficiaries will receive for the same duration (90 days) a benefit equal to 100 per cent of the minimum wage (option 1) or a flat rate benefit of KES 2,000 per month (option 2) respectively.

In 2022, an estimated 6.4 per cent of pregnant women were insured with NHIF through their employment in the **formal economy**. The total cost of MCB for these women is projected at KES 12.5 billion for the year 2024, or around 1.0 percent of total insurable earnings in the formal sector (male and female contributors to NHIF). Hence employers and workers in the formal economy would need to contribute about 1.0 percent of the salary mass to the new fund for financing the cost of MCB for pregnant women working in the formal economy. Due to the projected decrease of the fertility rate, the relative cost would decrease thereafter gradually to reach about 0.84 percent of total insurable earnings by 2035.

At present, around 4.5 per cent of pregnant women are enrolled in NHIF as beneficiaries through voluntary contributions to the **informal economy** scheme. The total cost of providing MCB to informal economy workers insured in the year 2024 is projected at KES 4.0 and 0.53 billion for benefit options 1 and 2 respectively. It is assumed that the total cost will be split between contributors and the government, with 20 per cent to be financed through contributions of households working in the informal economy and 80 per cent to be subsidized from the national budget. The monthly premium for the NHIF coverage of households in the informal economy would have to be increased by 57.6 KES for option 1 (100 per cent replacement of the minimum wage) and 7.6 KES per month for option 2 (Flat rate benefit of KES 2000/month) in the year 2024, assuming no cross subsidies between formal and informal sector. The remaining part of the cost to be subsidized from the national budget is projected at 0.019 and 0.002 percent of GDP (0.10 and 0.014 percent of Government revenues) for options 1 and 2 respectively in the year 2024, and to slowly decrease thereafter due to the projected decrease of the fertility rate.

For **Linda Mama beneficiaries**, cost estimations assume that the coverage of Linda Mama will increase from 55.6 per cent of all pregnant women as observed in 2022 to full coverage of uncovered pregnant women (89.0 percent of total) in 2026, this due to the conditionality mentioned above. The total cost of providing a MCB to Linda Mama beneficiaries in the year 2026 is projected at 0.44 and 0.06 per cent of GDP (2.4 and 0.3 percent of Government revenues) for options 1 and 2 respectively, and to decrease gradually thereafter due to the projected decline of the fertility rate. In absolute terms, the financial resources needed to cover the benefit in the year 2024 for Linda Mama beneficiaries are projected at KES 65.0 and KES 8.6 billion for options 1 and 2 respectively.

Scenario 2 – Universal MCB for all women

Under scenario 2, it is assumed that all women in Kenya, except those in the formal sector insured by NHIF would receive a universal MCB. The employer liability would remain such that pregnant women in the formal economy will continue to receive the same benefit of 100 per cent of their salary for 90 day (12.9 weeks) as stipulated in the labour law. For other women, the benefit options considered for the financial projections are 100% of the minimum wage during 90 days of maternity leave (option 1) and KES 2,000/month during 90 days (option 2).

The total cost under scenario 2 (excluding formal sector) for the year 2024 is estimated at KES 69 billion for benefit option 1 and KES 9.1 billion for benefit option 2. In relative terms, the projected cost of the universal MCB in the year 2024 is projected at 0.40 and 0.053 percent of GDP for options 1 and 2 respectively, or 2.2 and 0.30 per cent of Government revenues. The relative cost of the scheme is projected to peak in 2026 (full coverage of Linda Mama) at 0.46 and 0.061 percent of GDP for options 1 and 2 respectively, and to decrease thereafter due to the projected decrease of the fertility rate.

Overall, the cost projections show that a universal maternity cash benefit is feasible in Kenya. Depending on the chosen design and benefit level, a universal MCB would cost less than 0.07 per cent of GDP or 0.35 percent of total Government revenues (scenario 2/option 2). By comparison, the cost of no breastfeeding was estimated by UNICEF at 0.7 per cent of the global GDP on average.[2] In addition, it should be noted that under both scenarios it is expected that pregnant women who are currently uncovered by NHIF and therefore do not benefit from any social health insurance coverage will increasingly enrol with the Linda Mama scheme due to the conditionality to be attached to the MCB. The higher uptake of Linda Mama membership expected would increase the rate of skilled birth attendance (currently estimated at around 69 per cent) and take Kenya closer to the international target of 90 per cent skilled birth attendance, and thus reduce maternal and child mortality.

To finalize the design of the scheme and adopt implementation modalities, it is recommended to conduct consultations with policy makers together with all relevant national stakeholders. Advocacy efforts are also needed with the Government of Kenya to secure the fiscal space required to subsidize the scheme partially (in addition to contributions) or fully (universal cash benefit). An internal assessment at NHIF should be done to determine how NHIF needs to adapt its operations to be able to deliver the MCB, including the design of standard operating procedures, adapting the management information system and enrolling women in the Linda Mama scheme for cash transfers. It is further recommended to pilot the planned MCB scheme first and review enrolment and delivery mechanisms. This needs to go hand in hand with awareness campaigns in the pilot areas to ensure women are enrolling with the planned MCB scheme and Linda Mama.

[2] Dylan D Walters, Linh T H Phan, Roger Mathisen, The cost of not breastfeeding: global results from a new tool, *Health Policy and Planning*, Volume 34, Issue 6, July 2019, Pages 407–417, https://doi.org/10.1093/heapol/czz050.

Abbreviations

COVID 19	Coronavirus Disease of 2019
GDP	Gross Domestic Product
ILO	International Labour Organization
IMF	International Monetary Fund
KES	Kenyan Shilling
MCB	Maternity Cash Benefit
MW	Minimum Wage
NHIF	National Health Insurance Fund
PAYG	Pay-as-you-go
SDG	Sustainable Development Goals
TFR	Total Fertility Rate
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNWPP	United Nations World Population Prospects
WHO	World Health Organisation

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Introduction

Maternity protection is essential to prevent and reduce poverty and vulnerability, promote the health, nutrition and well-being of mothers and their children, achieve gender equality and advance decent work. It comprises income security, maternal healthcare, maternity leave, breastfeeding arrangements, employment protection and childcare solutions after return to work. Maternity cash benefits – in addition to maternity care, maternity leave, and employment security - are a central component of maternity protection. Such benefits are of critical importance for the well-being of pregnant women, new mothers, and their families, not least to enable adequate nutrition and improved adherence to pre-natal and post-natal care during pregnancy and breastfeeding. The absence of income security forces many women to keep working into the very late stages of pregnancy and/or to return to work prematurely after the birth, thereby exposing themselves and their children to significant health risks. Women in the informal economy are particularly vulnerable to the risks of income insecurity and ill health because of discrimination, unsafe and insecure working conditions, lack of employment protection, often low and volatile incomes, limited freedom of association, lack of representation in unions/collective bargaining processes and lack of access to social insurance. The challenges facing women in the informal economy are often compounded by other factors, such as cultural practices and inadequate legal protection of their businesses.

In Kenya there is currently a provision for paid maternity leave for women working in the formal economy through employer liability (i.e., when a female worker who falls under the labour code is pregnant, the employer is liable for paying maternity leave). The objective of this report is to assess the feasibility of introducing a maternity cash benefit through NHIF in line with the principles and parameters set in up-to date international social security standards, with a particular focus on women working in the informal economy. This was requested by the National Health Insurance Fund (NHIF) in Kenya as they are planning to expand their portfolio from social health insurance towards the inclusion of maternity cash benefits. The report details policy design options as well as a detailed costing to evaluate the financial implications of introducing a maternity cash benefit for all women in Kenya.

This report has been prepared by the International Labour Office (ILO), UN joint SDG Fund project on Social Protection, the PROSPECTS project, the ILO EC funded social protection project in Kenya and NHIF Kenya.

This report presents the results of the feasibility study and costing. It is structured as follows:

- Section 2 provides an overview of the economic, demographic and labour contexts;
- Section 3 gives information on international labour standards on maternity protection and international practices;
- Section 4 explains the current NHIF schemes and policy options for the maternity benefit;
- Section 5 presents the assumptions used for the costing, the methodology used and the result of the projections;
- Section 6 presents the recommendations and conclusions.

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2

Overview of economic, demographic and labour contexts

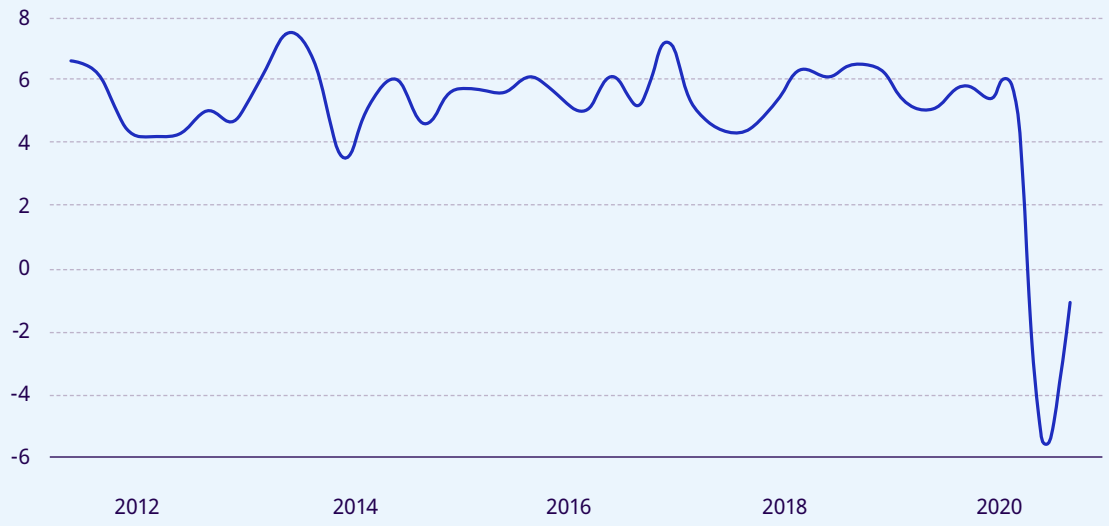
2.1. Economic Context

Kenya is one of the fastest-growing economies in Africa, with an annual average growth of 5.9 per cent between 2010 and 2018. With a Gross Domestic Product (GDP) of $95 billion, reaching a lower-middle-income status in 2014 and has successfully established.[3,4]

[3] https://www.usaid.gov/kenya/economic-growth-and-trade#:~:text=Until%20the%20COVID%2D19%20pandemic,a%20diverse%20and%20dynamic%20economy.

[4] https://www.worldbank.org/en/country/kenya/overview.

Figure 1. Kenya GDP growth (%) 2010 -2021



Source: Kenya National Bureau of Statistics; https://tradingeconomics.com.

The COVID-19 pandemic has been unprecedented with a negative economic impact on the economy but the Kenyan economy has proven resilient and grew by 6.7 per cent in 2021 due to relaxed COVID restrictions after a 0.3 per cent contraction in 2020.[5]

Investments in human capital through social development complement investments in physical, natural, or other types of capital that can be used to advance both national and global economies. In countries like South Korea, upfront investments in human capital have proven to be a major driver for sustained growth acceleration.[6,7] The experience of many low- and middle-income countries in expanding maternity cash benefits highlights the critical importance of investment in social protection for pregnant women, mothers, and their new-borns.[8]

Policymakers face the challenge of supporting post-Covid recovery and laying the foundation for resilient and inclusive development while reducing macro-financial vulnerabilities.[9] In this regard, guaranteeing access to maternity care is critical for the health of both mothers and children, as well as investments in maternity cash benefits can play an important role in ensuring at least a minimum level of income security during this critical stage in the lives of mothers and children.

In Kenya, data on maternal mortality as a key indicator has not been updated in recent years. UNFPA estimates that the maternal mortality ratio, the number of women dying of pregnancy-related causes, stands at 355 deaths per 100,000 live births in 2020. Given the current annual births, this means that there are nearly 5000 women and girls dying annually due to pregnancy and childbirth complications. While access to skilled birth attendance has improved from 62 per cent to about 70 per cent over the last seven years, over 80 per cent of maternal deaths are attributed to poor quality of care.[10]

[5] https://www.afdb.org/en/countries-east-africa-kenya/kenya-economic-outlook.
[6] ILO (2022). Costs and benefits of investing in transformative care policy packages: A macrosimulation study in 82 countries.
[7] Tandon, Ajay; Bloom, Danielle; Oliveira Hashiguchi, Lauren; Hoang-Vu Eozenou, Patrick; Cain, Jewelwayne; Nigam, Aditi; Nagpal, Somil eds. 2021. Making the Case for Health: A Messaging Guide for Domestic Resource Mobilization. Joint Learning Network for Universal Health Coverage.
[8] Social protection for maternity: key policy trends and statistics / International Labour Office, Social Protection Department. - Geneva: ILO, 2015 (Social protection policy paper: No. 15).
[9] *Kenya Economic Update: Rising Above the Waves (English)*. Kenya Economic Update; no. 23 Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/782411624966067020/Kenya-Economic-Update-Rising-Above-the-Waves.
[10] UNFPA (2020). https://kenya.unfpa.org/en/topics/maternal-health-16.

2.2. Demographic Structure

Kenya's population was enumerated at 47.6 million in 2019 with an inter-censual population growth rate of 2.3 per cent.[11] The population is dominated by young people with those below the age of 15 making up for 39 per cent of the population. Kenya's labour force (15 – 64 years) accounts for 57 per cent and youth constitute 29per cent of the total population.

Concomitantly, Kenya's 2019 population pyramid shown in Figure 2 is typical of a population that is dominated by young persons. This pyramid shows that the population of those in the age cohort 0-4 and 5-9 years is less than that of those in the 10-14 years cohort. Kenya is experiencing declining fertility rates and hence a reduction in the proportion of the population below 15 years when compared to previous censuses.

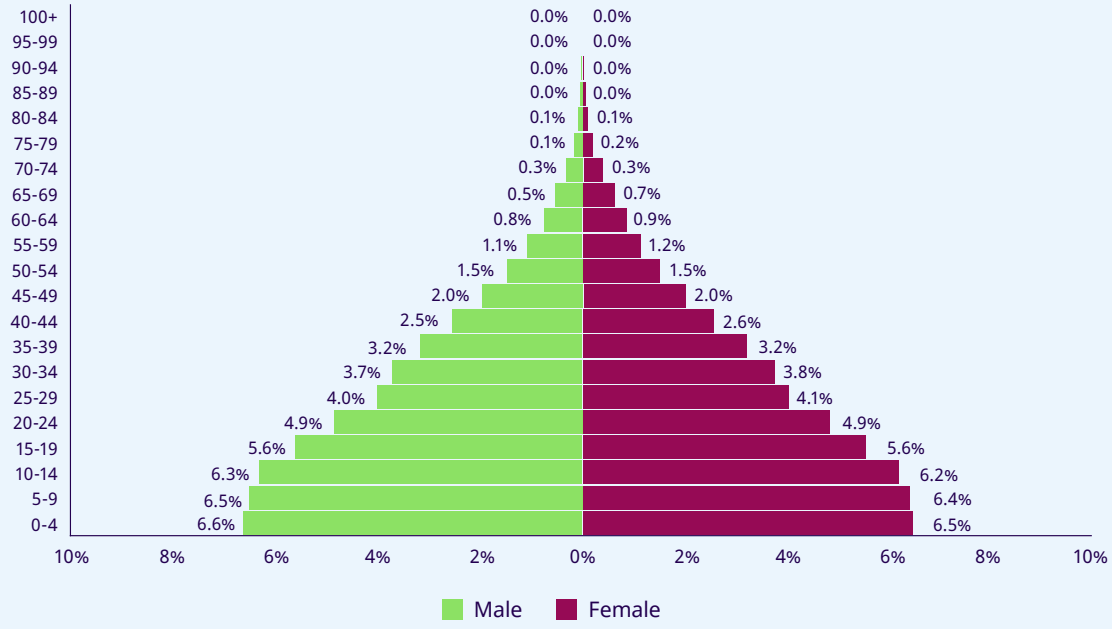
Accordingly, there were 1,191,507 registered births in 2019, over 75 per cent of births were reported from mothers between the age of 20-34 years as shown in table 1.

Table 1. Registered Births by Age of Mother [12]

Age of Mother	%
<15 years	0.2
15 - 19 years	10.8
20 - 24 years	29.0
25 - 29 years	26.4
30 - 34 years	23.5
35 - 39 years	7.6
40 - 49 years	2.4
> 50 years	0.1

The social protection sector has seen progress, with policies shifting towards universal programmes with a lifecycle approach but spending is still below 0.4 per cent of GDP in 2019.[13] There are still significant coverage gaps in numbers and types of benefits, particularly within the informal economy which forms 83.6 per cent of the workforce in 2019.

Figure 2. Population Pyramid



[11] KNBS. (2019). Kenya Population Census
[12] KNBS. (2021). Statistical Abstract 2020.
[13] MoLSP (2020). Kenya Social Protection Sector Annual Report 2018/19.

Kenya has made several strides to achieve a demographic dividend from the large population of young persons in the country. The decline in fertility levels over the years is a good indication that Kenya is on the right path to creating a conducive environment for a demographic dividend.

To actualize this, a demographic dividend roadmap was developed in 2017 to guide the country in making strategic investments in the health, education, training, economic, and governance sectors to harness the potential of young people and accelerate socio-economic development that would ultimately lead to a better quality of life for the citizenry. In this regard, access to reproductive health information and services as well as to education and training opportunities for young persons is being improved countrywide.

According to the World Bank, continued investment in human capital and social protection is required so that those entering the labour force are productive and workers can progress from low productivity activities to sustainable sources of higher income.[14]

The distribution of health outcomes is an indicator of the inclusiveness of economic growth and the levels and distribution of health outcomes is regarded as a proxy for the concern a government has for all its citizen. A healthy labour force is an asset for an economy. A healthy labour force means a more productive labour force and they create opportunities to gradually break the cycles of both poverty, and hunger, sustainably.

2.3. Workforce Structure in Kenya

In 2019, approximately 18 million people were estimated to be employed in Kenya. Most workers are engaged in the informal economy; roughly 15 million people formal economy, whereas three million were employed in the formal economy.

Social protection is both a cause and a consequence of such informality (ILO 2021e). Formalization is measured as a consequence of social security registration and the extent of social security coverage improves as a result of formalization. Even if the trend in Kenya points towards formalization through the extension of labour conditions, far too many workers in the informal economy still do not have access to decent work. Significant social protection deficits remain.

Table 2. Total Employment in Kenya, 2017-2021

	2017	2018	2019	2020	2021
Modern establishments					
Wage employees	2792.7	2,859.7	2,928.4	2,742.6	2,907.3
Self-employed and unpaid family workers	139.4	152.2	162.7	156.1	163.7
Sub-total	**2,932.1**	**3,011.9**	**3,091.1**	**2,898.7**	**3,071**
Informal sector	13,539.6	14,283.6	15,051.6	14,508	15,261.8
TOTAL	**16,471.7**	**17.295.5**	**18,142.7**	**17,406.7**	**18,332.8**

Source: KNBS, 2022. [15]

Women in Kenya's Labour force

A study by the UN Women indicates that 64 per cent [16] of women in Kenya are currently in the labour force. According to the Gender and Equality Commission, most women work in vulnerable employment – which is marked by informal working arrangements, lack of adequate social protection, and in most cases low productivity, and hence low earnings or pay.[17]

[14] *Kenya Economic Update: Rising Above the Waves (English).* Kenya Economic Update; no. 23 Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/782411624966067020/Kenya-Economic-Update-Rising-Above-the-Waves.

[15] KNBS (2022). Economic survey 2022.

[16] UN Women (2020). The state of women's economic empowerment in the Indian ocean rim. https://interactive.unwomen.org/multimedia/infographic/economicempowermentindianocean/en/kenya.html.

[17] National Gender and Equality Commission (2016). Status of Equality and Inclusion in Kenya.

Table 3. Employment by the main employer for working-age group and by sex, 2015 (%)

	Male (15 -64 years)	Female (15 -64 years)	Working Age (15 -64 years)
Individual/family enterprise	48.1	63.6	55.8
Private sector company	16.8	8.2	12.5
Informal economy employer	11.9	7.5	9.7
National government	4.6	2.8	3.7
County government	2.6	1.7	2.2
International organization	0.5	0.3	0.4
Non-governmental Organization	0.4	0.3	0.4
State-owned enterprise	0.2	0.7	0.4
Constitutional commission	0.3	0.0	0.2
Other	14.4	14.9	14.6
Total (%)	100	100	100

Source: National Gender and Equality Commission, 2016.[18]

In table 3, it is evident that in Kenya, a larger proportion of employed females (nearly 64 per cent) than males (48 per cent) are engaged in self-employment (or individual/family enterprises).

Workers in the Formal Economy

The "formal economy" comprises all economic units that are formally recognized as producers of goods and services and are thus covered by formal arrangements. These formal economic units are characterized by:[19]

- having a formal status as distinct producers of goods or services by:
- being owned and/or controlled by the government; or
- being recognized as separate legal entities from their owners; or
- keeping a complete set of accounts for tax purposes; or
- being registered in a nationally established system of registration; or
- producing for the market and employing one or more persons to work as an employee with a formal job(s).

Employment in the formal economy in Kenya has marginally grown recently. According to the economic survey 2022, wage employment in "the modern sector" recorded a growth of 6.0 per cent to 2.9 million in 2021. Employment in the public sector increased by 4.3 per cent to 923.1 thousand persons in 2021.

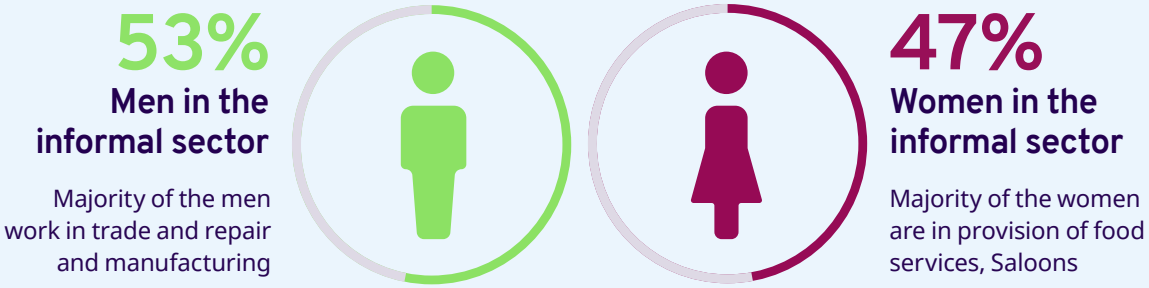
Workers in the Informal Economy

ILO defines the informal economy as "all economic activities by workers and economic units that are – in law or practice – not covered or insufficiently covered by formal arrangements and does not cover illicit activities".[20] Often wages and social insurance coverage are lower in the informal economy than those in the formal economy. In Kenya, the economic survey does not measure the informal economy as per ILO definition as agricultural workers and pastoralists are excluded from the statistics. According to the economic survey 2022, total employment outside small scale agriculture and pastoralist activities stood at 18.3 million, accounting for 81.4 per cent of the total jobs.

Typically, informal economy enterprises are characterised by business enterprises not registered by the registrar of companies and do not produce for their consumption. The informal economy includes all forms of unregistered or unincorporated small-scale productive, vending, financial and service activities, as well as all forms of employment without secure contracts, worker benefits and social protection.

[18] National Gender and Equality Commission (2016). Status of Equality and Inclusion in Kenya.
[19] ILO (n.d.). Draft Resolution concerning Statistics on the Informal Economy.
[20] NORMLEX, R204 – Transition from the Informal to the Formal Economic Recommendation, 2015 (No. 204)

Figure 3. Informal economy demographics 2019

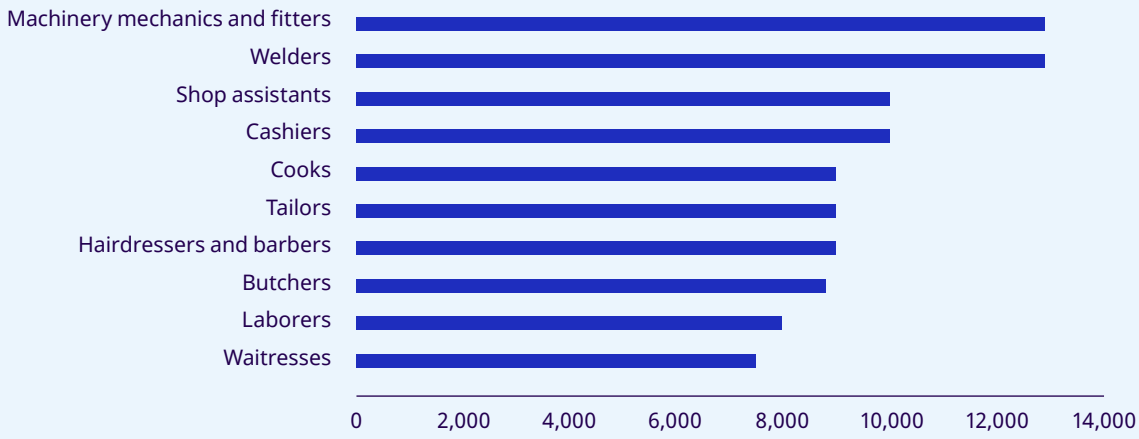


Source: Ibid.

The informal economy constitutes an important part of the Kenyan economy, being related to employment creation, production, and income generation.

Informal workers usually earn between KES 6,500 and KES 15,000 per month. Machinery mechanics and welders are likely to earn more in the informal economy.

Figure 4. Typical Informal economy Monthly Earnings by occupation (Kenya Labour Market Information System), 2019



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3

International labour standards on maternity protection and international practices

3.1. International standards related to maternity protection

Women's right to maternity protection is enshrined in the Universal Declaration of Human Rights of 1948, which sets out the right to social security and special care and assistance for motherhood and childhood. The International Covenant on Economic, Social and Cultural Rights (1966), which Kenya is a party to since 1972, establishes the right of mothers to special protection during a reasonable period before and after childbirth, including prenatal and postnatal healthcare and paid leave or leave with adequate social security benefits. The Convention on the Elimination of All Forms of Discrimination against Women (1979), which Kenya is party to since 1984, in addition to proclaiming maternity protection as an essential right, calls to introduce maternity leave with pay or with comparable social benefits without loss of former employment, seniority or social allowances to prevent discrimination against women and recommends that special measures be taken to ensure maternity protection.

ILO maternity standards go as far back as its foundation in 1919 when governments, employers, and trade union representatives of member States adopted the first Maternity Protection Convention, 1919 (No. 3). ILO constituents have further enhanced protections for working mothers through adopting no less than 42 standards that are directly or indirectly linked to maternity protections in its multidimensional facets.

More specifically, guidance for the design of maternity cash benefits, alongside the provision of maternity care, free of co-payments, are at the core of several international social security standards. With the adoption of the Convention on Social Security (Minimum Standard), No. 102, 1952, maternity was recognized as one of the nine contingencies that should be addressed by comprehensive social security systems. In recent years, ILO constituents have reaffirmed their commitment to protecting maternity and developing the social protection systems required to make maternity protection a reality for all women. It is in this spirit that ILO constituents revised Convention No. 103 by adopting Convention No. 183 and Maternity Protection Recommendation, 2000 (No. 191), and included maternity care and cash benefits in the Social Protection Floors Recommendation, 2012 (No. 202), aimed at guiding countries towards access to maternal health care and income security in case of maternity for all. The body of ILO standards on maternity protection have progressively expanded the coverage, material scope, and entitlements of maternity protection at work, providing detailed guidance to orient national policy and action. These standards should be viewed as representing a minimum level for protection. Countries are encouraged to grant more favourable conditions in line with national circumstances.

Maternity protection is essential to promote the health, nutrition and well-being of mothers and their children, to achieve gender equality at work, prevent and reduce poverty and to advance decent work for both women and men. This makes maternity protection the first key step of the comprehensive set of care policies that promote women's economic empowerment, prevent informalization and enable individuals and societies to thrive, especially in the context of demographic transitions. It increases the chances of survival of the mother and the new-born and lays the conditions for optimal physical and cognitive development of the infant. Without maternity protection, women may shift into lower-paid and more insecure work to breastfeed and care for their infants. While they initially consider it a temporary coping strategy, women with children are likely to stay in the informal economy as they juggle childcare and earning an income.[21]

Exclusive breastfeeding is one of the most cost-effective maternal and child health interventions.[22] The World Health Organization (WHO) recommends exclusive breastfeeding for 6 months of life and continued breastfeeding with complementary foods until at least 24 months. Breastfeeding is especially critical during the first six months of life, helping prevent diarrhoea and pneumonia, two major causes of death in infants. Mothers who breastfeed have a reduced risk of ovarian and breast cancer, two leading causes of death among women. One of the major barriers to exclusive and continued breastfeeding is the lack of income protection for mothers, who then have no other choice but to re-join the labour force too soon after childbirth. Empirical

[21] ILO (2016). Maternity cash benefits for workers in the informal economy. Social protection brief for all.
[22] WHO and UNICEF. (2003). *Global strategy for infant feeding*. Geneva: World Health Organization.

studies have shown that the sooner mothers return to work, the shorter their breastfeeding duration [23],[24], [25], [26]. Recent economic costing studies have also estimated the substantial annual economic burden resulting from not breastfeeding. For most countries, the cost of not breastfeeding is approximately 0.7 per cent of gross domestic product.[27] The prevalence of exclusive breastfeeding in Kenya is 61 per cent,[28] which leaves considerable room for improvement.

Although Kenya has not ratified the minimum social security standard (Convention No. 102) or the higher maternity protection standard (Convention No. 183), these Conventions, as well as Recommendations No. 191 and No. 202, should serve as guidance to the Kenyan Government as it redefines its maternity protection policy, as they represent the most up-to-date internationally accepted minimum levels of maternity protection. In fact, their relevance was reiterated by the international labour conference, who formally called for the launch of a Global campaign to promote the ratification of Convention No. 102 and to systematically promote the ratification and effective implementation of other up-to date ILO social security standards.[29]

The minimum social security standard, Part VIII of Convention No. 102 provides for maternity benefits comprising of medical care and periodical payments to compensate for the suspension of earnings due to maternity. The Convention calls for free maternity medical care (at least prenatal, confinement, and postnatal care either by medical practitioners or by qualified midwives, and hospitalization where necessary) and cash benefits for at least 12 weeks or a longer period corresponding to the actual duration of maternity leave. As for the most advanced and up-to-date maternity protection instruments, the Maternity Protection Convention, 2000 (No. 183), and Maternity Protection Recommendation, 2000 (No. 191), are notable for several advances in maternity protection. For instance, Convention No. 183 expands the scope of maternity protection to cover all employed women, including those in atypical forms of dependent work in the informal economy. The minimum leave period was extended from the 12 weeks specified in earlier Conventions to 14 weeks in Convention No. 183, and 18 weeks in Recommendation No. 19. Convention No. 183 requires cash benefits to reach at least two thirds of previous earnings, while Recommendation No. 191 suggests that the level of cash benefits should be raised to the full amount of previous earnings, where practicable.

Furthermore, Convention No. 183 provides stronger employment protections by requiring health protection measures as well as to ensure that maternity does not constitute grounds for discrimination in employment, including in access to employment, and explicitly prohibiting pregnancy tests as part of candidate selection procedures (except in very limited specific circumstances to protect the woman's and the baby's health). In terms of breastfeeding, Recommendation No. 191 calls for the establishment of breastfeeding facilities at the workplace. With regards to cash benefits, a consistent theme in all ILO social security and maternity protection Conventions is to secure maternity cash benefits through public funds or compulsory social insurance. Recommendation No. 191 emphasizes that the financing of maternity benefits should be a shared responsibility among men and women indicating specifically that: "Any contribution due under compulsory social insurance providing maternity benefits and any tax based on payrolls which is raised for the purpose of providing such benefits, whether paid by both the employer and the employees, [...] should be paid in respect of the total number of men and women employed, without distinction of sex." Furthermore, Convention No. 102, with regards to general principles in financing social insurance schemes, states that the total of insurance contributions borne by the employees should not exceed 50 per cent of the total financial resources allocated to social security. These principles ensure a broad, stable pooling of resources that avoids adverse selection and ensures fair distribution of the costs and responsibilities for reproduction between non-childbearing individuals and childbearing individuals, regardless of age and sex, and comparable to child benefits. Thus, even persons

[23] Bai, D., Fong, D., & Tarrant, M. (2015). Factors associated with breastfeeding duration and exclusivity in mothers returning to paid employment postpartum. *Maternal and Child Health Journal*, 19, 990–999. https://doi.org/10.1007/s10995-014-1596-7.

[24] Chang, P.-C., Li, S.-F., Yang, H.-L., Wang, L.-C., Weng, C.-Y., Chen, K.-F., ... Fan, S. (2019). Factors associated with cessation of exclusive breastfeeding at 1 and 2 months postpartum in Taiwan. *International Breastfeeding Journal*, 14, 18. https://doi.org/10.1186/s13006-019-0213-1.

[25] Nandi, A., Hajizadeh, M., Harper, S., Koski, A., Strumpf, E., & Heymann, J. (2016). Increased duration of paid maternity leave lower infant mortality rate in low and middle-income countries: A quasi experiment study. *PLoS Medicine*, 13(3), e1001985. https://doi.org/10.1371/journal.pmed.100198.

[26] Ogbuanu, C., Glover, S., Probst, J., Liu, J., & Hussey, J. (2011). The effect of maternity leave length and time of return to work on breastfeeding. *Pediatrics*, 1414–1427.

[27] Walters, D., Phan, L., & Mathisen, R. (2019). The cost of not breastfeeding: Global results from a new tool. Health Policy and Planning, **34**(6), 407–417. https://doi.org/10.1093/heapol/czz050.

[28] Kenya National Bureau of Statistics. Kenya demographic and health survey 2014 (2015). https://www.knbs.or.ke/2014-kenya-demographic-and-health-survey-kdhs/.

[29] ILO, Resolution concerning the second recurrent discussion on social protection (social security), ILC 109th Session, June 2021; Matters arising out of the work of the 109th Session (2021) of the International Labour Conference: Follow-up to the resolution concerning the recurrent discussion on the strategic objective of social protection (social security) GB.343/INS/3/1

who can certify medically an inability to bear children should contribute. In so doing, they also serve to avoid discrimination in the labour market.

As to the frequency of payments for cash maternity benefits, international labour standards require periodic payments as opposed to a lump-sum payment for the maternity leave (Article 50 of Convention No. 102). This is consistent with the function of income replacement attributed to cash benefits. In practice, most maternity cash benefit schemes around the world provide for a benefit payment mechanism that follows the same frequency of payments as usual salaries and wages.

Table 4. Main requirements: International social security standards on health protection

	Convention No. 102 Minimum standards	Convention No. 130[30] and Recommendation No. 134:[31] Advanced standards	Recommendation No. 202: Basic protection
What should be covered?	Any ill-health condition, whatever its cause; pregnancy, childbirth and their consequences.	The need for medical care of a curative and preventive nature.	Any condition requiring healthcare, including maternity.
Who should be covered?	At least: ▶ 50% of all employees, and wives and children; or ▶ categories of the economically active population (forming not less than 20% of all residents, and wives and children); or ▶ 50% of all residents.	C.130: All employees, including apprentices, and their wives and children; or ▶ categories of the active population formingnot less than 75% of the whole active population, and their wives and children; or ▶ prescribed class(es) of residents forming not less than 75% of all residents. (Persons already receiving certain social security benefits shall also continue to be protected under prescribed conditions.) **R.134:** In addition: persons in casual employment and their families, members of employers' families living in their house and working for them, all economically active persons and their families, all residents.	At least all residents and children, subject to the country's existing international obligations.
What should the benefit be?	*In case of ill health:* general practitioner care, specialist care at hospitals, essential medications and supplies; hospitalization if necessary. *In case of pregnancy, childbirth and their consequences:* prenatal, childbirth and postnatal care by medical practitioners and qualified midwives; hospitalization if necessary.	**C.130:** The medical care required by the person's condition, with a view to maintaining, restoring or improving health and ability to work and attend to personal needs, including at least: general practitioner care, specialist care at hospitals, allied care and benefits, essential medical supplies, hospitalization if necessary, dental care and medical rehabilitation. **R.134:** Also the supply of medical aids (e.g. eyeglasses) and services for convalescence.	Goods and services constituting at least essential healthcare, including maternity care, meeting accessibility, availability, acceptability and quality criteria; free prenatal and postnatal medical care for the most vulnerable; higher levels of protection should be provided to as many people as possible, as soon as possible.

[30] Medical Care and Sickness Benefits Convention, 1969 (No. 130).
[31] Medical Care and Sickness Benefits Recommendation, 1969 (No. 134).

	Convention No. 102 Minimum standards	Convention No. 130[1] and Recommendation No. 134:[2] Advanced standards	Recommendation No. 202: Basic protection
What should the benefit duration be?	As long as ill health, or pregnancy and childbirth and their consequences, persist. May be limited to 26 weeks in each case of sickness. Benefit should not be suspended while beneficiary receives sickness benefits or is treated for a disease recognized as requiring prolonged care.	**C.130:** Throughout the contingency. May be limited to 26 weeks where a beneficiary ceases to belong to the categories of persons protected, unless he/she is already receiving medical care for a disease requiring prolonged care, or as long as he/she is paid a cash sickness benefit. **R.134:** Throughout the contingency.	As long as required by the health status.
What conditions can be prescribed for entitlement to a benefit?	Qualifying period may be prescribed as necessary to preclude abuse.	**C.130:** Qualifying period shall be such as not to deprive of the right to benefits persons who normally belong to the category. **R.134:** Right to benefit should not be subject to qualifying period.	Persons in need of healthcare should not face hardship and an increased risk of poverty due to financial consequences of accessing essential healthcare. Should be defined at national level and prescribed by law, applying principles of non-discrimination, responsiveness to special needs and social inclusion, and ensuring the rights and dignity of people.

3.2. Financing maternity protection schemes

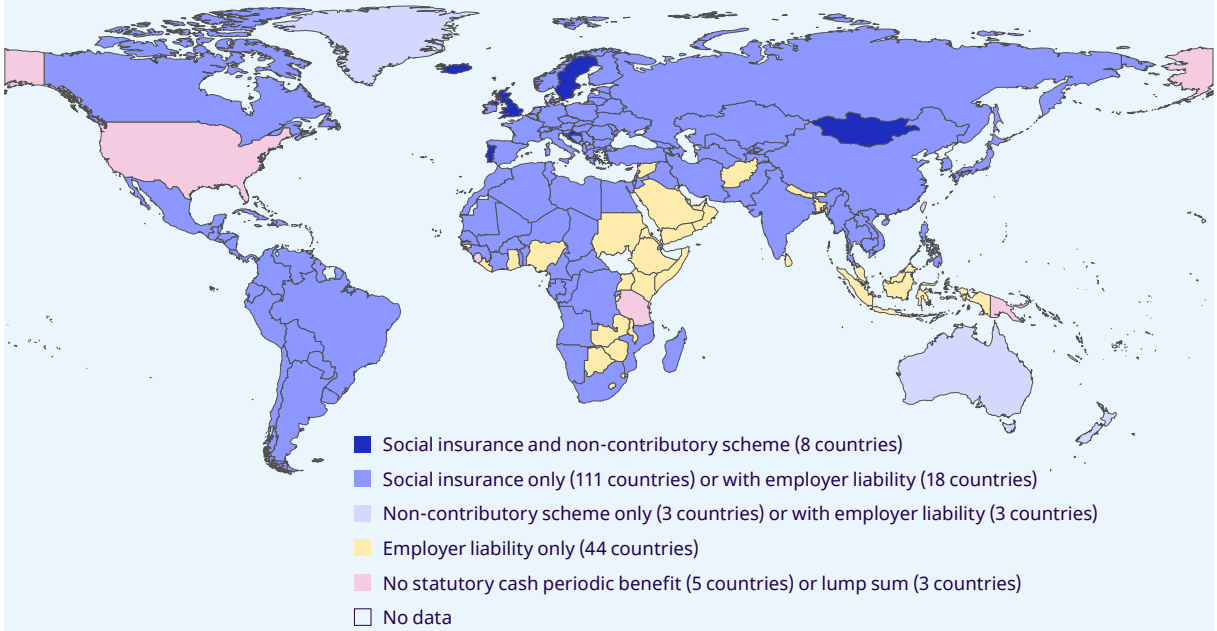
Maternity cash benefits are provided in different ways across countries including social insurance, social assistance, universal schemes, and paid leave through employer liability provisions. In line with international standards, the ILO promotes the implementation of maternity cash benefits financed by way of social insurance contributions, taxes, or a combination of both and places the responsibility for the sound financing of maternity schemes on the State. Pooling financial resources ensures fair distribution of the cost and redistribution through pooling creates incentives for employers to hire females and males on an equitable basis.

According to worldwide experience, employer liability schemes create disincentives for employers to hire women who may become pregnant and incentives to discharge pregnant employees to avoid paying maternity benefits as well as wages to replacement workers during maternity leave. Labour administrations often face difficulties in enforcing employers' compliance in employer liability compensation schemes, particularly in developing countries. Administrative costs with respect to providing direct maternity compensation is substantial for small enterprises. In summary, employer liability schemes are detrimental to the promotion of equal treatment for men and women in the labour market and for the due provision of maternity cash benefits in practice. For Kenya, with only around 6 per cent of the population and only 5 per cent of pregnant women engaged in the formal economy, employer liability provisions will only benefit a very small proportion of the workforce. Neither women in the informal economy nor self-employed are currently covered by maternity benefits – hence, 95 per cent of pregnant women do not receive a replacement of their income during pregnancy or after childbirth and are often forced to resume work prematurely, putting their health and that of their children at risk.

3.3. Maternity protection globally

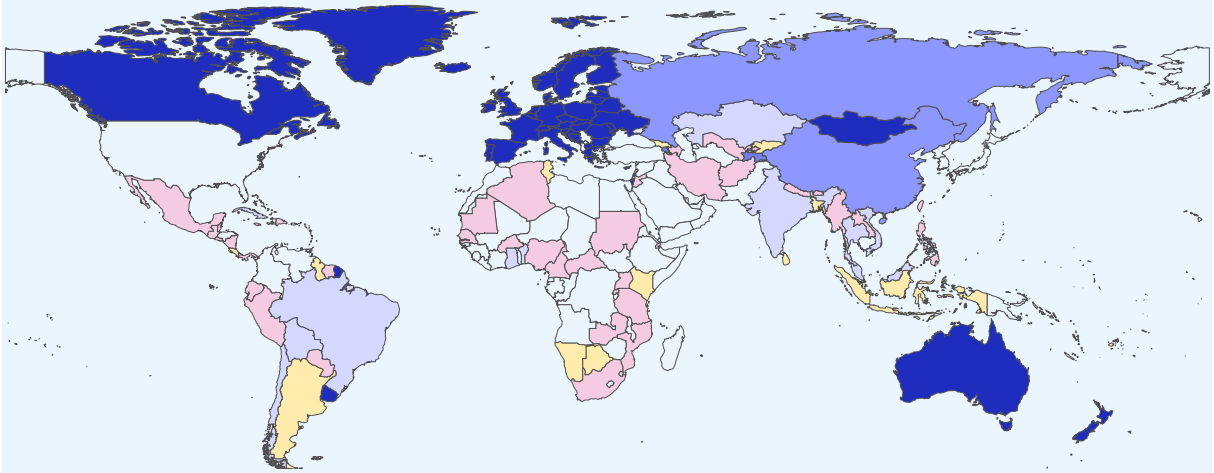
In 143 out of the 195 countries and territories for which information was available, periodic maternity cash benefits are anchored in national social security legislation and provided through collectively financed mechanisms: either through social insurance that fully or partially replaces women's earnings during the final stages of pregnancy and after childbirth, or by non-contributory schemes that provide at least a basic level of income. Almost all these countries (137) had social insurance schemes, of which eight also operate non-contributory tax-financed schemes. 47 other countries – most of them in Africa or Asia – have provisions in their labour legislation for a mandatory period of maternity leave and establish the employer's liability for the salary (or a percentage thereof during that period. 18 countries combine social insurance and employer liability mechanisms. There has been a shift in the last 20 years from employer liability systems to collectively financed maternity benefits, mainly through social insurance schemes. The percentage of countries that finance cash maternity benefits through employer liability systems decreased from 31 per cent in 1994 to 26 per cent in 2009.Three countries provide maternity cash benefits exclusively through non-contributory schemes. In another three countries, women may take unpaid maternity leave, but do not benefit from income replacement. Countries, in which pregnant and childbearing women can benefit from non-contributory cash transfer programmes, often do not anchor these programs in law and tend to cover only a small fraction of the population with often very modest benefit amounts that do not allow women to withdraw temporarily from paid or unpaid work.

Figure 5. Maternity protection (cash benefits) anchored in law, by type of scheme, 2020 or latest available year



Moreover, not all women legally covered have effective access to their entitlements. Only 44.9 per cent of women giving birth receive maternity cash benefits (see figure below). Forty-seven countries achieve close to universal coverage, with more than 90 per cent of pregnant women receiving maternity cash benefits, while in 23 countries (most of them in sub-Saharan Africa) this proportion is less than 10 per cent.

Figure 6. SDG indicator 1.3.1 on effective coverage for maternity protection: Percentage of women giving birth receiving maternity cash benefits, 2020 or latest available year



Region	Coverage rate (%)
World	44.9
Africa	14.9
Americas	51.9
Arab States	12.2
Asia and the Pacific	45.9
Europe and Central Asia	83.6

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4

Current legislation and provisions for health and maternity benefits in Kenya

4.1. Existing national legislation on paid maternity leave through employer liability

Article 21 of the Kenyan Constitution commits the State to work towards the gradual realization of the social and economic rights and binds the State "to observe, respect, protect, promote, and fulfil the rights and fundamental freedoms in the Bill of Rights." For this to be achieved, the State is expected to take legislative, policy, and other measures as necessary, including the setting of standards.

In addition, Article 43 (1) of the constitution states that "Every person has the right— (a) to the highest attainable standard of health, which includes the right to health care services, including reproductive health care; (b) to accessible and adequate housing, and reasonable standards of sanitation; (c) to be free from hunger, and to have adequate food of acceptable quality; (d) to clean and safe water in adequate quantities. Whereas item (a) above is explicit on health the other sub-items are related to the realization of the right to health. Item 43 (e) is even broader as it guarantees every Kenyan the right to e) social security. Furthermore, emergency medical treatment is guaranteed and basic rights. Article 43 (2) states a person shall not be denied emergency medical treatment' and this applies to all medical facilities whether private or public."

It could be further noted that Kenya's constitution also makes provision for the integration of international human rights instruments as well as other ratified international instrument into its national normative framework to fulfil its obligations in respect of these (Article 21(4), Article 132 (5)). This would include, among others, the International Covenant on Economic, Social and Cultural Rights (1966) and the Convention on the Elimination of All Forms of Discrimination against Women (1979).

From the foregoing, the legal framework in Kenya is well anchored to provide for programmes that promote social protection (including maternity protection) and eliminate discrimination in access to health services.

Progressive realisation of the same has been achieved through the enactment of the Employment Act, 2007 (the Act), which imposes certain basic minimum terms and conditions that an employment contract should contain. Such terms and conditions include annual leave, paid sick leave, maternity leave, and paternity leave. An employer's failure to comply with the basic minimum requirements of leave set out under the Act constitutes an offence for which an employer may be liable to a minimum fine of KES 50,000 (USD 500) and/or imprisonment of up to three (3) months.

A female employee is therefore entitled to three (3) months (12.9 weeks) of maternity leave with full pay and is also entitled to return to the same job she held before going on maternity leave, or a reasonably suitable job on terms and conditions equal to those that would have applied had she not been on maternity leave. In addition to the statutory maternity leave, there has been an increase in the number of employers offering additional maternity leave (subject to various terms and conditions provided under their respective policies) as a benefit to their female employees. Maternity leave is an additional benefit to annual leave. A male employee is also entitled to two (2) weeks' paternity leave with full pay.

The international Maternity Protection Convention (No.183) applies to all employed women, including those in atypical forms of dependent work, including part-time, casual, or seasonal jobs. In Kenya, the percentage of women covered by the law is quite low. Several sectors are not protected:

- agricultural, informal economy, domestic and homeworkers;
- migrant workers;
- part-time, casual, and temporary workers;
- workers in small enterprises and those in family undertakings; and
- self-employed, independent workers.

4.2. Current social health protection schemes under NHIF

The NHIF in Kenya manages three health protection schemes:

1. NHIF National Health scheme comprising a package of health benefits covering the following population groups:
    ii. Workers employed in the formal economy on a mandatory contributory basis.
    iii. Households in the informal economy on a voluntary contributory basis. They can enrol for KES 6,000 annually per household.
    iv. Vulnerable groups including refugees and indigent households are covered on a non-contributory basis. The annual payment is KES 6,000 per subsidised household and it is funded through government's subsidies and the donors for sponsored programs, amongst them:

- Health Insurance Subsidy Programme (HISP)/Cash transfer recipients – government pays NHIF contributions.
- Secondary School Children in Public Schools – government pays NHIF contributions.
- Vulnerable refugees – UNHCR pays NHIF contributions.

2. Enhanced Scheme- comprising of benefit package covering:
   Civil servants, public servants, national police, and prisons staff at both levels of government i.e., national and county governments. The beneficiaries access a comprehensive cover by paying additional premiums computed based on the extra services required and the size of the group to be covered among other considerations. Notably, the statutory deductions are still remitted to NHIF from members accessing the enhanced cover/scheme since this is mandated by Law; NHIF Act.
3. Linda Mama programme comprising a package of health benefits specifically on maternity care for which any pregnant woman who is not already covered by the NHIF is eligible. The programme is funded through Government budget and provides benefits to about 800,000 women per year.

An important policy decision was the enactment of National Hospital Insurance Fund (Amendment) Act 2022. Among key amendments include the mandatory requirement for all Kenyans 18 years and above to be NHIF members. This bill is currently temporarily suspended and therefore has not been implemented yet, but it is important to have a policy discussion on how this will potentially affect the design of the existing health protection schemes and therefore what this means for the future coverage of pregnant women in Kenya.

4.3. Policy options for maternity cash benefits in Kenya

As per the Employment Act, 2007 women workers in the formal economy should receive full pay from their employer in case of maternity. As this is an employers' liability scheme, the full cost of the paid maternity leave falls on employers. This mechanism does not allow risk pooling and present risks of discrimination against women in childbearing age at the workplace. It puts small enterprises reliant on female labour at a disadvantage considering they should bear the cost individually. It legally only covers around 6.5 per cent of pregnant women and enforcement on actual coverage is unknown - gaps in compliance can result in women not benefitting from paid leave as stipulated in the labour laws.

Aside from this mechanism, which is sub-optimal with respect to risk pooling and effective protection without discrimination, there is no mechanism in place for the rest of the population that guarantees income security during maternity. Among the estimated 1.48 million women getting pregnant every year, this leaves 1.38 million women (93.5 per cent) without access to any income replacement, including an estimated 494,733 (33.5 per cent) who also do not benefit from free maternity care under any existing scheme (table 5). This leaves most pregnant women uncovered and creates an important risk of impoverishment, with further impact on the health and well-being of mothers and children alike.

Table 5. Coverage of pregnant women for maternity care in 2022 [32]

Pregnant women covered through NHIF scheme for formal economy workers who benefit from maternity care as well as employers' liability as per the labour code	95,077
Pregnant women covered through NHIF scheme for households in the informal economy (including both women voluntarily enrolled and contributing to NHIF through informal employment and pregnant women whose husbands in the informal economy are the main contributor) for maternity care only	66,374
Pregnant women enrolled in Linda Mama for maternity care only	821,307
Pregnant women currently not covered by any scheme (neither NHIF nor Linda Mama)- this category are either using private insurance or paying out of pocket	494,733
Total number of pregnant women	1,477,491

[32] UN WPP (Revision 2022) data, NHIF data, and own calculations.

In this context, there are two main design scenarios available to NHIF for the introduction of a maternity cash benefit that will ensure income security in line with international standards:

1. Scenario 1 - Introducing a maternity benefit based on the design of the existing schemes (NHI scheme, Enhanced Scheme for civil and public servants, and the Linda Mama Program);
2. Scenario 2 - Creating a universal maternity benefit outside of the existing schemes.

Different optional scheme designs can be assessed depending on the joint decision of stakeholders with regard to scheme parameters such as benefit level, benefit duration and periodicity of benefit payments. The alternative options discussed in past consultations include the following:

Table 6. Scheme design options regarding benefit level, benefit duration, and periodicity of payment

Benefit level	ILO C102: 45% of salary ILO C183: 67% of salary Current level for formally employed in Kenya: 100% of salary Additional options discussed at the **2nd stakeholder workshop**: 100% of minimum wage and flat-rate benefit of KES 2000/month
Benefit duration	ILO C102: 12 weeks ILO C183: 14 weeks Current level for formally employed in Kenya: 90 days (12.9 weeks) Additional options discussed at the stakeholder workshop: 16 weeks
Benefit periodicity	Periodical benefit Fixed amount (possibly disbursed in several instalments)

The benefit level of the maternity cash benefit should be sufficient to ensure its effectiveness in improving health and nutrition.[33]

Scenario 1 – Linking maternity income benefit to existing schemes

In this scenario, the maternity benefit will be simply attached to the existing schemes currently implemented by NHIF. This means that:

1. NHIF formal workers who give birth would receive a replacement of their income, on a contributory basis (**"NHIF formal economy"** scheme). This means that employers and workers in the formal economy, pay a monthly contribution to be deducted from salary payments (of male and female insured) into a social insurance mechanism that would pay out the MCB to pregnant women and replace 100 per cent their salary for 90 days (12.9 weeks) as currently provided for under the Kenyan law. The calculations have been done under the assumption that this would be a pooled fund separate from the other population groups.
2. Households actively enrolled in NHIF through voluntary contributions (**"NHIF informal economy"** scheme) or vulnerable households whose contributions are paid by government of other partners, whose member give birth would receive a fixed amount in replacement of their income, on a contributory basis (regardless of who covers contributions);
3. **Linda Mama** beneficiaries would receive, on a non-contributory basis, a fixed amount cash benefit in addition to the maternity health care benefits they already receive;

It is assumed that women in the informal economy that are not voluntarily insured through NHIF or have not registered for Linda Mama and are currently not benefiting from any scheme, will – over time – increasingly enrol into the Linda Mama scheme due to this benefit, assuming full coverage to be reached by the year 2026. In this scenario, the maternity benefit only complements the current maternity care medical benefits, assuming a status quo is maintained with respect to the current design and target group of the health protection schemes.

[33] Kalra, Aarushi and Priya, Aditi, Birth Pangs: Universal Maternity Entitlements in India (November 14, 2019). Available at SSRN: https://ssrn.com/abstract=3486671.

Advantages:

- NHIF can use current records and seamlessly complement the medical care scheme
- It incentivises contributions to the existing NHIF "informal economy" scheme.
- It incentivises enrolling in NHIF or Linda Mama therefore the medical coverage of pregnant women from currently 66.5 percent (2022) is expected to rapidly increase.
- It allows for contributions to be collected and pooled while scenario 2 requires mobilising more tax revenues.
- It would allow for a seamless transition from employer's liability to a proper social insurance mechanism, less discriminatory for women.

Disadvantages:

- More complex administratively than scenario 2.
- It would at first only cover women that are currently covered through an NHIF scheme (33.5 per cent are not covered at present)
- Will be based on minimum wage / reference wage which is not a proper income replacement for many female workers.

Scenario 2 – Universal maternity benefit not linked to existing schemes

The second scenario would comprise a universal non-contributory maternity benefit for all women excluding the formal sector, which is already covered under the existing employer liability provisions. Practically, at present NHIF (nor any other public institutions) does not have access to a full income registry of the population, therefore it would not be possible to establish a maternity benefit in proportion of past earnings. Similarly, a periodic payment may be difficult to establish because the sole verification mechanism for eligibility to the benefit is likely to be directly linked to the pregnancy or childbirth events. Therefore, it is assumed that it will be more likely that the NHIF will be able to implement a lump sum benefit. The benefit amount would be calculated as a percentage of the official minimum wage. For women working in the formal economy, employers will continue to be liable to grant 90 days of maternity leave at full salary as provided for under the Kenyan labour law.

It is further assumed that women currently uncovered by any scheme are required to enrol with Linda Mama to benefit from the planned MCB.

Advantages:

- Easy to administer with a fixed amount payment applicable to all pregnant women or childbirth, excluding the formal sector.
- Easier to reach universal coverage of all pregnant women / women giving birth in a short timeframe.
- Can expect a rapid extension of coverage by Linda Mama and thus to achieve universal coverage of maternity health care benefits in the future

Disadvantages:

- No contributions generated –the Government needs to mobilize other resources.
- This option does not provide incentives for people to join NHIF voluntarily.
- Will be based on minimum wage / reference wage which is not a proper income replacement for many female workers.
- Employer liability will continue to ensure adequate benefit levels for women working in the formal sector – hence, the inherent issues of discrimination of women in the workplace and the problems around enforcement of actual coverage related to employer liability remain unless the employer liability provisions are replaced by a social insurance benefit.

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5

Demographic and financial projections

This section presents the main results of the estimation of cost and financing resources for several design options under scenario 1 and 2 for the maternity cash benefit implementation. In addition to presenting the results, this section lists the data that has been used for the estimation, the assumptions, and the methodology used to assess the cost of the scheme.

5.1. Data used

The following data was received from NHIF for the feasibility study:

- Audited financial statements for the periods 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20, and unaudited financial statements for the year 2021/22
- Employee's contributions series of data for years from 2015 to 2020 with information on the contributor ID, month of contribution and monthly contribution amount.

- Self-employee's contributions series of data for years from 2015 to 2020 with information on the contributor ID, month of contribution and monthly contribution amount.
- Active members and dependants' data extracted on the 14th of December 2021 with information on the active member ID, dependent ID, gender, birthdate, and dependent's relationship with main contributor (son, daughter, or spouse).
- Total members and dependent's data extracted on the 13th of December 2021 with information on the member ID, dependent ID, gender, birthdate, and dependent's relationship with main contributor (son, daughter, or spouse).
- Linda Mama beneficiaries' series of data for years from 2015 to 2021 with information on membership number, membership ID, date of confirmation of the pregnancy, date of admission to the hospital for delivery and mother birthdate.
- Total maternity claims of NHIF for years from 2015 to 2020 with information on NHIF member number, member ID, Inpatient code, date of admission of the patient and birthdate of patient.
- Contribution schedule stipulating the contribution amount due according to a salary interval.

5.2. Main assumptions

Last year of full data has been 2021, therefore the initial year for the projections is 2022.

The main assumptions used for the projections are summarized in the following table:

Table 7. Main assumptions

Assumptions	Description
Population	Based on the UN World Population Prospects, the total population aged 15 years or older in 2021 is estimated at 32.7 million persons and projected to increase to 46.2 million persons by 2035.[34]
Total fertility rate (TFR)	Based on the UN World Population Prospects, the TFR for the national population is estimated at 3.32 in 2021 and is projected to decrease to 2.76 by 2035 according to the medium variant scenario.
Coverage rate of NHIF insured population	Coverage rate for the formal and informal workers insured by the NHIF has been defined as the ratio of the number of insured members divided by the number of the population aged 18 or older. The coverage rate is assumed constant for each age and sex over the whole projection period.
Covered NHIF insured population	Active insured members of NHIF scheme, including dependent spouses of active insured males from informal economy.
Coverage rate of Linda Mama beneficiaries	Coverage rate of Linda Mama beneficiaries has been defined as the ratio of total number of Linda Mama beneficiaries divided by the total number of pregnant women in the country. The coverage rate has been estimated based on Linda Mama programme data for years 2015-2021. The coverage rate estimated for 2021 is 52.5% and is projected to increase annually by 3%.
Administrative expenditures	Assumed at 15% of total benefit expenditures.
Density of contributions and salaries	Estimated based on NHIF scheme data for the years 2015-2020, separately by gender, age, and economic sector (formal and informal).

[34] United Nations World Population Prospects, The 2022 Revision.

5.3. Demographic projections

Categories of the population to be potentially covered by the new Maternity Cash Benefit

This feasibility study has estimated the cost of MCB separately for three different categories of population which are:

1. **Formal economy:** Workers in the formal economy currently covered by the NHIF on a mandatory contributory basis
2. **Informal economy:** Households in the informal economy currently covered by the NHIF on a voluntary contributory basis
3. **Linda Mama:** Linda Mama programme beneficiaries of a package of health benefits specifically on maternity care for which any pregnant woman who is not already covered by the NHIF is eligible.

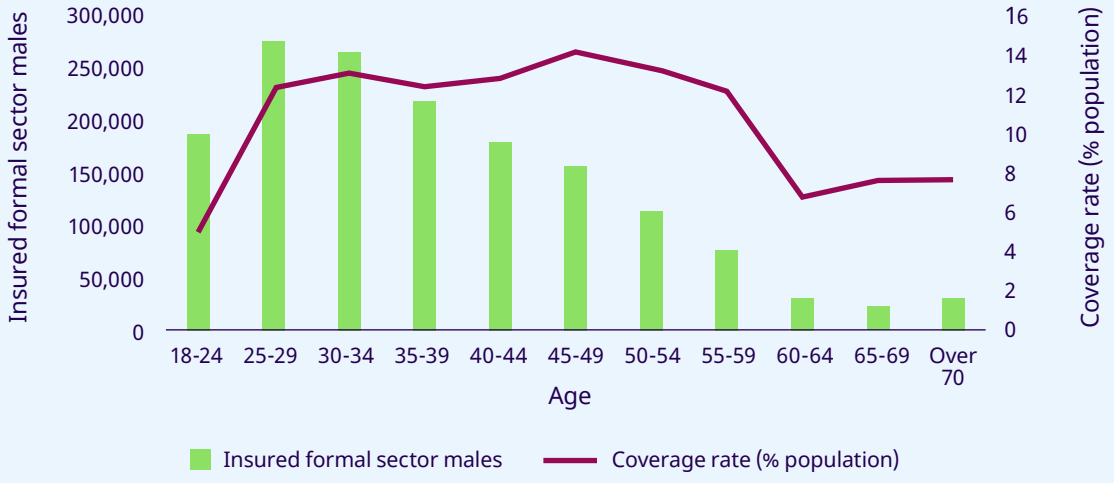
Potential resources from contributions to finance the cost of MCB, have been estimated separately for the first two categories of population: workers in the formal economy and households in the informal economy. The study does not consider any cross-subsidization in between the formal and informal economy, and Linda Mama beneficiaries. Therefore, the results can be interpretated separately for each category of population.

Initial and projected NHIF potential contributors and coverage rates

The UN World Population Prospects estimates of population classified by age and sex have been used as the benchmark to project the NHIF insured members covered as potential contributors to the Maternity Cash Benefit (MCB). This concerns to categories of population 1 and 2 (formal and informal economy) described in the section above.

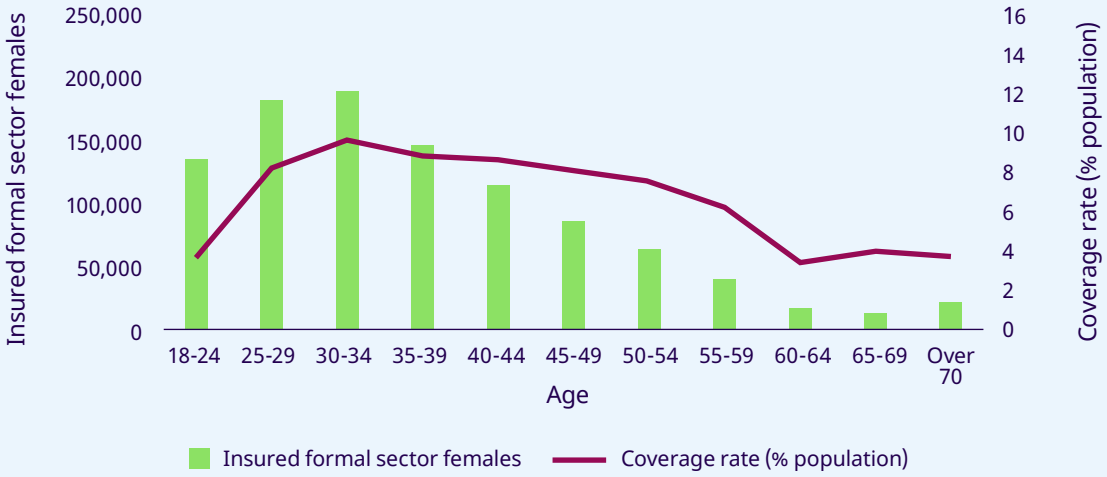
Active members of the NHIF from ages 18 to 100 are considered as potentially insured members of the new maternity benefit scheme in case this category of the population is covered by the scheme (figure 7-10). Active members of NHIF older than 70 years old correspond to pensioners voluntarily contributing to NHIF or subsidized members by the government. However, they have been included into the insured members contributing to the MCB. A decision will need to be made on whether the Government will contribute to the maternity benefit scheme on their behalf due to the lower contributory capacity of persons over 70 years old.

Figure 7. Distribution of NHIF insured male active members from formal economy by age groups (left axis) and coverage rate as a proportion of total male population by age group (right axis), 2021



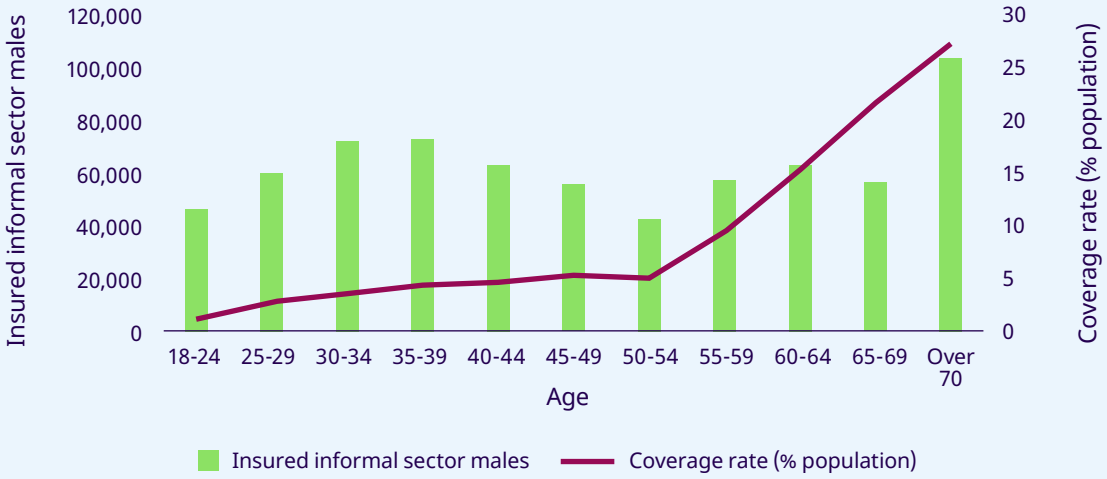
Sources: NHIF data and UN WPP population data (Revision 2022)

Figure 8. Distribution of NHIF insured female active members in the formal economy by age group (left axis) and coverage rate as a proportion of total female population by age group (right axis), 2021



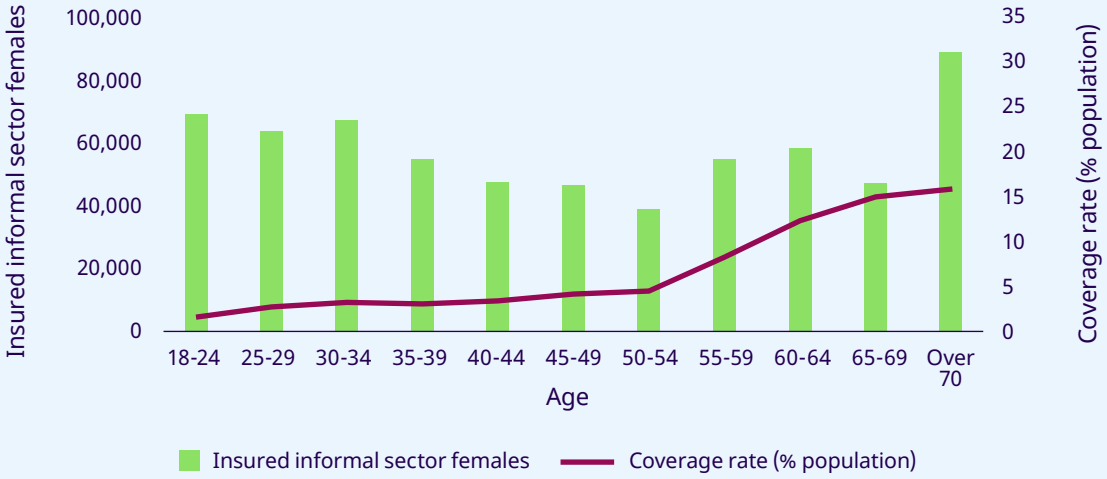
Sources: NHIF data and UN WPP population data (Revision 2022)

Figure 9. Distribution of NHIF insured male active members from informal economy by age groups (left axis) and coverage rate as a proportion of total male population by age groups (right axis), 2021



Sources: NHIF data and UN WPP population data (Revision 2022)

Figure 10. Distribution of NHIF insured female active members from informal economy by age groups (left axis) and coverage rate as a proportion of total female population by age groups (right axis), 2021



Sources: NHIF data and UN WPP population data (Revision 2022)

Figures 7 and 8 show the age distribution and coverage rate of NHIF insured male and female active members from formal economy for the base year 2021. It is observed that insured males are higher in number than females and that there is a higher proportion (in absolute numbers) of insured members at younger ages for both genders.

Figures 9 and 10 show the age distribution and coverage rate of NHIF insured male and female active members from informal economy for the initial year 2021. It is observed that, contrary to formal economy, informal economy workers coverage rates increase for older ages for both genders.

The coverage rates for active members in the population are calculated by gender and age groups as seen in the figures from 7 to 10. The coverage rates by gender and age groups have been maintained constant over the whole projection period. This means that the number of active members in each age and gender cohort are assumed to evolve in line with projected growth of the respective cohort in the total population. The numbers of insured active members by age, gender, year, for the formal and informal and economy for the base year and for the projection period are shown in tables A1, A2, A3 and A4 (See Annex).

Table 8. Population (ages 18-100), covered population (in thousands), and coverage rates for the period, 2021-2035

Both sexes	2021	2025	2030	2035
Population (18-100 years old)	28,026	32,580	37,529	42,177
Population covered	3,828	4,261	4,975	5,728
Formal	2,492	2,764	3,200	3,646
Informal	1,336	1,497	1,775	2,082
Male				
Population (18-100 years old)	13,846	15,975	18,379	20,623
Population covered	2,197	2,440	2,848	3,280
Formal	1,503	1,664	1,927	2,196
Informal	694	776	921	1,083
Female				
Population (18-100 years old)	14,180	16,605	19,150	21,554

Population covered	1,631	1,821	2,127	2,449
Formal	989	1,099	1,273	1,450
Informal	642	721	854	998
Coverage rate				
Both	13.7%	13.1%	13.3%	13.6%
Male	15.9%	15.3%	15.5%	15.9%
Female	11.5%	11.0%	11.1%	11.4%

Sources: NHIF data and UN WPP, projections medium variant from 2022 (Revision 2022).

Family statistics of NHIF insured active members from informal economy

Workers in the informal economy pay a fixed contribution on behalf the household. Thus, women in an NHIF covered household, whether they are the contributors or not, are also entitled to maternity cash benefit in case of childbirth. As a result, this study assumes that maternity cash benefit coverage applies to all individuals of the household in the informal economy, not only to the main contributor of the household.

The probability for active men contributors in the informal economy to have a dependent spouse and the average age of spouse have been estimated from the NHIF scheme data for informal economy. Table 9 shows the obtained probabilities and average age of the spouse. Total number of women for whom contributions are made on their behalf, has been estimated by combining these family statistics with the age distribution of active men contributing voluntarily in the informal economy. Jointly with the observed women in the data contributing to NHIF under the formal and informal economy, these women have been also considered as potential beneficiaries, in case of childbirth, of the MCB.

Table 9. Family statistics of NHIF insured active members from informal economy, probability to have a wife and mean age of wife for selected ages

Age	Probability to have a dependent spouse	Mean age of spouse
18	3.58%	21
20	14.02%	24
25	47.49%	23
30	67.53%	27
35	62.33%	34
40	66.16%	34
45	61.92%	38
50	60.28%	43
55	60.00%	47

Source: Own calculations based on NHIF data provided.

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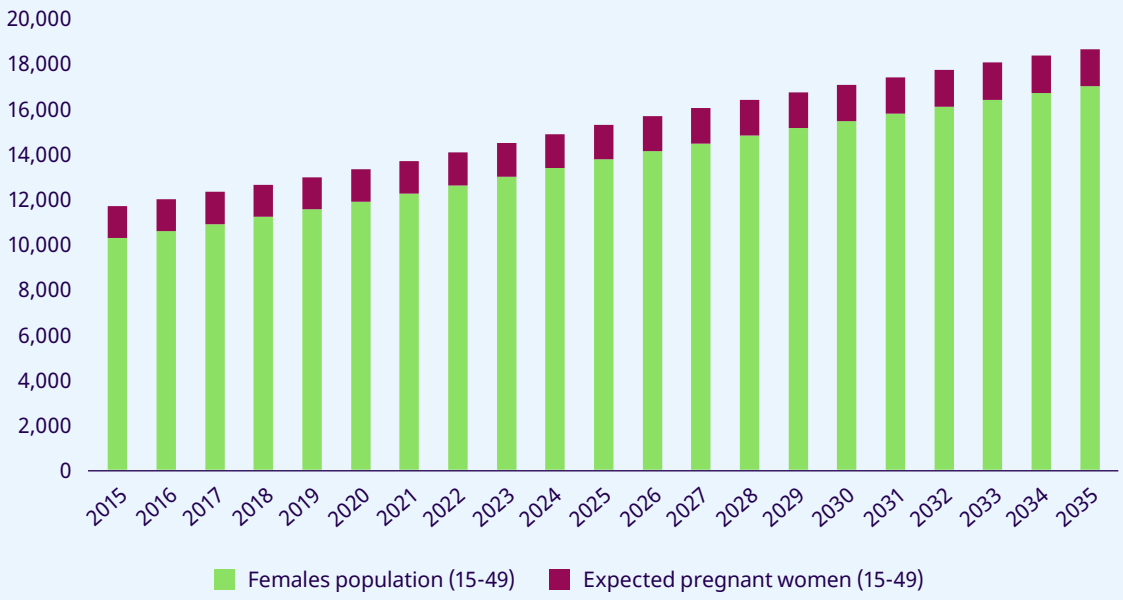
Estimation of annual births

The total number of pregnant women in Kenya has been estimated by multiplying the assumed fertility rate as shown in table 10, by the number of women by age from 15 to 49 years old. They are shown in figure 11.

Figure 11. Expected annual births among the total female population (thousands)



Sources: Own calculations and UN WPP projections medium variant from 2022.

Table 10. Assumed fertility ratios by age groups of females and total fertility rate

Age group	2021	2025	2030	2035
15-19	64.2	58.2	52.1	45.9
20-24	169.0	162.2	154.1	147.0
25-29	172.3	167.3	161.3	156.3
30-34	133.4	127.5	121.4	116.4
35-39	78.5	71.5	64.4	59.1
40-44	33.8	29.8	25.6	22.4
45-49	12.3	10.0	7.8	6.1
TFR	**3.32**	**3.13**	**2.93**	**2.77**

Sources: UN WPP, projections medium variant from 2022.

The total number of beneficiaries from formal and informal economy under NHIF, has been estimated following the same methodology as for estimating the total pregnant women in Kenya. Assumed fertility rates by single age have been multiplied by the number of female insured members under NHIF by age cohort. As mentioned above, the women insured members under NHIF considered as potential beneficiaries under the study are:

- Women working in the formal economy contributing to NHIF
- Women working in the informal economy contributing to NHIF
- Women working in the informal economy for whom their husbands working in the informal economy are contributing to NHIF

The total number of Linda Mama beneficiaries to be covered under the new MCB, has been estimated as a percentage from the total pregnant women of Kenya. From table 11, it can be observed that coverage under the Linda Mama programme represented the 46.2 per cent, 50.2 per cent and 52.5 per cent of total pregnant women in 2019, 2020 and 2021, respectively. It has been assumed that the coverage under the Linda Mama programme will increase to full coverage for the non-covered population by 2026. Therefore, the coverage rate of Linda Mama beneficiaries is projected to increase from 52.5 per cent of total pregnant women in 2021 to 89.0 per cent by 2026 and to remain at the same level thereafter.

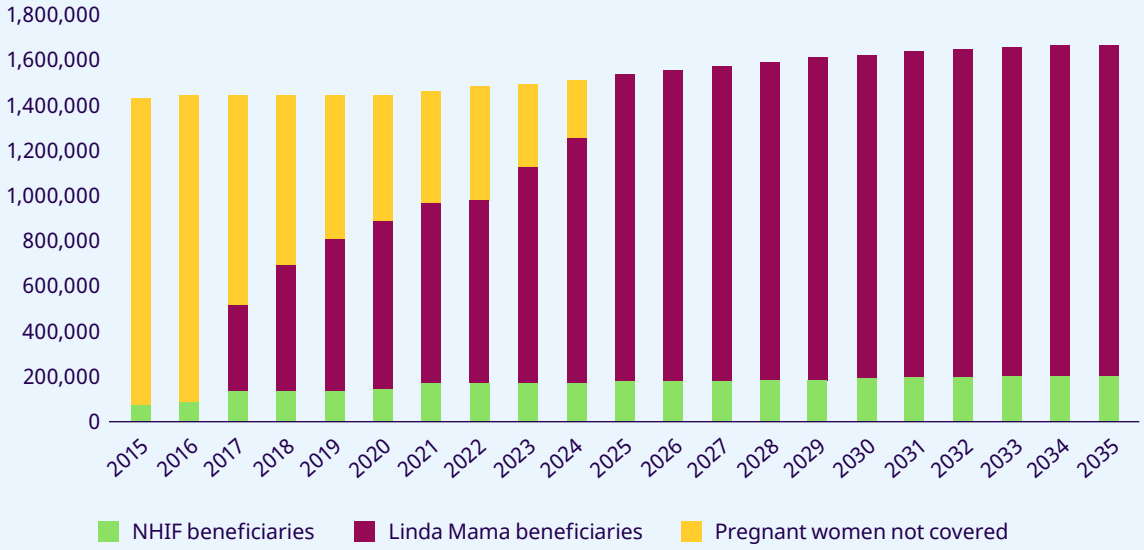
Figure 12 presents the evolution of the total beneficiaries under NHIF (formal and informal) and under Linda Mama. It has been conservatively assumed that the Linda Mama take up rate will evolve as observed from past trends and that pregnant women enrolment in the program will increase during coming years. It can be observed that the Linda Mama beneficiaries represent the highest proportion of MCB beneficiaries from 2018 onwards. Beneficiaries under NHIF remain relatively stable due to the assumption that coverage rate for NHIF members will remain constant for all the projection period. Annex I, presents the total number of beneficiaries from NHIF, Linda Mama and the remaining pregnant women not covered by the MCB for each year in table A5.

Table 11. Female population in reproductive age (15-49 years old), pregnant women, Linda Mama beneficiaries, and Linda Mama coverage rates as projected for years 2022-35

Year	Female population (15-49 years old) (thousands)	Pregnant women (thousands)	Linda Mama beneficiaries	Coverage rate (Linda Mama beneficiaries/ pregnant women)
2015	11,751	1,432	26	0.002%
2016	12,059	1,438	670	0.05%
2017	12,382	1,438	386,000	26.7%
2018	12,699	1,440	563,655	39.2%
2019	13,028	1,437	688,309	47.9%
2020	13,388	1,444	753,004	52.1%
2021	13,758	1,456	797,282	54.8%
2022	14,142	1,477	821,307	55.6%
2023	14,547	1,493	954,778	64.0%
2024	14,956	1,510	1,091,709	72.3%
2025	15,356	1,531	1,235,077	80.7%
2026	15,742	1,550	1,379,748	89.0%
2027	16,114	1,573	1,400,598	89.0%
2028	16,473	1,588	1,412,967	89.0%
2029	16,818	1,607	1,428,537	88.9%
2030	17,156	1,619	1,438,473	88.9%
2031	17,491	1,637	1,452,852	88.8%
2032	17,818	1,647	1,461,034	88.7%
2033	18,135	1,654	1,465,677	88.6%
2034	18,442	1,661	1,470,926	88.5%
2035	18,743	1,663	1,471,341	88.5%

Sources: NHIF data, UN WPP projections (medium variant) from 2022 onwards, and own calculations.

Figure 12. NHIF Beneficiaries of MCB, Linda Mama beneficiaries of MCB and remaining pregnant women not covered by MCB for years 2015-2035



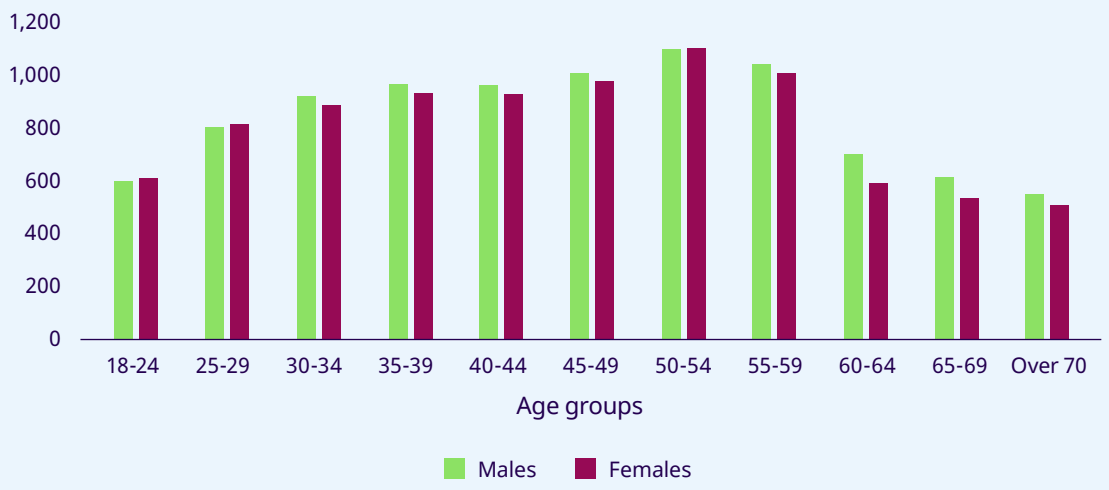
Sources: NHIF data and own calculations based on UN WPP projections (medium variant) from 2022.

5.4. Financial projections

Estimation of contributions and salaries

Data on contribution amount has been provided by age and gender for the active contributor NHIF members from the formal economy. A projection of the average contributions by age and sex has been carried out from the provided data. Since the salary data for active members of the NHIF was not available, the salary scale provided by NHIF has been used to estimate the projected average salaries by age and sex from the projected average contributions. The salary scale is shown in table 12 and it determines the contribution amount due by the formal economy workers according to the insured salary interval. The projection of the total salary mass is needed to compute the contributory basis for the scheme to finance expenditures for the formal economy workers category. The average contribution amount of formal economy workers, by age groups and gender for the year 2020, is shown in figure 13. Table A6 and A7 of the annex shows the monthly contribution amount for males and females from the formal economy and contributing to NHIF, by single age for 2020 and the projection period.

Figure 13. Average monthly contributions amount for the formal economy age groups and gender for year 2020



Sources: NHIF data.

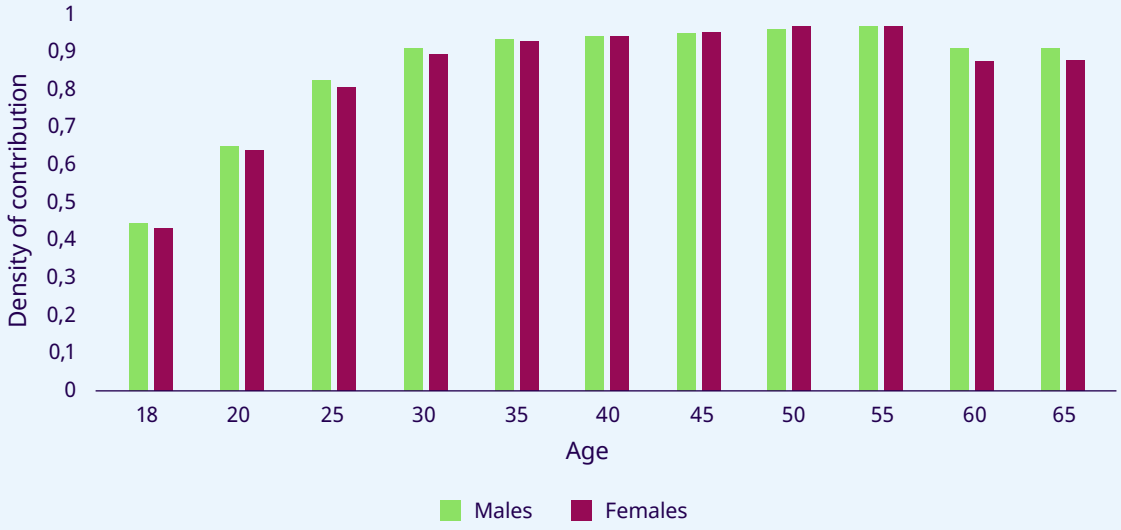
Table 12. Salary scale applied in NHIF to determine the premium amount according to a gross income range

Gross income (Kshs)	Monthly Premium Amount (Kshs)
Up to 5,999	150
6,000 – 7,999	300
8,000 – 11,999	400
12,000 – 14,999	500
15,000 – 19,999	600
20,000 – 24,999	750
25,000 – 29,999	850
30,000 – 34,999	900
35,000 – 39,999	950
40,000 – 44,999	1000
45,000 – 49,999	1100
50,000 – 59,999	1200
60,000 – 69,999	1300
70,000 – 79,999	1400
80,000 – 89,999	1500
90,000 – 99,999	1600
100,000 and above	1700

Sources: NHIF data.

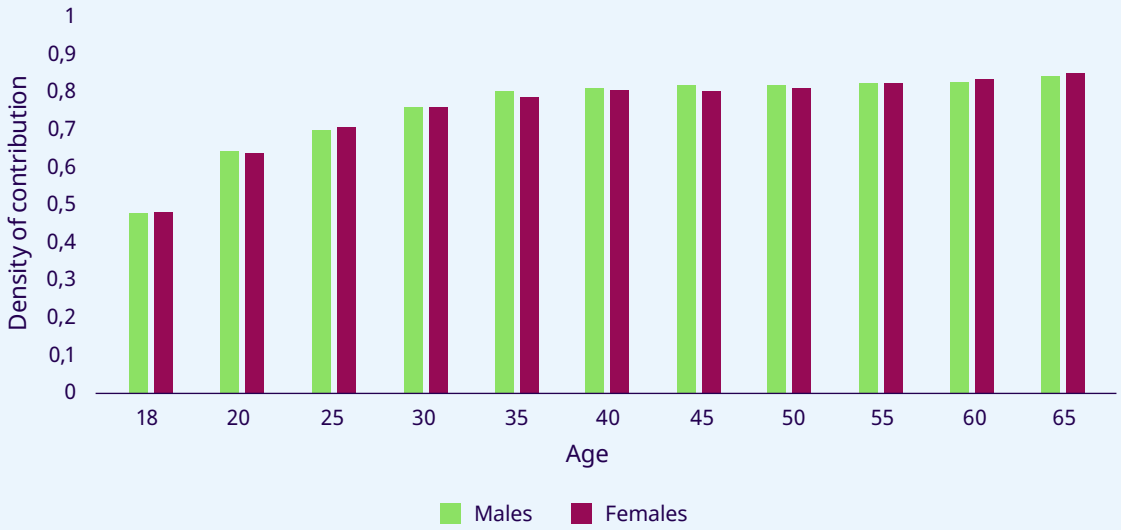
Based on the contribution schedule displayed in table 12, a trendline linking the monthly premium amount with the gross income, was estimated using the median salary of the different salary brackets as the reference point and the corresponding monthly premium amount. The trendline obtained was used to estimate average insured earnings (average gross income) by age and sex cohort based on the average amount of contributions paid in 2021 by each respective cohort (see Figure A.1, Annex 1).

Figure 14. Density of contributions of formal economy workers by gender and age for year 2020



Sources: Own calculations based on NHIF data.

Figure 15. Density of contributions of informal economy workers by gender and age for year 2020



Sources: Own calculations based on NHIF data.

Figure 14 and 15 reports the density of contributions estimated separately for the formal and informal economy by both gender and age based on contributing months for the year 2020. Based on past trends, it has been assumed that the density of contribution remains constant for all the projection period.

The annual rate of increase of contributions is assumed to be the same as the increase of labour productivity (i.e. GDP per employed) in nominal terms. Real labour productivity growth has been estimated for past years (2009-2019) based on real GDP growth and total employment as estimated by ILO. The estimated average real productivity growth (0.8%) has been assumed constant at the same rate from 2020 onwards. The annual rate of consumer price inflation as projected by the IMF (see *IMF World Economic Outlook*) is adopted to inflate the real values into nominal values. The economic variables used to estimate salary growth are displayed in table A8 (see annex).

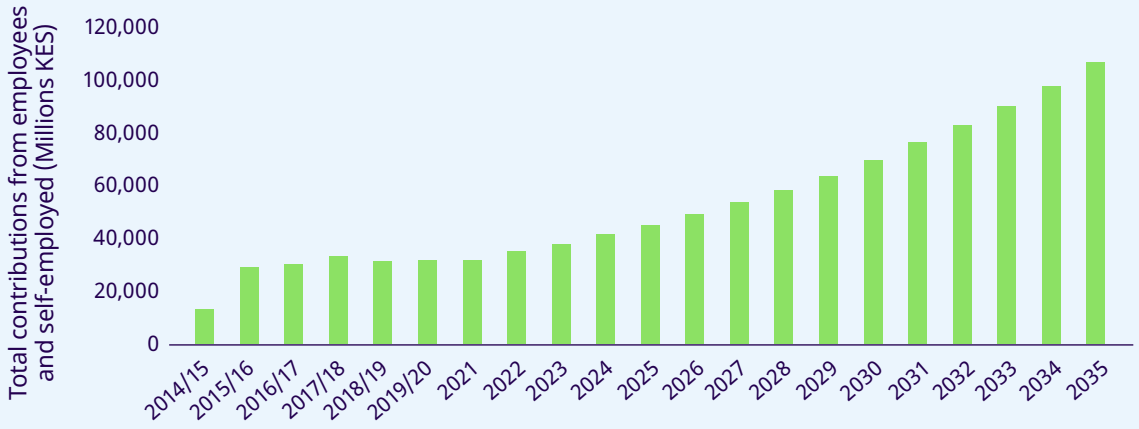
Table 13. Annual inflation, real productivity growth and nominal contribution increase (in %)

Year	2020	2022	2025	2030	2035
Consumer price Inflation (% p.a.)	5.3	7.6	5.3	5.0	5.0
Real productivity growth (% p.a.)	0.8	0.8	0.8	0.8	0.8
Wage growth in nominal terms (% p.a.)	6.2	7.0	8.5	8.7	6.5

Sources: IMF, World Economic Outlook Database (May 2023), ILOSTAT data and own calculations.

The total contribution income for the formal economy has been estimated by multiplying the number of active insured members in the formal economy by the average contribution and the density of contributions by age cohort and gender. The total contribution income for the informal economy has been estimated by multiplying the number of active insured members in the informal economy by the flat rate contribution (500 KES per month) and by the density of contributions assumed by age cohort and gender. It is assumed that the contribution rate for the informal economy will increase from the year 2025 onwards based on the projected rate of nominal wage growth (see table 13). Figure 16 shows total contribution income amounts from the financial statement for periods from 2014/15 to 2019/20 and contributions projected from 2022 onwards.

Figure 16. Total contribution income from formal (employees) and informal economy (self-employees)



Sources: Own calculations based on NHIF data.

As mentioned before, total salary mass for the formal economy has been estimated by multiplying the number of active insured members in the formal economy by the average salary estimated from the trendline showed in Figure A1 of Annex 1; and by the density of contributions assumed by age cohort and gender.

Estimation of cost and required resources

The theoretical formula to calculate the benefit expenditure is as follows:

$$B = \left(\sum_{x} N \times T \times S \right) \times E \times R \times D$$

Where:

- B: total benefit expenditures in y financial year;
- N: number of females in the population covered by the system for each age, x;
- T: percentage of women of age x who give birth (namely, age-wise fertility rates);
- S: average monthly salary of women of age x;
- E: percentage of women who satisfy the qualifying period;
- R: percentage of salary paid during the maternity leave (namely, the replacement rate); and
- D: average duration of maternity leave expressed in months.

Therefore, for the present study, benefit expenditures of the maternity cash benefit have been obtained by multiplying the projected number of beneficiaries by the number of months during which the cash benefit is paid and the average monthly benefit amount.

The number of beneficiaries is obtained by multiplying the number of births by the assumed percentage of women who satisfy the qualifying conditions for the benefits. Considering that there is not yet a qualifying period to access to the benefit, it was conservatively assumed that the percentage of women who satisfy the qualifying period is 100 per cent.

Total cost is the sum of benefit expenditures and administrative expenditures. Based on NHIF data administrative expenditures to administer health benefits, administrative expenditures of MCB have been assumed to be 15 per cent of total benefit expenditures.

Scenario 1 – Linking maternity income benefit to existing schemes

As described under section 4.3, under scenario 1, the maternity benefit will be simply attached to the existing schemes currently implemented by NHIF to provide MCB coverage to the following three categories of population:

- Linda Mama beneficiaries
- NHIF formal workers
- NHIF informal economy

From the entire options of design parameters that can be simulated (they are represented in table 6 of section 4.3), selected options, reflecting the most probable options that could be implemented, have been analysed for each of the categories of population in the following subsections a), b) and c). Options are presented in table 14. In addition to the cost, required resources to finance the total cost or part of the cost, have been estimated for the NHIF formal workers and NHIF informal economy categories separately.

Table 14. Selected options for each population group for which cost and required financing resources (except for Linda Mama population group) have been estimated

Linda Mama beneficiaries	NHIF formal workers	NHIF informal economy
Option 1 **Benefit level:** Flat rate - 100% of minimum wage **Benefit duration:** 90 days (12.9 weeks)	Option 1 **Benefit level:** 100% of last wage Benefit duration: 90 days (12.9 weeks)	Option 1 **Benefit level:** Flat rate - 100% of minimum wage **Benefit duration:** 90 days (12.9 weeks)
Option 2 **Benefit level:** Flat rate - KES 2000/ month (2022) **Benefit duration:** 90 days (12.9 weeks)	Option 2 **Benefit level:** 100% of last wage **Benefit duration:** 90 days (12.9 weeks)	Option 2 **Benefit level:** Flat rate - KES 2000/ month (2022) **Benefit duration:** 90 days (12.9 weeks)

a. Estimation of costs for extending Maternity Cash Benefit to the Linda Mama beneficiaries

Table 15. Option 1: Maternity benefit cost (billion KES), administrative cost (billion KES) and total cost (billion KES) for Linda Mama beneficiaries receiving 100% of replacement rate of the minimum wage, for 90 days (12.9 weeks)

Year	Maternity benefit	Administrative cost	Total cost
2022	36.7	5.5	42.2
2023	46.4	7.0	53.4
2024	56.5	8.5	65.0
2025	67.8	10.2	78.0
2026	79.9	12.0	91.9
2027	85.8	12.9	98.7
2028	91.7	13.8	105.4
2029	98.2	14.7	112.9
2030	104.6	15.7	120.3
2031	111.9	16.8	128.7
2032	119.1	17.9	137.0
2033	126.5	19.0	145.5
2034	134.5	20.2	154.6
2035	142.4	21.4	163.8

Table 15 and 16, present the benefit cost and administrative cost that has been estimated for each year of the projection period. For option 1, the total cost estimated for 2024 is 64.96 billion KES, which represents 0.38 per cent of GDP [35] and 2.10 per cent of general government revenues (Table 15).[36] For option 2, the total cost estimated for 2024 is 8.6 billion KES, which represents 0.05 per cent of GDP and 0.32 per cent of general government revenue (Table 16). Under both options, the total cost is projected to increase as a percentage of GDP and of General government revenue until 2026 and to decrease thereafter due to the projected decrease of the fertility rate.

Table 16. Option 2: Maternity benefit cost (billion KES), administrative cost (billion KES) and total cost (billion KES) for Linda Mama beneficiaries receiving KES 2000 per month for 90 days.

Year	Maternity benefit	Administrative cost	Total cost
2022	4.86	0.73	5.59
2023	6.14	0.92	7.06
2024	7.47	1.12	8.59
2025	8.97	1.35	10.32
2026	10.57	1.59	12.16
2027	11.36	1.70	13.06
2028	12.13	1.82	13.95
2029	12.98	1.95	14.93
2030	13.84	2.08	15.92
2031	14.80	2.22	17.02
2032	15.76	2.36	18.12

[35] According to the International Monetary Fund, World Economic Outlook Database, accessed in May 2023, the Gross Domestic Product of Kenya is projected at 17,227 billion KES for the year 2024.

[36] According to the International Monetary Fund, World Economic Outlook Database, accessed in May 2023, the General government revenue in Kenya is projected at 3,088 billion KES for the year 2024.

Year	Maternity benefit	Administrative cost	Total cost
2033	16.74	2.51	19.25
2034	17.79	2.67	20.45
2035	18.84	2.83	21.66

b. Estimation of costs and required resources for extending Maternity Cash Benefit to the formal economy workers covered under NHIF

Table 17 shows the estimated evolution of the pay-as-you-go (PAYG) cost rate from 2022 to 2035 for the option of extending the coverage of MCB for the formal economy. The PAYG cost rate is the ratio between the total cost and the total salary mass and represents the percentage of the salary mass required as contributions to cover the total cost.

The PAYG cost rates are projected to decrease from 1.0 per cent in 2022 to 0.84 per cent in 2035, mainly due to the assumed decrease of the fertility rates.

Table 17. Maternity benefit cost (billion KES), administrative cost (billion KES), total cost (billion KES) and PAYG rate for formal economy beneficiaries receiving the 100% of replacement rate of the last wage for 90 days (12.9 weeks)

Year	Maternity benefit	Administrative cost	Total cost	PAYG
2022	9.22	1.38	10.60	1.02
2023	10.12	1.52	11.64	1.00
2024	10.89	1.63	12.52	0.98
2025	11.72	1.76	13.47	0.97
2026	12.52	1.88	14.40	0.95
2027	13.48	2.02	15.50	0.94
2028	14.46	2.17	16.63	0.92
2029	15.56	2.33	17.90	0.91
2030	16.72	2.51	19.22	0.90
2031	18.03	2.70	20.74	0.89
2032	19.39	2.91	22.29	0.88
2033	20.80	3.12	23.91	0.86
2034	22.31	3.35	25.66	0.85
2035	23.84	3.58	27.42	0.84

c. Estimation of costs and required resources for extending Maternity Cash Benefit to the informal economy workers covered under NHIF

Tables 18 and 19 show the projected evolution of the total cost and monthly flat rate contribution for the period 2022-2035 for the two options considered to extend coverage of MCB to the informal economy workers that are currently covered under NHIF. The monthly flat rate contributions represent the flat rate amount that the informal economy would be required to contribute to cover the 20 per cent of the total cost. A national decision will be needed to determine whether informal economy can support the financing of 20 per cent of the total cost or whether another percentage reflects better outcomes of national discussions and the ability of informal economy to support the financing of the cost. Therefore, the rest of the cost corresponding to the remaining 80 per cent of the total cost under the proposed cost sharing option, would be finance by other sources. Discussions at a national level about the sources to finance the remaining part of the cost would be needed also to decide on that aspect.

Table 18. Maternity benefit cost (billion KES), administrative cost (billion KES), total cost (billion KES), total cost financed by informal economy (billion KES) and monthly flat rate contribution for informal economy beneficiaries receiving 100% of replacement rate of the minimum wage, during 90 days (12.9 weeks)

Year	Maternity benefit	Administrative cost	Total cost (KES mil.)	Monthly premium (KES)	Cost for informal workers (20% of total in KES mil.)	Monthly premium at 20% (KES)
2022	2.97	0.45	3.41	259.8	0.68	52.0
2023	3.26	0.49	3.75	276.6	0.75	55.3
2024	3.50	0.53	4.03	288.2	0.81	57.6
2025	3.77	0.57	4.34	299.8	0.87	60.0
2026	4.03	0.60	4.64	309.5	0.93	61.9
2027	4.34	0.65	4.99	322.0	1.00	64.4
2028	4.65	0.70	5.35	333.5	1.07	66.7
2029	5.01	0.75	5.76	346.8	1.15	69.4
2030	5.37	0.81	6.18	359.9	1.24	72.0
2031	5.78	0.87	6.65	375.2	1.33	75.0
2032	6.21	0.93	7.14	389.8	1.43	78.0
2033	6.65	1.00	7.65	404.4	1.53	80.9
2034	7.12	1.07	8.19	419.9	1.64	84.0
2035	7.60	1.14	8.75	434.7	1.75	86.9

Table 19. Maternity benefit cost (billion KES), administrative cost (billion KES), total cost (billion KES), total cost financed by informal economy (billion KES) and monthly flat rate contribution (KES) for informal economy beneficiaries receiving KES 2000 per month during 90 days (12.9 weeks)

Year	Maternity benefit	Administrative cost	Total cost (KES mil.)	Monthly premium (KES)	Cost for informal workers (20% of total in KES mil.)	Monthly premium at 20% (KES)
2022	0.39	0.06	0.45	34.4	0.09	6.9
2023	0.43	0.06	0.50	36.6	0.10	7.3
2024	0.46	0.07	0.53	38.1	0.11	7.6
2025	0.50	0.07	0.57	39.7	0.11	7.9
2026	0.53	0.08	0.61	40.9	0.12	8.2
2027	0.57	0.09	0.66	42.6	0.13	8.5
2028	0.62	0.09	0.71	44.1	0.14	8.8
2029	0.66	0.10	0.76	45.9	0.15	9.2
2030	0.71	0.11	0.82	47.6	0.16	9.5
2031	0.77	0.11	0.88	49.6	0.18	9.9
2032	0.82	0.12	0.94	51.6	0.19	10.3
2033	0.88	0.13	1.01	53.5	0.20	10.7
2034	0.94	0.14	1.08	55.5	0.22	11.1
2035	1.01	0.15	1.16	57.5	0.23	11.5

Scenario 2 – Universal maternity benefit not linked to existing schemes

The cost of the second scenario consisting of a universal maternity benefit for all women excluding those insured in the NHIF formal sector scheme (as described in section 4.3) is provided below. The considered duration of the benefit under this scenario is 90 days (12.9 weeks). Two different options have been considered for the benefit level:

- Option 1: 100% of the minimum wage during 90 days
- Option 2: Flat-rate amount of KES 2,000/month during 90 days

It is assumed that, as for scenario 1, all currently uncovered women must enrol with Linda Mama to become eligible for the MCB and must attend the required four (4) antenatal care visits and four (4) post-natal care visits. Given this conditionality, the coverage of Linda Mama is assumed to increase gradually to reach full coverage of all uncovered women by the year 2026 and improve overall maternal and child mortality outcomes.

Table 20. Option 1: Maternity benefit cost (billion KES), administrative cost (billion KES) and total cost (billion KES) to provide universal maternity cash benefit to all pregnant women (excluding formal sector) receiving 100% of replacement rate of the minimum wage, for 90 days (12.9 weeks)

Year	Maternity benefit	Administrative cost	Total cost
2022	39.7	6.0	45.6
2023	49.7	7.4	57.1
2024	60.0	9.0	69.0
2025	71.6	10.7	82.3
2026	83.9	12.6	96.5
2027	90.2	13.5	103.7
2028	96.3	14.5	110.8
2029	103.2	15.5	118.6
2030	110.0	16.5	126.5
2031	117.7	17.7	135.3
2032	125.4	18.8	144.2
2033	133.2	20.0	153.2
2034	141.6	21.2	162.8
2035	150.0	22.5	172.5

The total cost of a universal maternity cash benefit for all pregnant women (excluding formal sector) under option 1 is projected at KES 69.0 billion for the year 2024, which represents 0.40 per cent of GDP and 2.2 per cent of general government revenues. The relative cost of the scheme is projected to peak in 2026 (full coverage of Linda Mama) at 0.46 percent of GDP and 2.55 percent of Government revenues, and to decrease gradually thereafter due to the assumed decrease of the fertility rate.

Table 21. Option 2: Maternity benefit cost (billion KES), administrative cost (billion KES) and total cost (billion KES) to provide universal maternity cash benefit to all pregnant women (excluding formal sector) receiving a flat-rate benefit of KES 2000 per month for 90 days

Year	Maternity benefit	Administrative cost	Total cost
2022	5.2	0.8	6.0
2023	6.6	1.0	7.6
2024	7.9	1.2	9.1
2025	9.5	1.4	10.9
2026	11.1	1.7	12.8
2027	11.9	1.8	13.7
2028	12.7	1.9	14.7
2029	13.6	2.0	15.7
2030	14.6	2.2	16.7
2031	15.6	2.3	17.9
2032	16.6	2.5	19.1
2033	17.6	2.6	20.3
2034	18.7	2.8	21.5
2035	19.8	3.0	22.8

The total cost of universal maternity cash benefit for all pregnant women (excluding formal sector) under option 2 is projected at KES 9.1 billion for the year 2024, which represents 0.053 per cent of GDP and 0.30 per cent of general government revenue. As under option 1, under option 2, the relative of the scheme is projected to peak in 2026 at 0.061 percent of GDP and 0.34 percent of Government revenues, and to decrease thereafter due to the assumed decrease of the fertility rates as mentioned for option 1.

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Conclusions and recommendations

Overall, the feasibility study has shown that a maternity cash benefit covering all women could cost less than 0.07 per cent of GDP depending on the design of the scheme. A well designed MCB implemented universally can reduce poverty and vulnerability, improve maternal and infant mortality rates, promote the health, nutrition and well-being of mothers and their children, achieve gender equality and advance decent work.

It is strongly recommended to establish an inclusive maternity cash benefit which does not leave out any group of women in Kenya. This would imply to move away from paid maternity leave that is provided through employer liability provisions and move towards a social insurance mechanism (scenario 1). Under scenario 2, a tax-funded universal maternity cash benefit targeting all women outside of the formal sector would ensure universal coverage and complement the maternity protection already granted to the women employed in the formal sector through the existing employer liability provisions.

The feasibility study suggests two possible scenarios for the extension of coverage of maternity cash benefits. In scenario 1, the maternity cash benefit is partially contributory and attached to the existing NHIF schemes (NHI scheme, NHI Enhanced Scheme and Linda Mama), while in scenario 2, the benefit would be fully

non-contributory for all population groups and not be linked to any of the existing schemes. If the maternity benefit design is attached to the current schemes, then the design should be aligned with policy decisions regarding the future extension of these schemes, especially of the health care schemes for which reforms are currently under consideration.

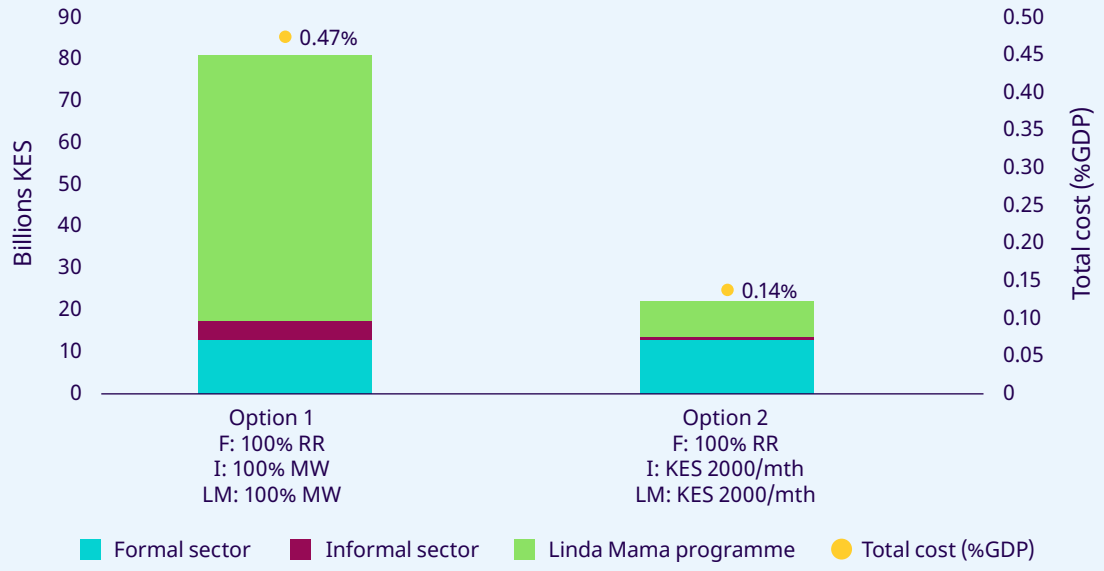
Under scenario 1 (MCB attached to the current schemes), the total cost of the MCB in the year 2024 is estimated 0.47 per cent of GDP for benefit option 1 and 0.14 percent of GDP for benefit option 2 (figure 17). Under scenario 2 (universal scheme) the total cost for the year 2024 is estimated at 0.40 percent of GDP for benefit option 1 and 0.053 per cent of GDP in the year 2024.

Scenario 1

In scenario 1, three distinct groups of pregnant women are considered to benefit from the new maternity cash benefit: (i) NHIF-insured women working in the formal economy, (ii) NHIF-insured women working in the informal economy and pregnant spouses of insured males, and (iii) Linda Mama beneficiaries. Under this scenario, it is assumed that women currently uncovered by any scheme must enrol with the Linda Mama scheme to benefit from the planned non-contributory maternity cash benefit. Under scenario 1, it is further assumed that the employer liability will be replaced by a social insurance scheme, whereby employers and workers in the formal economy, regardless of their sex, would contribute into a separate fund out of which the benefits would be paid. Pregnant women insured by the formal sector branch would continue to receive 100 per cent of their previous salary for 90 days (12.9 weeks) as stipulated in the labour law. Self-employed women enrolled voluntarily including spouses of insured males (informal economy) and Linda Mama beneficiaries will receive for the same duration (90 days) a monthly benefit equal to 100 percent of the minimum wage (option 1) or KES 2000 per month (option 2) respectively.

A summary of the estimated cost for the two benefit options considered under scenario 1 for the three categories of the population - NHIF insured working in the formal economy, NHIF insured working in the informal economy (including spouses of male insured), and Linda Mama beneficiaries – is presented in Figure 17. Option 1 consisted of providing the 100 per cent of replacement rate of the last wage for the formal economy, or the 100 per cent of replacement rate of the minimum wage for informal economy and Linda Mama beneficiaries for a duration of 90 days (12.9 weeks). For option 2 the benefit duration is the same as for option 1 but the benefit amount for workers in the informal economy and Linda Mama beneficiaries is reduced to 2000 KES per month.

Figure 17. Scenario 1: Total cost by category of the population (formal, informal and Linda Mama) in Billion KES and share of GDP as projected for year 2024



Notes: F=Formal, I=Informal, LM=Linda Mama, MW=Minimum Wage.

For **Linda Mama beneficiaries**, cost estimations are based on the assumption that the coverage of Linda Mama will increase from 55.6 per cent of all pregnant women as observed in 2022 to full coverage (89.0 per cent) in 2026, this due to the conditionality mentioned above. The total cost of providing a MCB to Linda Mama beneficiaries in the year 2026 is projected at 0.44 and 0.06 per cent of GDP (2.4 and 0.3 percent of Government revenues) for options 1 and 2 respectively, and to decrease gradually thereafter due to the projected decline of the fertility rate. In absolute terms, the financial resources needed to cover the benefit in the year 2024 for Linda Mana beneficiaries are projected at 65.0 and 8.6 billion KES for options 1 and 2 respectively.

In 2022, an estimated 6.4 per cent of pregnant women were insured with NHIF through their employment in the **formal economy**. The total cost of MCB for these women is projected at KES 12.5 billion for the year 2024, or around 1.0 percent of total insurable earnings in the formal sector (male and female contributors to NHIF). Hence formal economy employers and workers would need to contribute about 1.0 percent of their salaries [37] to the new fund for financing the cost of MCB for pregnant women working in the formal economy. Due to the projected decrease of the fertility rate, the relative cost would decrease thereafter gradually to reach about 0.84 percent of total insurable earnings by 2035.

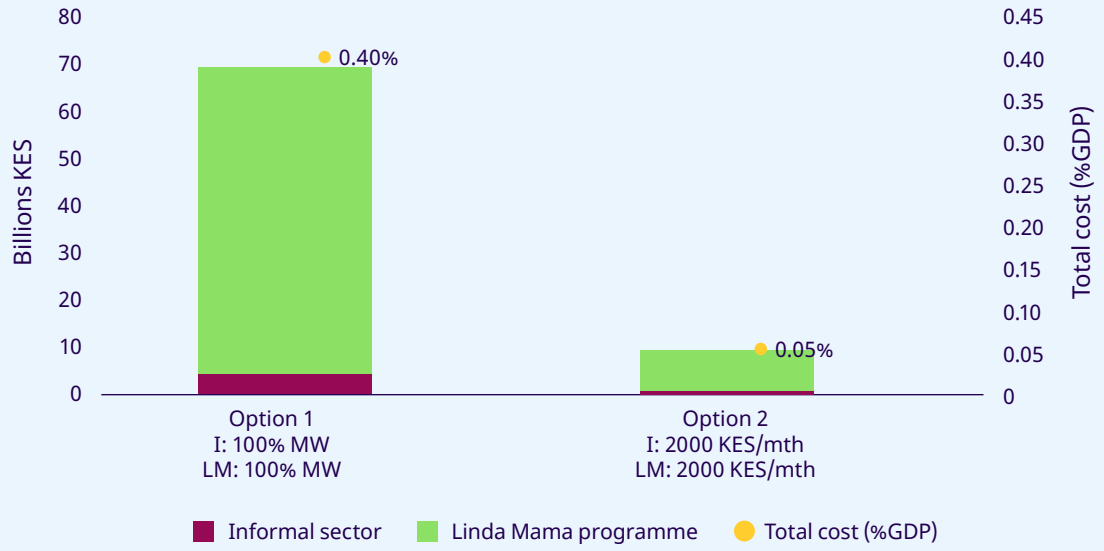
At present, around 4.5 per cent of pregnant women are enrolled in NHIF as beneficiaries through voluntary contributions to the **informal economy** scheme. The total cost of providing MCB to informal economy workers insured in the year 2024 is projected at KES 4.03 and 0.53 billion for benefit options 1 and 2 respectively. It is assumed that the total cost will be split between contributors and the government, with 20 per cent to be financed through contributions of households working in the informal economy and 80 per cent to be subsidized from the national budget. The monthly premium for the NHIB coverage of households in the informal economy would have to be increased by 57.6 KES for option 1 (100 per cent replacement of MW) and 7.6 KES per month for option 2 (Flat rate benefit of KES 2000/month) in the year 2024, assuming no cross subsidies between formal and informal sector. The remaining part of the cost to be subsidized from the national budget is projected at 0.019 and 0.002 percent of GDP (0.10 and 0.014 percent of Government revenues) for options 1 and 2 respectively in the year 2024, and to slowly decrease thereafter due to the projected decrease of the fertility rate.

Scenario 2

Under scenario 2, it is assumed that all women in Kenya, except those in the formal sector insured by NHIS would receive a universal MCB. However, women currently uncovered by any scheme would have to enrol with Linda Mama to become eligible for the MCB. For the formal sector, the employer liability would remain such that pregnant women in the formal economy will continue to receive the same benefit of 100 per cent of their salary for 12.9 weeks as stipulated in the labour law. For other women, the benefit options considered for the financial projections are 100% of the minimum wage during 90 days (option 1) and KES 2000/month during 90 days (option 2).

[37] A contribution rate slightly over 1 percent could be considered in order to account for some margins and to be on the safe side.

Figure 18. Scenario 2: Costs for each of the options in billion KES and as % of GDP, for year 2024



Note: MW=Minimum Wage.

Under scenario 2 the total cost (excluding formal sector) in the year 2024 is estimated at KES 69.0 billion for benefit option 1 and KES 9.1 billion for benefit option 2 (figure 18). In relative terms, the projected cost of the universal MCB in the year 2024 is projected at 0.40 and 0.053 percent of GDP for options 1 and 2 respectively, or 2.2 and 0.3 per cent of Government revenues. The relative cost of the scheme is projected to peak in the year 2026 and decrease thereafter due to the projected decrease of the fertility rate.

The way forward

Overall, the cost projections show that a universal maternity cash benefit is feasible in Kenya. Depending on the chosen design and benefit level, a universal MCB would cost less than 0.07 per cent of GDP or 0.35 percent of total Government revenues (scenario 1/option 2). By comparison, the cost of no breastfeeding was estimated by UNICEF at 0.7 per cent of GDP on average. In addition, it should be noted that under both scenarios it is expected that pregnant women currently uncovered by NHIF and therefore not benefiting from any social health insurance coverage, will increasingly enrol with the Linda Mama scheme due to the conditionality to be attached to the MCB. The higher uptake of Linda Mama membership expected would increase the rate of skilled birth attendance (currently estimated at around 62 per cent) and take Kenya closer to the international target of 90 per cent skilled birth attendance, and thus reduce maternal and child mortality.

Alternative design options were assessed under this feasibility study aiming at providing a factual basis to feed into the national dialogue and stakeholders' discussions. It is recommended that the benefit level of the MCB is set high enough to ensure its effectiveness in improving health and nutrition. As a next step, NHIF needs to engage with stakeholders to decide about the design parameters as well as the complementary financial design that is desired for the MCB scheme in Kenya. Furthermore, decisions regarding the pooling of funds, whether one risk pooling fund or separate funds between different targeted categories of the population are established, have to be carefully made to avoid a situation in which low-income workers would end up subsidizing categories of workers with higher incomes. The other way around should be aimed at to ensure wage redistribution from high-income workers towards lower income workers. This study has considered a separate funds approach. Different contribution flat rates according to different segments of population within the informal economy may also be considered.

Once design options have been decided upon, policy decisions have to be made with regard to the level of government subsidies that can be committed to finance the MCB. This will require considerable advocacy efforts with the Ministry of Finance to identify the fiscal space needed to subsidize the scheme partially (scenario 1) or fully (scenario 2). Under scenario 1, it is assumed that the government will cover 80 per cent of the cost of MCB

for workers in the informal economy and will fully cover its cost for Linda Mama beneficiaries. Under scenario 2, the universal MCB would be financed exclusively through government revenue.

An internal assessment at NHIF may be needed to determine how NHIF needs to adapt its operations to be able to deliver the MCB, including the design of standard operating procedures, adapting the management information system and enrolling women in the Linda Mama scheme for cash transfers. It is further recommended to pilot the planned MCB scheme first and review enrolment and delivery mechanisms. This needs to go hand in hand with awareness campaigns in the pilot areas to ensure women are enrolling with the planned MCB scheme and Linda Mama.

Regardless of the scheme design to be chosen eventually, it is undeniable that the implementation of the new MCB presents a synergetic opportunity to increase the coverage of social health protection schemes at the same time.

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Annex 1

Table A1. Active insured males, formal economy, by age group and year, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	180892	184092	190637	197402	204320	210934	217268	223564	229490	234441	237968	239655	239559	238432	237294
25-29	267139	271865	278573	286777	296072	306559	318020	329485	340841	352493	364099	375681	387238	397691	405528
30-34	256866	261411	263286	265425	268370	272533	278029	285165	293769	303449	314430	326376	338283	350130	362197
35-39	211796	215543	221314	226419	230565	233728	236033	237995	240165	243099	247139	252354	259078	267085	276087
40-44	174066	177145	183588	190126	196798	203357	209758	215872	221234	225650	229033	231483	233513	235658	238475
45-49	151456	154136	159536	165531	171909	178660	185697	192731	199773	206882	213936	220779	227192	232802	237392
50-54	109889	111833	115616	119542	123693	128086	132713	137684	143057	148722	154676	160921	167177	173420	179782
55-59	74207	75520	78451	81495	84644	87911	91267	94651	98038	101498	105175	109096	113329	117866	122633
60-64	27794	28285	29595	31006	32523	34095	35641	37168	38715	40270	41857	43497	45142	46798	48512
65-69	20008	20362	21432	22582	23801	25079	26406	27786	29208	30688	32204	33710	35198	36703	38225
70+	29020	29533	29789	30477	31577	32939	34386	35990	37679	39373	41196	43205	45343	47585	49985
Total	1503131	1529725	1571818	1616783	1664273	1713880	1765218	1818091	1871968	1926565	1981713	2036756	2091051	2144171	2196110

Table A2. Active insured females, formal economy, by age group and year, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	133531	135894	140074	144379	148801	153056	157136	161164	164920	168046	170245	171230	171083	170329	169561
25-29	179100	182269	186968	192310	198063	204323	211018	217639	224189	230930	237679	244514	251449	257818	262717
30-34	187319	190633	193646	196700	200141	204224	208974	214560	220849	227582	234950	242794	250524	258206	266062
35-39	143573	146113	151104	155802	159974	163563	166604	169384	172207	175401	179168	183503	188579	194247	200322
40-44	112024	114005	118328	122815	127542	132373	137300	142232	146854	151001	154568	157573	160297	163023	166069
45-49	83440	84916	87822	91020	94429	98086	101972	105944	110052	114357	118791	123288	127722	131861	135546
50-54	62542	63648	65770	67932	70186	72550	75035	77710	80616	83704	86998	90515	94117	97829	101739
55-59	39654	40355	41915	43486	45087	46741	48440	50160	51872	53600	55425	57372	59480	61747	64156
60-64	15788	16067	16815	17599	18427	19277	20106	20922	21747	22573	23415	24283	25151	26024	26926
65-69	12373	12592	13278	13993	14728	15488	16271	17083	17914	18777	19657	20527	21381	22242	23110
70+	19902	20254	20692	21287	22046	22910	23841	24898	26009	27136	28350	29693	31133	32614	34164
Total	989245	1006747	1036414	1067322	1099426	1132590	1166695	1201695	1237230	1273106	1309246	1345291	1380916	1415940	1450372

Table A3. Active insured males, informal economy, by age and year, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	46820	47649	49327	51059	52825	54519	56127	57676	59077	60205	60973	61306	61250	61001	60775
25-29	59785	60843	62313	64124	66184	68512	71067	73636	76192	78817	81416	83998	86591	88971	90803
30-34	71687	72956	73483	74070	74866	75995	77499	79456	81828	84509	87548	90867	94198	97515	100890
35-39	73676	74980	76994	78782	80242	81359	82173	82861	83614	84625	86016	87814	90140	92913	96034
40-44	62995	64110	66443	68809	71222	73596	75914	78127	80069	81666	82889	83774	84507	85281	86300
45-49	55921	56910	58900	61112	63467	65957	68557	71162	73767	76398	79008	81541	83927	86022	87742
50-54	42934	43693	45176	46715	48340	50054	51855	53792	55888	58101	60426	62866	65318	67766	70262
55-59	57383	58398	60733	63205	65733	68274	70887	73562	76269	79051	81908	84857	88046	91515	95208
60-64	63494	64617	67605	70834	74310	77912	81456	84963	88514	92076	95704	99456	103230	107029	110956
65-69	56301	57297	60311	63556	67001	70609	74347	78231	82235	86412	90693	94944	99149	103405	107703
70+	102874	104694	105580	107933	111773	116572	121656	127302	133257	139245	145708	152797	160339	168259	176726
Total	693870	706146	726865	750199	775963	803361	831536	860767	890710	921105	952288	984222	1016693	1049677	1083400

Table A4. Active insured females, informal economy, by age and year, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	69872	71108	73286	75514	77792	80009	82148	84217	86071	87533	88478	88821	88663	88280	87944
25-29	64052	65186	66873	68788	70848	73091	75487	77852	80188	82595	85010	87459	89937	92198	93921
30-34	67485	68679	69767	70865	72096	73557	75259	77262	79522	81943	84592	87414	90203	92978	95812
35-39	54908	55880	57793	59598	61206	62593	63767	64836	65917	67134	68567	70216	72150	74313	76633
40-44	48121	48972	50833	52761	54792	56869	58986	61114	63114	64912	66461	67763	68938	70107	71406
45-49	46243	47061	48665	50429	52316	54336	56482	58691	60971	63356	65816	68309	70788	73122	75208
50-54	39877	40583	41940	43321	44763	46270	47850	49550	51397	53365	55460	57700	59998	62363	64862
55-59	55174	56150	58382	60676	62984	65295	67668	70106	72565	75066	77618	80256	83116	86225	89554
60-64	58833	59874	62660	65586	68675	71846	74943	77991	81073	84154	87292	90530	93773	97035	100398
65-69	48367	49223	51906	54702	57584	60557	63621	66793	70045	73423	76867	80272	83617	86990	90388
70+	88914	90487	92381	94998	98354	102148	106236	110919	115849	120865	126298	132289	138725	145348	152290
Total	641848	653204	674485	697238	721412	746570	772447	799330	826714	854346	882459	911031	939908	968957	998417

Table A5. Pregnant woman (total) and number of beneficiaries by scheme, 2015-2035

Year	Pregnant women (total)	NHIF formal sector beneficiaries	NHIF informal sector beneficiaries	Linda Mama beneficiaries	Pregnant women not covered
2015	1431890			26	1431864
2016	1437949			670	1437279
2017	1437991			386000	1051949
2018	1439528			563655	875873
2019	1436685			688309	748376
2020	1444293			753004	691289
2021	1455986	94310	65858	797282	498536
2022	1477491	95077	66374	821307	494733
2023	1492960	96110	67019	954778	375053
2024	1509634	97255	67737	1091709	252933
2025	1530830	98751	68694	1235077	128308
2026	1549508	100166	69594	1379748	0
2027	1573432	102027	70807	1400598	0
2028	1588076	103415	71694	1412967	0
2029	1606565	105180	72847	1428537	0
2030	1618957	106668	73816	1438473	0
2031	1636548	108593	75103	1452852	0
2032	1647262	110098	76130	1461034	0
2033	1653992	111314	77000	1465677	0
2034	1661353	112514	77914	1470926	0
2035	1663166	113256	78569	1471341	0

Table A6. Monthly contribution amount by age group, male insured, NHIS formal sector, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	669	715	766	807	848	888	932	979	1095	1161	1231	1305	1382	1464	1549
25-29	776	842	915	974	1033	1089	1153	1221	1431	1515	1604	1698	1798	1905	2018
30-34	948	1029	1119	1191	1264	1333	1410	1492	1645	1742	1844	1952	2067	2189	2318
35-39	1023	1110	1207	1285	1364	1439	1523	1612	1730	1832	1939	2053	2174	2301	2437
40-44	1042	1131	1230	1309	1390	1466	1551	1642	1744	1847	1955	2070	2192	2321	2457
45-49	1065	1156	1256	1337	1419	1497	1584	1677	1821	1928	2041	2161	2288	2423	2566
50-54	1142	1239	1347	1434	1522	1606	1699	1799	1954	2068	2190	2319	2455	2599	2752
55-59	1158	1257	1366	1454	1543	1628	1723	1824	1794	1899	2011	2129	2255	2387	2528
60-64	890	966	1050	1118	1186	1251	1323	1400	1311	1388	1470	1556	1647	1744	1846
65-69	702	762	829	882	936	987	1045	1106	1116	1182	1251	1324	1402	1484	1572
70+	605	657	714	760	807	852	902	956	994	1053	1115	1180	1250	1323	1401
Total	931	1009	1095	1165	1235	1301	1376	1455	1583	1676	1775	1881	1993	2113	2239

Table A7. Monthly contribution amount by age group, female insured, NHIS formal sector, 2021 - 2035

Age	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
18-24	660	717	779	830	881	929	983	1042	1104	1171	1241	1316	1394	1476	1562
25-29	862	936	1017	1083	1149	1212	1282	1358	1438	1522	1612	1706	1807	1914	2027
30-34	957	1038	1129	1202	1275	1345	1423	1507	1595	1689	1788	1893	2005	2123	2247
35-39	1001	1087	1181	1257	1335	1408	1490	1577	1670	1768	1872	1982	2098	2222	2352
40-44	1011	1097	1193	1270	1348	1422	1504	1593	1687	1786	1891	2002	2119	2244	2376
45-49	1068	1160	1261	1342	1424	1502	1590	1683	1782	1887	1998	2115	2240	2372	2512
50-54	1169	1269	1380	1469	1559	1644	1740	1842	1950	2065	2186	2315	2451	2595	2747
55-59	1028	1116	1213	1291	1370	1445	1529	1619	1713	1814	1921	2034	2154	2281	2415
60-64	681	740	804	856	908	958	1013	1072	1135	1202	1272	1347	1426	1509	1598
65-69	581	631	685	730	774	817	864	915	969	1026	1086	1150	1217	1289	1364
70+	550	597	649	691	734	774	820	868	919	973	1030	1091	1155	1223	1295
Total	921	999	1086	1156	1227	1294	1370	1450	1536	1627	1724	1826	1936	2052	2175

Figure A1. Estimated of insured earnings from contributions

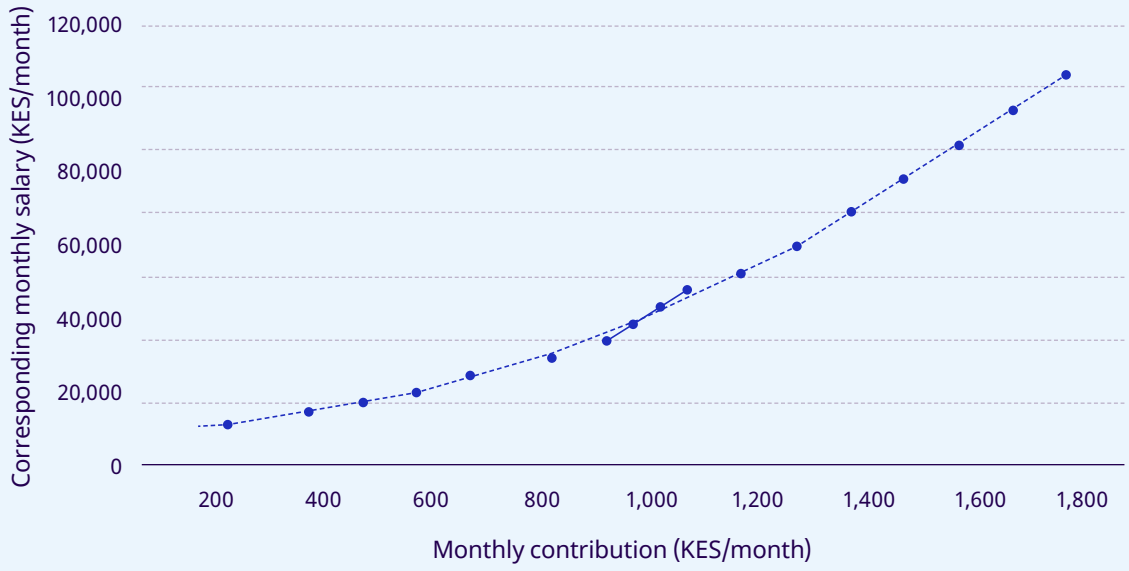

Table A8. Economic variables and salary growth

Year	Total Employment (thousands	GDP at constant prices (KES bln)	GDP growth (% p.a.)	Labour Productivity (in KES 000's per cap.)	Labour productivity growth (% p.a.)	Price Inflation (% p.a.)	Wage inflation (% p.a.)
2009	15,606	5,344	3.3	342.5	-1.04	10.5	9.4
2010	16,312	5,794	8.4	355.2	3.71	4.1	7.9
2011	17,040	6,090	5.1	357.4	0.63	14.0	14.7
2012	17,804	6,368	4.6	357.7	0.08	9.4	9.5
2013	18,600	6,610	3.8	355.4	-0.64	5.7	5.0
2014	19,429	6,942	5.0	357.3	0.54	6.9	7.5
2015	20,273	7,287	5.0	359.4	0.59	6.6	7.2
2016	21,151	7,594	4.2	359.0	-0.11	6.3	6.2
2017	21,797	7,884	3.8	361.7	0.74	8.0	8.8
2018	22,449	8,331	5.7	371.1	2.60	4.7	7.4
2019	23,116	8,757	5.1	378.8	2.08	5.2	7.4
2020		8,735	-0.3		0.84	5.3	6.2
2021		9,392	7.5		0.84	6.1	7.0
2022		9,896	5.4		0.84	7.6	8.5
2023		10,419	5.3		0.84	7.8	8.7
2024		10,985	5.4		0.84	5.6	6.5
2025		11,588	5.5		0.84	5.3	6.1
2026		12,223	5.5		0.84	4.6	5.5
2027		12,895	5.5		0.84	4.9	5.8
2028		13,599	5.5		0.84	5.0	5.9
2029					0.84	5.0	5.9
2030					0.84	5.0	5.9
2031					0.84	5.0	5.9
2032					0.84	5.0	5.9
2033					0.84	5.0	5.9
2034					0.84	5.0	5.9
2035					0.84	5.0	5.9

Table A9. Financial Projections: Scenario 1 / Option 1

Year	2022	2023	2024	2025	2026	2027	2028
Cost for formal economy (NHI)	10604	11636	12519	13473	14398	15504	16626
Cost for informal workers (NHI)	3413	3745	4030	4338	4636	4991	5350
Cost extension Linda Mama	42228	53358	64955	77991	91903	98722	105447
Total cost (KES Millions)	56245	68739	81504	95801	110936	119216	127424
NHI contributions[1]	11287	12385	13325	14340	15325	16502	17696
Government subsidies[2]	44958	56354	68179	81461	95611	102715	109727
Total cost (% GDP)	0.41	0.44	0.47	0.50	0.53	0.51	0.49
Total cost (% Government revenue)	2.36	2.52	2.64	2.79	2.93	2.81	2.68
PAYG cost rate formal economy (%)	1.02	1.00	0.98	0.97	0.95	0.94	0.92
Monthly premium informal economy (KES)	**52.0**	**55.3**	**57.6**	**60.0**	**61.9**	**64.4**	**66.7**

(1) Includes the full cost of the formal sector scheme and 20% of the informal sector scheme

(2) Includes the full cost for the extension of Linda Mama and 80% of the cost of the informal sector scheme

(3) Costs, contributions and subsidies are provided in Million KES

Table A10. Financial Projections - Scenario 1 / Option 2

Year	2022	2023	2024	2025	2026	2027	2028
Cost for formal economy (NHI)	10 604	11 636	12 519	13 473	14 398	15 504	16 626
Cost for informal workers (NHI)	451	495	533	574	613	660	708
Cost extension Linda Mama	7 058	8 592	10 316	12 156	13 058	13 948	14 930
Total cost (KES Millions)	18 114	20 723	23 368	26 203	28 069	30 112	32 265
NHI contributions[1]	10 695	11 735	12 625	13 588	14 521	15 636	16 768
Government subsidies[2]	7 419	8 988	10 743	12 615	13 549	14 476	15 497
Total cost (% GDP)	0.13	0.13	0.14	0.14	0.13	0.13	0.12
Total cost (% Government revenue)	0.76	0.76	0.76	0.76	0.74	0.71	0.68
PAYG cost rate formal economy (%)	1.02	1.00	0.98	0.97	0.95	0.94	0.92
Monthly premium informal economy (KES)	**6.9**	**7.3**	**7.6**	**7.9**	**8.2**	**8.5**	**8.8**

(1) Includes the full cost of the formal sector scheme and 20% of the informal sector scheme

(2) Includes the full cost for the extension of Linda Mama and 80% of the cost of the informal sector scheme

(3) Costs, contributions and subsidies are provided in Million KES

Table A11. Financial Projections - Scenario 2 / Option 1

Year	2022	2023	2024	2025	2026	2027	2028
NHI beneficiaries (informal sector)	66 374	67 019	67 737	68 694	69 594	70 807	71 694
Linda Mama beneficiaries	821 307	954 778	1 091 709	1 235 077	1 379 748	1 400 598	1 412 967
Total beneficiaries	887 681	1 021 797	1 159 446	1 303 771	1 449 342	1 471 405	1 484 661
Total cost (KES Millions)	45 641	57 104	68 985	82 328	96 538	103 713	110 797
Total cost (% GDP)	0.33	0.37	0.40	0.43	0.46	0.44	0.43
Total cost (% Government revenue)	1.91	2.10	2.23	2.40	2.55	2.45	2.33

Table A12. Financial Projections - Scenario 2 / Option 2

Year	2022	2023	2024	2025	2026	2027	2028
NHI beneficiaries (informal sector)	66 374	67 019	67 737	68 694	69 594	70 807	71 694
Linda Mama beneficiaries	821 307	954 778	1 091 709	1 235 077	1 379 748	1 400 598	1 412 967
Total beneficiaries	887 681	1 021 797	1 159 446	1 303 771	1 449 342	1 471 405	1 484 661
Total cost (KES Millions)	6 037	7 553	9 125	10 890	12 770	13 719	14 656
Total cost (% GDP)	0.044	0.049	0.053	0.057	0.061	0.059	0.057
Total cost (% Government revenue)	0.25	0.28	0.30	0.32	0.34	0.32	0.31

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