

ETHIOPIAN DEMOGRAPHY AND HEALTH

CHAPTER 9

POPULATION, HEALTH, AND DEVELOPMENT

Policy, Transformation, and Prospects to 2050

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Chapter 9. Population, Health, and Development: Policy, Transformation, and Prospects to 2050

9.1 Introduction

9.1.1 Population change as a development and public-health process

Population change is neither an autonomous demographic process nor simply a background condition for economic development. Fertility, mortality, migration, education, gender relations, health-system performance, and the distribution of economic opportunities interact over time, shaping both the size of populations and the circumstances in which people live. The demographic transition framework describes the long-run movement from high mortality and fertility toward longer lives and smaller families, but the pace, sequencing, and institutional conditions of that transition differ markedly across countries (Bongaarts, 2017; United Nations Department of Economic and Social Affairs [UN DESA], 2024). For public policy, the relevant question is not only how many people a country will have, but also whether improvements in health, human capital, infrastructure, and opportunity keep pace with demographic change.

Ethiopia offers an important setting for examining these interdependencies. Its demographic history spans declining mortality, changing fertility preferences, expanded schooling, major efforts to increase family-planning and maternal-health coverage, and persistent socioeconomic and geographic inequalities. Success in one domain does not guarantee comparable progress in another. A rise in antenatal care, for example, need not yield equivalent gains in safe delivery or postnatal follow-up; expanded educational access need not translate immediately into reproductive autonomy or freedom from restrictive gender norms. National progress may also coexist with strikingly different regional trajectories (Ethiopian Statistics Service [ESS], n.d.; World Health Organization [WHO], 2016, 2022).

This chapter therefore approaches population policy as an integrated public-health and development undertaking. Rather than treating fertility, maternal health, women's agency, and projections as isolated subjects, it asks how their interconnections—and their uneven distribution—shape Ethiopia's prospects to 2050. This approach is consistent with the Sustainable Development Goals' treatment of health, education, gender equality, and inclusive development as mutually reinforcing commitments, while recognizing that progress is neither automatic nor uniform (UN Women & UN DESA, 2024; UN DESA, 2024).

9.1.2 Fertility transition, reproductive choice, and family planning

The timing and pace of fertility decline have major implications for household welfare, public-service requirements, and population momentum. Across sub-Saharan Africa, fertility transition has generally begun later and progressed more slowly than in several other world regions, even as mortality improvements have expanded the number of people surviving into reproductive ages (Bongaarts, 2017). A fall in births per woman does not therefore imply an immediate reduction in

the total number of births or in national population growth. Population age structure and the number of women entering reproductive ages can sustain substantial growth for decades, a central consideration for long-range development planning (UN DESA, 2024).

Family planning is fundamental to this transition, but its significance extends beyond demographic targets. Access to voluntary, high-quality contraception enables individuals and couples to make informed decisions about whether and when to have children. Modern contraceptive prevalence, unmet need, total demand for family planning, and demand satisfied by modern methods illuminate different aspects of this process; they should not be treated as interchangeable measures. The DHS indicator framework provides standardized definitions for their construction and comparison, while national interpretation requires attention to method mix, eligibility, survey wording, and inequities in access (Croft et al., 2023; ESS, n.d.).

Equity is central to the interpretation of family-planning trends. National averages may conceal large differences by household wealth, education, residence, and region. Moreover, preferences for delaying a subsequent birth (spacing) and ending childbearing (limiting) may change differently over the demographic transition. A policy assessment concerned only with aggregate contraceptive prevalence could overlook these distinctions and the needs of women whose reproductive intentions are not being met. This chapter consequently places the long-run national trajectory alongside socioeconomic and geographic contrasts rather than interpreting a single prevalence measure as sufficient evidence of reproductive choice (Croft et al., 2023; UN Women & UN DESA, 2024).

9.1.3 Adolescent childbearing and the life-course foundations of development

Adolescent childbearing connects population dynamics to educational continuity, reproductive health, gender equality, and the life course. Pregnancy and parenthood during adolescence can coincide with school interruption, constrained economic options, and increased need for responsive maternal and reproductive health services. The significance of these associations depends on context, and descriptive survey measures should not be interpreted as establishing that childbearing alone causes subsequent disadvantage. Nevertheless, the distribution of adolescent childbearing is an important marker of unequal opportunities and access to information and services (WHO, 2016; UN Women & UN DESA, 2024).

A methodological distinction is also essential: the proportion of adolescents aged 15–19 who have begun childbearing is not the same measure as the adolescent birth rate, which counts births per 1,000 adolescent women. Historical and regional comparisons require consistency in both definition and geography. In this chapter, adolescent childbearing is examined as part of the broader relationship between reproductive opportunity, women's education, and regional development, rather than as a stand-alone demographic outcome (Croft et al., 2023; ESS, n.d.).

9.1.4 Maternal health: from service contacts to a completed continuum

Maternal-health improvement requires more than an increase in isolated service contacts. WHO's antenatal guidance emphasizes person-centered care, prevention, timely assessment, and a positive

pregnancy experience; its childbirth and postnatal recommendations similarly emphasize respectful care, clinical quality, and continuity across pregnancy, birth, and the weeks following delivery (WHO, 2016, 2018, 2022). The broader international literature and monitoring framework recognize that maternal survival and well-being depend on functioning systems that connect women to appropriate services when they are needed, including referral and emergency care (WHO et al., 2025).

This distinction motivates the chapter's separate examination of skilled birth attendance and the maternal health care continuum. Skilled birth attendance indicates assistance by a survey-defined skilled provider at delivery; it does not, by itself, establish the quality of care or availability of emergency obstetric services. Continuum completion is a more demanding measure: it requires women to receive the analytically specified sequence of antenatal, delivery, and postnatal care. The gap between contact with any one service and completion of the full sequence is therefore of direct relevance to health-system integration and equity (WHO, 2016, 2018, 2022).

Ethiopia's Health Sector Transformation Plan II framed improvements in access, quality, equity, and system performance as interconnected priorities (Federal Ministry of Health [FMoH], 2020). Against that policy background, the chapter examines both national improvement and the persistence of geographic differences in maternal-care utilization. The objective is not to equate service coverage with maternal mortality reductions, but to identify where progress in individual components of care may or may not translate into sustained access across the full maternal-care pathway (FMoH, 2020; WHO et al., 2025).

9.1.5 Women's education, gender norms, and the exercise of agency

Women's education is a major dimension of human development and a plausible pathway through which health knowledge, economic opportunity, reproductive preferences, and bargaining capacity may change. Yet education should not be treated as a mechanical proxy for empowerment. The social value of schooling depends partly on labor-market opportunities, household relations, institutions, and the local environment in which women exercise choices. Global assessments of gender equality underscore the continuing gap between formal advances and substantive equality in decision-making, safety, and access to resources (UN Women & UN DESA, 2024).

For this reason, the chapter distinguishes educational attainment from several noninterchangeable dimensions of gender power. Acceptance of wife beating under a specified circumstance is an attitudinal measure of restrictive norms, not a measure of actual violence. Partner fear captures a separate adverse experience within intimate relationships. Joint decision-making about a partner's earnings indicates participation in household economic decisions, but it does not necessarily establish independent financial autonomy. Informed sexual and reproductive decision-making represents another dimension of agency and must be interpreted according to its own definition and validation status (Croft et al., 2023; UN Women & UN DESA, 2024).

These distinctions have practical implications. Progress in schooling may coexist with persistent acceptance of restrictive norms; greater joint participation in economic decisions may coexist with partner fear; and a favorable regional average in one dimension may mask a less favorable profile

in another. Consequently, the chapter avoids a single unvalidated empowerment score and instead examines how education, norms, fear, and decision-making vary across Ethiopia's regions. This multidimensional approach is better aligned with the literature's emphasis on substantive agency and with the policy imperative to address unequal power as well as unequal access (UN Women & UN DESA, 2024).

9.1.6 Geographic inequality and the limits of national averages

Place is a fundamental dimension of public health. Access to education, contraceptive services, skilled maternity care, transportation, and economic opportunity depends partly on geographic location and the distribution of institutions and resources. Regional averages can reveal important contrasts, but they also conceal differences within regions and should not be interpreted as evidence of individual-level relationships. Similarly, a regional association between economic decision-making and partner fear cannot establish that women who participate in decisions experience less fear; such an inference would be ecological (Croft et al., 2023; FMoH, 2020).

Ethiopia's changing administrative boundaries add a further challenge. The subdivision of the former Southern Nations, Nationalities, and Peoples' Region means that historical and contemporary regional estimates cannot be compared responsibly without a consistent geographic framework. The chapter draws on its separately validated regional harmonization and survey-estimation work to present contemporary findings for all 14 current regions and to identify where reconstructed historical comparisons are appropriate. This geographic discipline is particularly important for adolescent childbearing, maternal-health coverage, education, and gender-power trends.

9.1.7 Population policy, demographic momentum, and the 2050 horizon

Population projections translate the cumulative effects of fertility, mortality, migration, and age structure into a framework for planning, but they are conditional estimates rather than predictions of inevitable outcomes. The United Nations' World Population Prospects 2024 provides a consistent international basis for considering future national population size and the uncertainty surrounding alternative trajectories (UN DESA, 2024). In rapidly growing populations, momentum can sustain sizeable increases even when fertility declines; the policy response must therefore include both reproductive rights and investments in the services and opportunities required by a growing population.

A comparative perspective sharpens the question. Ethiopia and Viet Nam had broadly similar total populations around 2007–2008, but their subsequent trajectories diverged. This historical convergence and later separation offer an accessible illustration of how distinct demographic transitions can change the scale of future development demands. The comparison should not be construed as a causal experiment or a claim that Viet Nam's history can be replicated by adopting any single policy. Instead, it invites closer consideration of the relationships among education, reproductive autonomy, public health, structural transformation, and the capacity of institutions to respond to population growth (Adugna, 2019; UN DESA, 2024).

The chapter's final section accordingly uses published national population estimates and the UN medium-variant projection through 2050, without constructing new regional or age-specific forecasts. The objective is to relate the preceding quarter-century of empirical demographic and health change to the scale of the public-health and development challenges likely to face Ethiopia over the next quarter-century. This extends the central concern of the earlier Ethiopia 2050 analysis: whether social and economic improvements can advance rapidly and equitably enough to meet the needs of a growing population (Adugna, 2019; UN DESA, 2024).

9.1.8 Chapter contribution and organization

The chapter brings together three analytical perspectives. First, it documents population-related changes through repeated, survey-based measures of fertility, family planning, adolescent childbearing, maternal care, education, and gender power. Second, it assesses the uneven distribution of those changes by wealth and geographic location, with particular attention to the distinction between service contact and continuity, formal schooling and substantive agency, and national averages and regional realities. Third, it situates the historical evidence within the policy and planning horizon to 2050, using an internationally standardized Ethiopia–Viet Nam population comparison.

The resulting synthesis does not assume that all indicators share the same causal mechanism, denominator, or statistical method. Rather, it treats them as complementary windows onto a common policy challenge: converting demographic and social change into equitable improvements in health and human development while preparing institutions for the population they will serve. The following Methods section specifies the indicator-specific sources, validation procedures, analytic techniques, geographic harmonization, and projection conventions used to support that synthesis.

9.2. Methodology

9.2.1. Analytical design and scope

This chapter employs a multi-method, descriptive and comparative analytical design to examine the intersections of population policy, demographic change, reproductive and maternal health, women's education, gender power, geographic inequality, and national population prospects. Its empirical core draws on successive Ethiopia Demographic and Health Surveys (EDHS), principally 2000, 2005, 2011, 2016, and 2024–25. The available survey waves differ by indicator, and some indicators begin later than 2000. Policy and institutional sections draw on relevant policy frameworks and sectoral documents, while the concluding population-prospects section draws on published international population estimates and projections rather than on a newly estimated projection model.

The methodological principle is indicator-specific fitness for purpose: national time-series analysis is used to describe historical change; stratified comparisons identify socioeconomic differentials;

harmonized regional estimates reveal geographic heterogeneity; selected multivariate or spatial analyses are discussed only where separately documented; and external demographic projections establish a forward-looking comparative perspective. These components are complementary, but they do not share a single denominator, statistical model, or causal estimand.

9.2.2. Data sources, survey populations, and measurement

EDHS microdata and their published tabulations provide the principal basis for the historical and contemporary indicators. Eligible populations, reference periods, and survey questions were determined separately for each outcome, including currently married women aged 15–49 for key family-planning indicators; women aged 15–19 for adolescent childbearing; the relevant recent-birth population for skilled birth attendance and maternal-care continuity; and the survey-defined eligible women for educational and gender-power measures. Survey-year labels refer to the corresponding EDHS rounds; 2024–25 denotes the most recent survey period.

Indicators were not pooled indiscriminately. Modern contraceptive prevalence, unmet need, total demand, and demand satisfied by modern methods were treated as distinct family-planning constructs. Spacing and limiting were analyzed as separate motivations or components as defined in the underlying analytic extracts. Maternal health indicators distinguished skilled attendance at delivery from completion of the full antenatal–delivery–postnatal sequence. Educational attainment was examined both as any schooling and, separately, as completed secondary or higher education among women aged 20–24 (primary educational-completion cohort), with ages 15–19 used only as a supplementary comparison.

9.2.3. Reproduction, validation, and analytic provenance

Before undertaking detailed regional or subgroup analysis, the chapter’s underlying analytical program prioritized reproduction of official EDHS national and regional results wherever an equivalent published benchmark was available. Indicator construction, eligibility restrictions, survey weights, regional coding, and denominator definitions were reviewed against those benchmarks. Analyses that passed their previously established certification checks were carried forward as validated inputs; this chapter synthesizes those results rather than rerunning or replacing the certified estimates.

For each output, the analytical record distinguishes observed survey estimates from illustrative values, projections, and estimates held for unresolved validation issues. Existing certified outputs are not reclassified merely because the chapter now integrates them across substantive domains. Where the source registry flags a specific unresolved anchor or definition mismatch, that restriction is retained and reported explicitly.

9.2.4. Estimation of trends, differences, and uncertainty

National trends were presented at observed survey dates, without imputing unobserved annual values. Absolute change was calculated in percentage points as the later survey prevalence minus the earlier prevalence. Relative change, when reported, was calculated as the absolute change

divided by the earlier prevalence. These measures answer different questions and are not interchangeable. Figures connecting successive surveys are visual guides to discrete observations, not evidence of continuously measured annual trajectories.

Survey-based percentages and their available standard errors or 95% confidence intervals were retained from the validated analytical outputs. Where the originating analysis incorporated the complex EDHS sample design, uncertainty estimates reflect the documented weighting, stratification, and clustering specifications. Where confidence intervals are absent from a figure, apparent differences are treated as descriptive and not automatically characterized as statistically significant. Sample sizes and denominators are indicator-specific, and small regional subgroups warrant particular caution.

9.2.5. Family planning and socioeconomic inequality

Family-planning analysis combined national five-wave trajectories with wealth-stratified contrasts, regional comparisons, and examination of spacing versus limiting. For modern contraceptive prevalence, wealth comparisons used DHS household wealth quintiles, a relative within-survey ranking rather than an absolute income measure. Differences between the poorest, middle, and richest quintiles were described in percentage points and, where useful, as ratios; interpretation explicitly distinguished absolute from relative inequality.

Demand satisfied by modern methods was interpreted as the proportion of total family-planning demand met by modern contraception, not as an additive component of modern contraceptive prevalence. Because family-planning indicators may have distinct numerators and denominators, comparisons were confined to like-defined measures. National and regional descriptions emphasized the contrast between long-run expansion, recent plateau or reversal, and continuing distributional inequalities.

9.2.6. Adolescent childbearing and maternal-health services

Adolescent childbearing was measured as the proportion of women aged 15–19 who had begun childbearing, according to the applicable EDHS definition. It was distinguished from the adolescent birth rate, which uses births per 1,000 adolescent women. Geographic changes were expressed as percentage-point differences between comparable observed survey estimates.

Skilled birth attendance (SBA; maternal-health sentinel MH01) was analyzed using national trends, source-reported uncertainty where available, and paired regional comparisons. Historical changes were interpreted with attention to provider classification and reference-period comparability. SBA was not equated with institutional delivery, emergency obstetric capacity, or quality of care.

Maternal-health continuum completion (MH02) was evaluated separately for 2011, 2016, and 2024–25. It captures completion of the analytically defined sequence of antenatal, delivery, and postnatal care, rather than coverage of any single contact. The precise antenatal threshold, delivery criterion, postnatal timing, and eligible denominator follow the certified MH02 construction and

should be cross-referenced in the indicator specification accompanying the final tables. National and 14-region trajectories were compared descriptively, including nonmonotonic changes.

9.2.7. Geographic harmonization and spatial interpretation

Contemporary regional reporting uses Ethiopia's 14 current administrative regions, with the national estimate presented separately. Historical surveys used earlier administrative geographies, including the former Southern Nations, Nationalities, and Peoples' Region (SNNPR). Comparisons involving Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia therefore depend on the previously established historical regional reconstruction and harmonization rules. The chapter uses the certified harmonized outputs where available and does not infer successor-region histories from the former SNNPR aggregate without documented reconstruction.

Regional heatmaps, ranked dot plots, paired-year plots, and scatterplots describe the magnitude, direction, and spatial heterogeneity of observed estimates. A region's position in an aggregate scatterplot does not establish an individual-level relationship. Geographic differences may reflect compositional variation, service environments, sampling uncertainty, and historical disruptions; descriptive visualizations alone cannot identify the causal contributions of these factors.

9.2.8. Women's education, gender norms, and agency

Women's educational transformation was examined using national and regional measures of schooling and completed secondary or higher education. The primary completed-secondary analysis used women aged 20–24 to reduce the incompleteness inherent in measuring completed schooling among younger adolescents. Historical comparisons respected available survey waves and geographic harmonization.

Gender-power analyses retained four conceptually distinct sentinel indicators: NEG1, acceptance of wife beating when a wife goes out without informing her husband; NEG2, partner fear; POS2, joint decisions concerning husband's or partner's earnings; and POS1, informed sexual and reproductive health decision-making. Higher NEG1 and NEG2 values indicate less favorable outcomes, whereas higher POS1 and POS2 values indicate more favorable outcomes within their specific constructs. NEG1 is an attitudinal norm rather than a direct measure of violence; NEG2 is not interchangeable with an intimate-partner-violence prevalence estimate; and POS2 reflects joint participation rather than independent financial control.

The POS1 series was not treated as certified because the relevant workbook retained an unresolved anchor-mismatch flag. The national and 14-region visual synthesis therefore emphasized NEG1, NEG2, and POS2, with POS1 discussed only subject to its documented qualification. No unvalidated composite empowerment index was constructed. Cross-indicator regional contrasts were interpreted as ecological descriptions, not evidence of individual associations or causal pathways from schooling to agency.

9.2.9. Policy synthesis and national population prospects

Population-policy, governance, financing, and implementation material was synthesized narratively from policy and institutional sources. These sections identify plausible policy pathways and monitoring needs but do not estimate the causal effects of particular interventions on fertility, mortality, or development. Associations between demographic change and public-health conditions are interpreted in their historical and institutional context.

The final projection section (9.11) uses published national population series for Ethiopia and Viet Nam. Historical comparisons employ internationally disseminated midyear population estimates, while the prospective series adopts the United Nations World Population Prospects 2024 medium variant for 2025–2050. The comparison focuses on total national population only: no new age-specific, regional, urban–rural, or alternative-scenario projections are estimated in this chapter. Historical estimates and future projections are graphically distinguished, and the approximate Ethiopia–Viet Nam population crossover in 2007–2008 is identified from annual historical series.

Projected changes are summarized as absolute additions (millions) and relative growth between selected years. Viet Nam serves as a historical and developmental comparator, not a counterfactual or a causal control. UNFPA, UNDP, World Bank, and related sources may inform contextual interpretation, but their series are not combined indiscriminately with the UN projection as though they represented a single model.

9.2.10. Interpretation, limitations, and reproducibility

The chapter integrates estimates produced for different populations, survey periods, and substantive questions. Consequently, apparent coherence across indicators should not be mistaken for evidence that they measure the same process. Additional limitations include recall and reporting error, changing questionnaire or provider definitions, sampling variability in smaller regions, boundary changes, the ecological nature of regional comparisons, and uncertainty inherent in long-range population projections. Temporal associations do not establish that policy or education caused the observed changes.

Reproducibility rests on the chapter’s certified indicator extracts, validation records, survey-specific denominators, geographic crosswalks, and figure/table source annotations. The final editorial pass should ensure that each exhibit identifies its sentinel code or source extract, population at risk, survey years, geographic specification, and any publication-status qualification. Where a chapter exhibit uses a definition not reproduced in this integrated methods text—especially MH02—the validated indicator specification remains authoritative.

9.3 Population Policy

9.3.1 1993: A national population policy linking demographic and socioeconomic development

The National Population Policy adopted in 1993 represented a foundational statement of the relationship between demographic change and development. Its central purpose was to harmonize population growth with economic and social development, while addressing the gap between rapid demographic expansion and low productivity. Its objectives also encompassed environmental protection, population distribution, women's status, morbidity, mortality, and access to family-planning information and services. Thus, it should not be retrospectively reduced to a contraception policy (TGE, 1993; Central Statistical Agency [CSA] & ICF International, 2012).

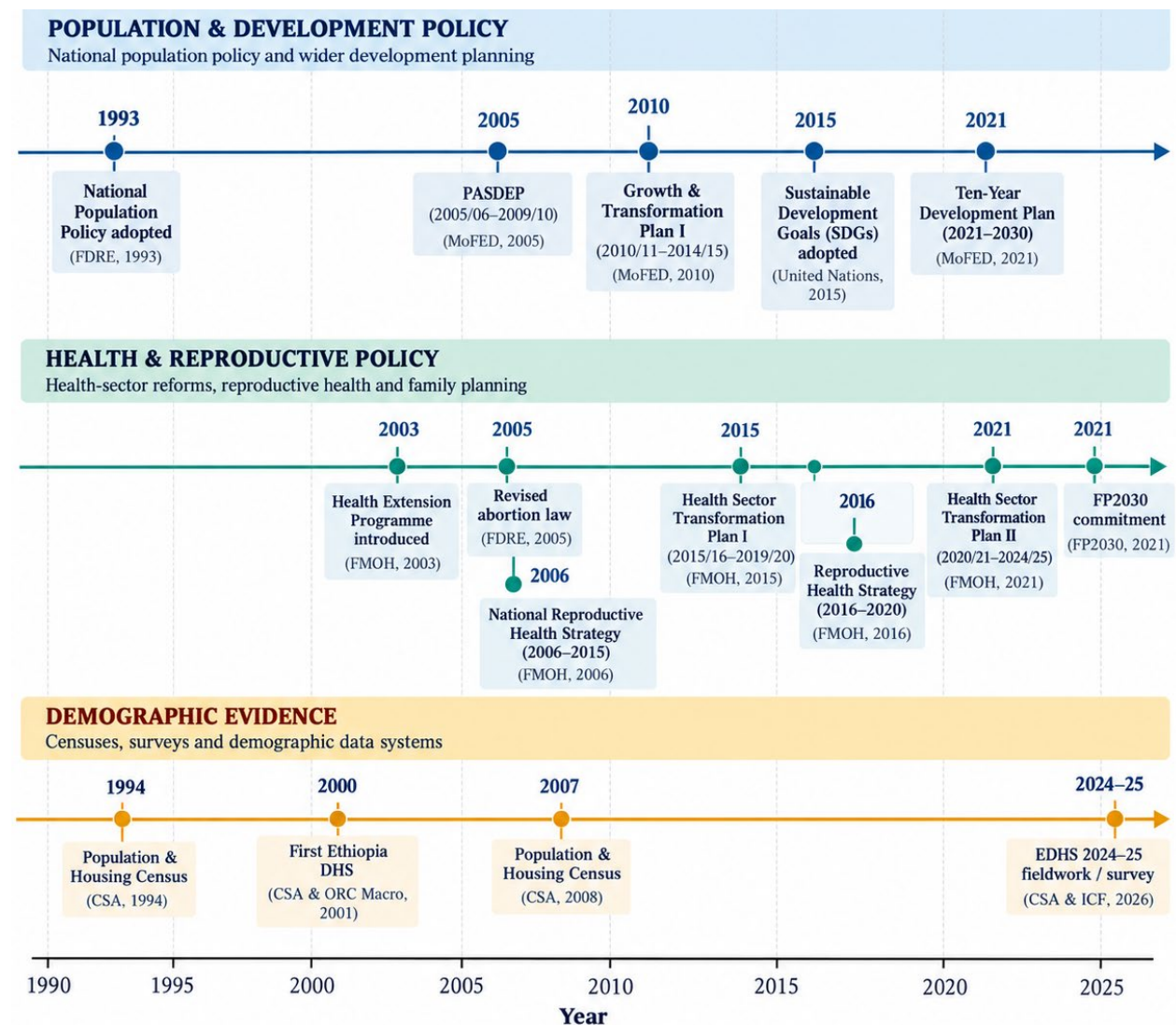
The policy's breadth is especially relevant to this chapter. Population size and age structure affect educational demand, labor-force entry, urban infrastructure, land use, and public-service provision. Conversely, education, health, employment, and gender relations shape fertility preferences and the ability to exercise reproductive choice. The policy articulated these interdependencies, but a policy statement alone cannot establish implementation coverage or effectiveness. The subsequent milestones should therefore be read as institutional and planning developments, not automatic evidence that the 1993 objectives were achieved (TGE, 1993; World Bank, 2007).

9.3.2 Policy, implementation, and evidence

Figure 9.1 depicts three interconnected but analytically distinct developments. The population and development track records the evolution from an explicit population policy toward economy-wide development planning. The health track captures the operational institutions and reproductive-health strategies through which some population-policy objectives could be pursued. The evidence track marks major investments in demographic enumeration and repeated household surveys. These tracks should not be interpreted as a sequence in which one event necessarily caused the next. Rather, their juxtaposition reveals changing policy instruments, implementing systems, and the statistical foundations of planning (Transitional Government of Ethiopia [TGE], 1993; Organisation for Economic Co-operation and Development [OECD], 2020; Ethiopian Statistics Service [ESS], n.d.-a, n.d.-b).

The timeline begins in 1993, but neither population planning nor population measurement began then. The 1984 census, for example, predates the figure. The selected 1993–2025 window is useful because it encompasses the original national policy, subsequent development plans, health-system expansion, and the latest EDHS cycle (ESS, n.d.-a, n.d.-b).

Figure 9.1. Major milestones in Ethiopia’s population policy and planning, 1993–2025



Note. The three tracks distinguish population and development policy, health and reproductive-health policy, and demographic evidence. Dates refer to adoption, programme introduction, plan commencement, or survey/census year; the figure is selective, not a causal evaluation. See the cited discussion and reference list for individual milestones.

9.3.3 1994, 2000, and 2007: Building—and complicating—the demographic evidence base

The 1994 Population and Housing Census furnished a post-policy population enumeration and a geographic basis for planning. The 2000 Ethiopia Demographic and Health Survey (EDHS) then established the first nationally representative DHS benchmark for fertility, contraception, maternal and child health, and related social indicators. Unlike a census, the EDHS relies on sampled households and survey-weighted estimates; its strength is detailed behavioral and health

measurement rather than complete enumeration. The two instruments therefore complement rather than substitute for one another (ESS, n.d.-a, n.d.-b; CSA & ORC Macro, 2001).

The 2007 Population and Housing Census was the next census milestone and remains the latest completed national census listed by ESS. Its inclusion in a policy-history timeline is justified as an institutional event, but should not be mistaken for an endorsement of the accuracy of all resulting geographic counts. In a setting of substantial administrative boundary change and a long interval without a new census, the choice of denominator, geographic harmonization, and projection assumptions require explicit scrutiny. This is especially important when interpreting current regional rates or reconciling historical and successor-region series (ESS, n.d.-a).

9.3.4 2003 and 2006: Moving from policy intent toward community delivery and reproductive-health strategy

The Health Extension Programme, introduced in 2003, was a major change in the operational reach of primary health care. By bringing health-promotion, disease-prevention, and basic family-health functions closer to communities through health posts and extension workers, it created a service platform relevant to contraception, maternal care, hygiene, and health education. Sources sometimes date launch or scale-up to 2004; the figure uses 2003 for programme introduction, consistent with WHO's retrospective account. These different dates should not be conflated with a single nationwide completion date (World Health Organization [WHO], n.d.; Assefa et al., 2020).

In March 2006, the Ministry of Health launched a national Reproductive Health Strategy. The strategy provided a more focused framework for fertility and family planning, maternal and newborn health, young people's reproductive health, and related priorities. This milestone illustrates the translation of the broader 1993 population-policy agenda into a sector-specific policy instrument. It did not, however, exhaust the full population-policy agenda, which also encompassed migration, employment, and the population–environment relationship (United Nations Population Fund [UNFPA], 2006; TGE, 1993).

9.3.5 2005–2015: Population concerns embedded in national development planning

The Plan for Accelerated and Sustained Development to End Poverty (PASDEP), covering 2005/06–2009/10, placed demographic concerns within an economic-development framework. One of its strategic pillars explicitly concerned balancing economic development and population growth, while others emphasized women's potential, infrastructure, employment, and human-resource development. This makes PASDEP a legitimate population-policy milestone even though it was not a standalone population-policy document (Federal Democratic Republic of Ethiopia [FDRE], 2011; OECD, 2020).

The Growth and Transformation Plan I (GTP I), covering 2010/11–2014/15, extended national planning toward structural transformation, industrial development, infrastructure, employment, education, and health. Its relevance to population policy lies in the connections between

demographic change and the capacity of the economy to generate livelihoods and services. The figure therefore distinguishes the 2010 development-plan milestone from the 2006 reproductive-health strategy: the former concerns economy-wide development priorities, while the latter concerns health-sector implementation (FDRE, 2011; OECD, 2020).

9.3.6 2015 and 2016: Health-sector transformation and renewed reproductive-health priorities

Ethiopia launched Health Sector Transformation Plan I (HSTP I) in October 2015. Its transformation agenda emphasized quality and equity, woreda-level performance, the health workforce, and information systems. For population planning, the importance of HSTP I was not merely that it continued health-service expansion, but that it shifted greater attention toward the quality, distribution, and management of services. It therefore represents an implementation-system milestone, not a replacement for national population policy (WHO Regional Office for Africa, 2015).

The National Reproductive Health Strategy 2016–2020 renewed sector-specific objectives, including family planning, maternal and newborn health, and adolescent and youth reproductive health. It is important to distinguish its adoption from the 2006 strategy: the two reflect successive strategic periods, not duplicate labels for the same event. Their existence demonstrates policy continuity and adaptation, while observed changes in contraceptive prevalence or fertility must still be analyzed with appropriate attention to confounding, survey comparability, and regional heterogeneity (Federal Ministry of Health [FMoH], 2016; DeMaria et al., 2022).

9.3.7 2021: A longer development horizon and renewed health commitments

The Ten-Year Development Plan, 2021–2030, articulated a broader national vision of prosperity and structural transformation. Its emphasis on human capital, economic opportunity, institutions, urban development, and inclusive growth situates population change within the country’s longer-term development trajectory. Its 2021 commencement is a planning-period milestone; it should not be interpreted as the first year in which the underlying development issues emerged (Ministry of Planning and Development [MoPD], 2021).

Within health, HSTP II covered 2020/21–2024/25, while Ethiopia’s FP2030 commitment was documented in 2021. They are adjacent but distinct initiatives. HSTP II provided a health-system strategy, whereas FP2030 set out commitments related to voluntary family planning, financing, contraceptive availability, adolescent pregnancy, and unmet need. The timeline groups them at 2021 for visual economy, but the narrative preserves their different institutional roles and reference periods (FMoH, 2021; FP2030, 2021).

9.3.8 2024–25: A new survey benchmark, not a new census

The EDHS 2024–25 marks the most recent survey milestone in the figure and provides a contemporary empirical benchmark for assessing population and reproductive-health conditions. It is particularly valuable when read alongside the 2000 EDHS, allowing long-run comparisons in fertility, contraceptive use, maternal and child health, and women’s circumstances, subject to indicator-specific definitions and survey comparability (ESS, n.d.-b).

This survey must not be mistaken for a new national census or a direct solution to all population-denominator problems. Census-based population reconstruction, changing regional boundaries, and the distinction between survey denominators and projected population totals remain central methodological concerns. In particular, the four successor regions of the former SNNPR cannot simply be inserted into a historical series without explicit geographic harmonization. The evidence track thus conveys both progress in data availability and continuing limits in demographic measurement (ESS, n.d.-a, n.d.-b).

9.3.9 Synthesis: What the timeline demonstrates—and what it cannot establish

Across the three tracks, the figure depicts a transition from an explicit demographic policy statement toward multiple development and sectoral instruments, accompanied by an expanding—but imperfect—demographic evidence base. The 1993 policy established a broad population–development rationale; PASDEP, GTP I, and the Ten-Year Development Plan embedded population-related concerns in national development; the Health Extension Programme and reproductive-health strategies developed delivery mechanisms; and censuses and EDHS rounds supplied data for monitoring (TGE, 1993; OECD, 2020; MoPD, 2021; ESS, n.d.-a, n.d.-b).

No milestone by itself demonstrates that a policy achieved its objectives. Nor does temporal proximity establish that a programme caused an observed decline in fertility or improvement in contraceptive use. Rigorous evaluation would require evidence on implementation intensity, financing, geographic reach, relevant counterfactuals, and changes in population composition. The value of Figure 9.1 is consequently interpretive: it provides a documented institutional chronology against which the empirical findings of this book can be assessed.

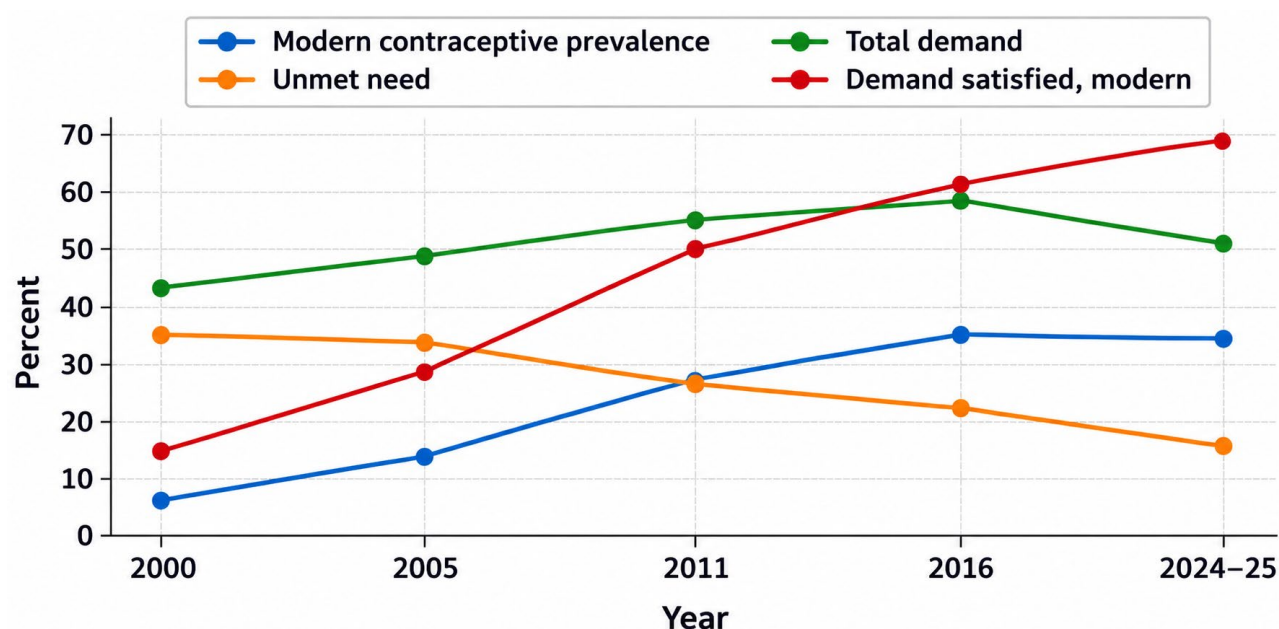
For the remainder of Chapter 9, the timeline also supplies a useful safeguard against overconcentration on family planning. Contraception is an important component of population policy, but the original policy and later development frameworks additionally encompass human capital, migration, urbanization, employment, women’s opportunities, and the relationship between population and natural resources. These dimensions warrant substantive treatment alongside—not beneath—the family-planning evidence (TGE, 1993; FDRE, 2011; MoPD, 2021).

9.4 Family Planning in Ethiopia, 2000–2024/25

9.4.1 Expansion, plateau, and changing demand

Modern contraceptive prevalence increased from 6.3% in 2000 to 35.3% in 2016, followed by a near plateau at 34.5% in 2024–25. Over the full period, unmet need declined from 35.2% to 15.4%. Total demand, however, declined after 2016, from 58.2% to 50.9%. Demand satisfied by modern methods rose to 67.7% in 2024–25, a ratio that must be interpreted alongside the shrinking demand denominator rather than as unambiguous evidence of additional contraceptive uptake.

Figure 9.2. National family-planning transition across five EDHS surveys: currently married women aged 15–49. Demand satisfied is a percentage of total demand, unlike the other plotted prevalence indicators.



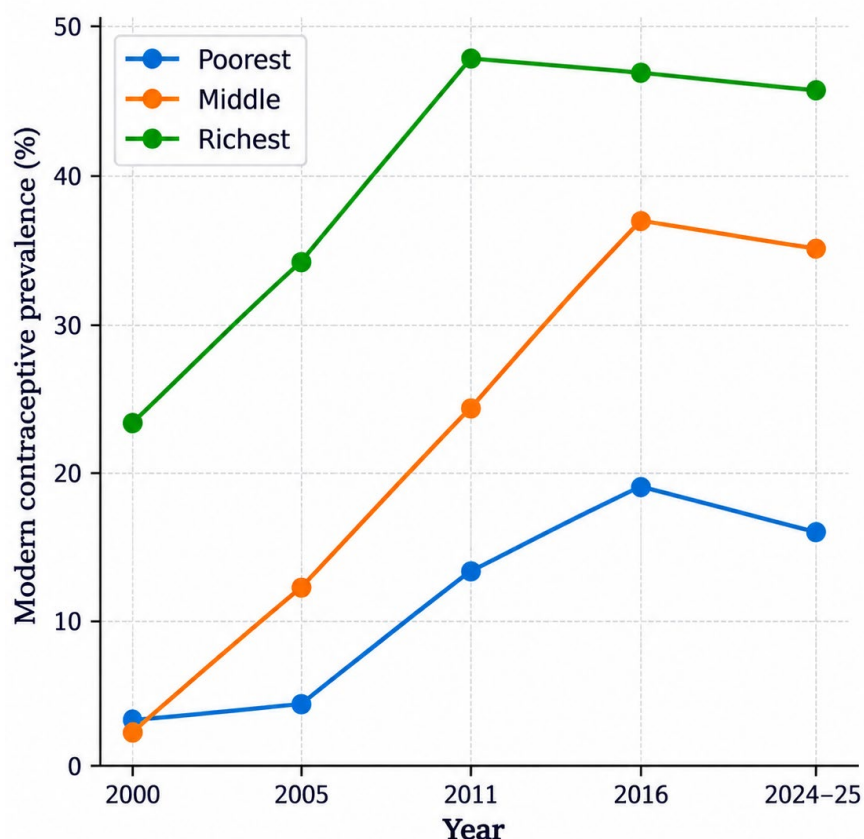
Note: Modern contraceptive prevalence represents the percentage of currently married women aged 15–49 using a modern contraceptive method. Unmet need refers to women who wish to delay or avoid pregnancy but are not using contraception. Total demand includes women using contraception and those with an unmet need for family planning. Demand satisfied by modern methods is the percentage of total family planning demand met through modern contraceptive use. Between 2000 and 2024–25, modern contraceptive prevalence increased substantially, while unmet need declined. Demand satisfied by modern methods rose markedly, despite a decline in total demand after 2016. The indicators have different denominators and should not be interpreted as additive percentages. Values are rounded for graphical presentation. Source: Ethiopia Demographic and Health Surveys (EDHS), 2000, 2005, 2011, 2016, and 2024–25.

9.4.2 Unequal socioeconomic gains

National mCPR growth concealed persistent wealth disparities. In 2024–25, prevalence among the poorest quintile was 16.2%, compared with 46.6% among the richest. The absolute richest–poorest

gap widened from approximately 20.1 percentage points in 2000 to 30.4 points in 2024–25. Poorest-quintile prevalence also declined from 19.5% in 2016 to 16.2% in 2024–25. These point estimates should not be treated as statistically significant changes without survey-design-based inference.

Figure 9.3. Modern contraceptive prevalence by selected household wealth quintiles, EDHS 2000–2024/25: currently married women aged 15–49 in each quintile.

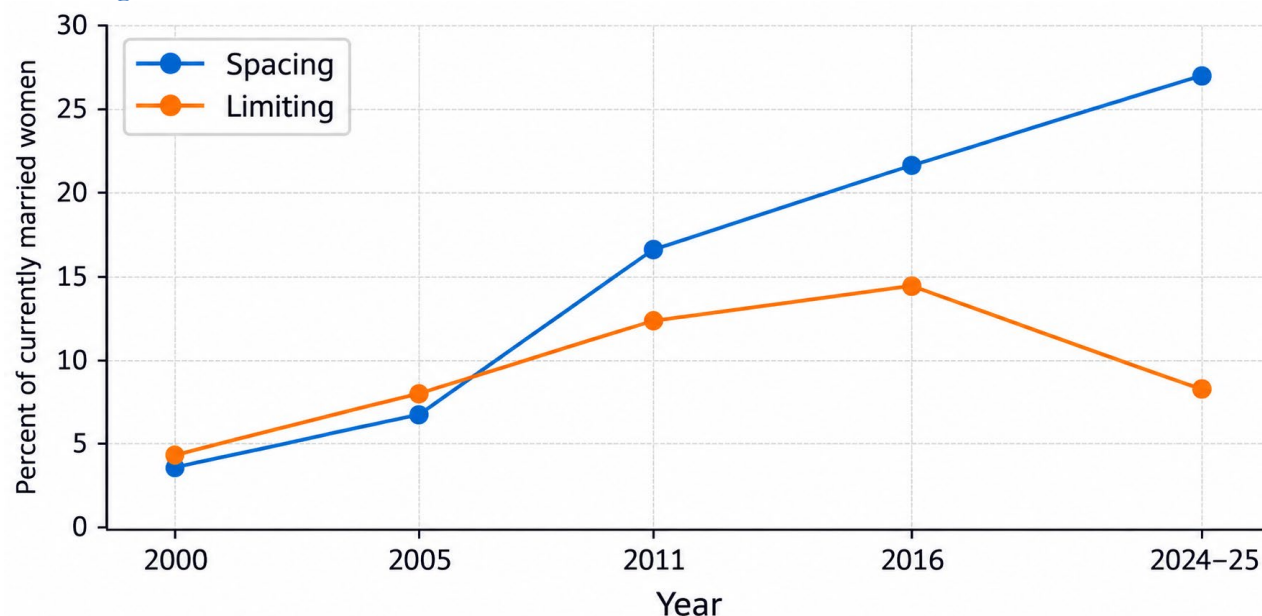


Note: Modern contraceptive prevalence represents the percentage of currently married women aged 15–49 using a modern contraceptive method. Wealth quintiles are based on the DHS household wealth index, which ranks households according to relative socioeconomic status within each survey. The figure presents trends for the poorest, middle, and richest wealth quintiles. Modern contraceptive prevalence increased substantially across all three groups between 2000 and 2016, followed by modest declines in 2024–25. Despite improvements, substantial wealth-related inequalities persisted: prevalence among the richest women remained nearly three times that of the poorest women in 2024–25. The widening absolute gap between the richest and poorest quintiles over the study period highlights the continuing challenge of equitable access to modern family planning. Values are rounded for graphical presentation. Source: Ethiopia Demographic and Health Surveys (EDHS), 2000, 2005, 2011, 2016, and 2024–25.

9.4.3 Spacing increasingly dominates met need

The composition of met need shifted strongly toward birth spacing. National spacing prevalence increased from 3.7% to 27.1% of currently married women, whereas limiting prevalence increased through 2016 and subsequently declined to 8.4% in 2024–25. Spacing accounted for approximately 76.3% of total met need in 2024–25, compared with 46.3% in 2000. The share of spacing among women with met need and its prevalence among all married women are distinct indicators and should not be conflated.

Figure 9.4. Prevalence of met need for spacing and limiting, EDHS 2000–2024/25: currently married women aged 15–49.



9.4.4 Regional contrasts and unequal access

Regional trajectories were highly heterogeneous. The reconstructed historical SNNPR geography is used for comparable 2000–2024/25 change analysis, while the 2024–25 successor regions are treated separately in contemporary rankings. Previously reviewed regional core estimates show large gains in Amhara and Oromia but persistently very low contraceptive prevalence in Somali and Afar. Regional wealth analyses likewise indicate that growth in coverage and reductions in inequality do not necessarily occur together. In particular, the richest–poorest mCPR gap widened substantially in Oromia.

9.4.5 Method mix, program choice, and service delivery

Contraceptive method mix varied substantially across regions. The four analytical groups—injectables, implants, pills, and other modern methods—provide a consistent description of concentration, not a direct measure of informed choice or stock availability. Some regions became more concentrated in fewer method categories even as mCPR increased. The historical method-mix comparisons should be interpreted particularly cautiously in Somali because the number of unweighted modern-method users is small.

9.4.6 Geographic shift in spacing composition

Across the 11 historically comparable regional geographies, the share of met need attributable to spacing increased between 2000 and 2024–25. This common directional shift should not obscure enormous differences in the prevalence of met need: a high spacing share can coexist with extremely low contraceptive coverage. In Somali, the underlying number of women with met need is particularly small, making the exact composition estimate unstable.

9.4.7 Implications for population policy

The policy evidence suggests four complementary priorities. First, track contraceptive coverage and unmet need together rather than interpreting either alone. Second, disaggregate progress by wealth and geography because national averages conceal substantial disadvantage. Third, distinguish the prevalence of met need from the composition of met need, especially when assessing spacing and limiting. Fourth, examine method availability and informed preference before equating diversification with improved service quality. None of these descriptive analyses establishes causality or demonstrates that the observed mix of reproductive intentions reflects an optimal policy outcome.

Table 9.1. Core national family-planning indicators, EDHS 2000–2024/25

Indicator	2000	2005	2011	2016	2024–25
Modern contraceptive prevalence	6.3	13.9	27.3	35.3	34.5
Unmet need	35.2	33.8	26.3	22.3	15.4
Total demand	43.2	48.5	54.9	58.2	50.9
Demand satisfied by modern methods	14.6	28.7	49.8	60.6	67.7

Note. Values are percentages. Demand satisfied uses total demand as its denominator; other indicators are prevalences among currently married women aged 15–49.

9.5 Regional Dimensions of Ethiopia's Family-Planning Transition, 2000–2024/25

9.5.1 Introduction: National progress, unequal regional transformation

Ethiopia's family-planning transition between 2000 and 2024–25 was substantial but geographically uneven. National modern contraceptive prevalence (mCPR) among currently married women aged 15–49 increased from 6.3% to 34.5%, while unmet need for family planning declined from 35.2% to 15.4%. Over the same period, total demand for family planning increased more modestly, from 43.2% to 50.9%, whereas demand satisfied by modern contraceptive methods rose sharply from 14.6% to 67.7%. Together, these changes describe a transition in which improvements in contraceptive coverage and demand satisfaction substantially exceeded the growth in total demand.

The national averages conceal striking regional differences in both the pace and extent of transformation. By 2024–25, regional mCPR ranged from 1.6% in Somali to 55.7% in Sidama—a difference of 54.1 percentage points. Ethiopia's family-planning transition cannot therefore be adequately characterized by a single national trajectory.

This analysis uses two complementary geographic frameworks. Long-term changes are examined across 11 historically comparable geographies, including reconstructed Southern Nations, Nationalities and Peoples' Region (SNNPR). Contemporary differences are examined across 14 current regions, allowing Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia to be analyzed separately. This distinction preserves historical comparability while revealing inequalities obscured within the former SNNPR aggregate.

9.5.2 Regional trajectories of modern contraceptive prevalence

Among the historically comparable regions, Amhara experienced one of the most pronounced transformations: mCPR increased from 6.6% in 2000 to 43.3% in 2024–25, a gain of 36.7 percentage points. Reconstructed SNNPR increased from 5.0% to 37.0%, while Oromia rose from 4.3% to 31.0%. Much of Ethiopia's contraceptive transition thus occurred in regions that began with very low modern-method use.

Other regions recorded more moderate increases: Benishangul-Gumuz from 8.5% to 31.2%, Gambella from 12.3% to 34.2%, and Tigray from 9.3% to 25.2%. Addis Ababa increased from 34.3% to 47.3%, reflecting a comparatively advanced starting position rather than an absence of progress.

Afar increased only slightly, from 7.4% to 8.8%, while Somali declined from 2.4% to 1.6%. The small absolute difference in Somali should not be interpreted as a statistically established decline without confidence intervals and sample-size assessment. These contrasting endpoints nonetheless demonstrate the exceptionally limited modern-method use in Somali in 2024–25.

The historical comparisons reveal a differentiated transition: large increases in Amhara, Oromia, and reconstructed SNNPR; intermediate gains elsewhere; and persistently low mCPR in Afar and Somali. The connecting segments in the historical exhibit join two observed survey endpoints; they do not represent continuously observed annual trends.

9.5.3 The contemporary geography of contraceptive prevalence

The 2024–25 regional configuration reveals even greater differentiation. Sidama recorded the highest mCPR (55.7%), followed by South West Ethiopia (54.2%), Addis Ababa (47.3%), and Amhara (43.3%). Somali (1.6%), Afar (8.8%), and Central Ethiopia (19.0%) occupied the lower end of the distribution.

The four successors of historical SNNPR show why geographic disaggregation matters. Although reconstructed SNNPR recorded an aggregate mCPR of 37.0% in 2024–25, its constituent regions ranged from 19.0% in Central Ethiopia to 55.7% in Sidama—a 36.7-percentage-point difference. The historical aggregate therefore conceals both some of the country’s highest contraceptive coverage and areas of substantially lower coverage.

Historical harmonization is indispensable for valid longitudinal comparison, but it can conceal within-region heterogeneity. Current administrative boundaries offer a more detailed contemporary picture, yet cannot be projected backward onto earlier surveys without appropriate geographic reconstruction.

Table 9.2. Modern contraceptive prevalence in the four SNNPR successor regions, EDHS 2024–25

Current region	mCPR (%)
Sidama	55.7
South West Ethiopia	54.2
South Ethiopia	28.5
Central Ethiopia	19.0

Note. These are current-region estimates. The reconstructed SNNPR value (37.0%) is a separate, historically comparable aggregate, not a fifth current region.

9.5.4 Unmet need: Uneven reductions and persistent disadvantage

National unmet need declined substantially, but regional experience varied. Amhara fell from 39.9% to 14.8%, a 25.1-percentage-point reduction; Oromia declined from 36.1% to 14.3%; and reconstructed SNNPR from 35.1% to 17.9%. Benishangul-Gumuz, Gambella, Harari, Tigray, Addis Ababa, and Dire Dawa also recorded declines.

Unmet need did not decline everywhere. Afar increased from 11.5% to 12.7%, while Somali rose from 13.3% to 22.2%. The Somali pattern is particularly consequential because exceptionally low modern contraceptive prevalence coexists with relatively high unmet need, indicating a gap between expressed reproductive intentions and contraceptive use.

In 2024–25, Somali had the highest unmet need (22.2%), followed by Central Ethiopia (21.6%), South Ethiopia (21.3%), and Gambella (20.3%). Addis Ababa had the lowest unmet need (10.2%), followed by South West Ethiopia (11.4%). Unmet need is not simply the inverse of contraceptive prevalence; it reflects women who wish to postpone or avoid pregnancy but are not using contraception, subject to survey classification and eligibility rules.

9.5.5 Total demand and modern demand satisfaction

National total demand increased from 43.2% to 50.9%, whereas demand satisfied by modern methods increased from 14.6% to 67.7%. The contrast indicates that a major dimension of the transition was the increased proportion of demand met by modern methods, not merely expansion in total demand.

In Amhara, modern demand satisfaction increased from 14.0% to 73.9%; in Oromia, from 10.1% to 67.2%; and in reconstructed SNNPR, from 12.2% to 65.7%. These gains occurred alongside more moderate changes in total demand.

In 2024–25, South West Ethiopia recorded the highest demand satisfied by modern methods (82.7%), followed by Sidama (79.4%), Addis Ababa (77.2%), and Amhara (73.9%). Somali presented the sharpest contrast: total demand reached 23.8%, but only 6.9% was satisfied by modern methods. Afar had similarly low total demand (21.5%) but substantially higher modern demand satisfaction (40.7%).

The joint interpretation of mCPR, total demand, unmet need, and demand satisfaction helps distinguish low use associated with limited demand from low use associated with a substantial shortfall in meeting existing demand. These are related but noninterchangeable measures.

9.5.6 Regional inequality and the limitations of national averages

The national mCPR of 34.5% lies below levels in Sidama, South West Ethiopia, Addis Ababa, and Amhara, but far above those in Somali and Afar. National modern demand satisfaction of 67.7% likewise masks a range from 6.9% in Somali to 82.7% in South West Ethiopia. National averages therefore combine regions at markedly different stages of the family-planning transition.

Oromia merits particular attention because of its large population. Its mCPR rose from 4.3% to 31.0%, representing substantial progress, although its 2024–25 estimate remained below the national average. Its precise contribution to national change cannot be determined from regional prevalence estimates alone; a decomposition would require indicator-specific survey-weighted denominator shares.

The historical SNNPR aggregate and the current successor-region estimates serve different analytical purposes. The former protects comparability across survey periods; the latter reveals contemporary disparities that would be concealed by treating the former region as internally uniform.

9.5.7 Implications for population policy and family-planning programming

The regional evidence suggests that a uniform national family-planning strategy may be insufficient. Regions with high modern contraceptive prevalence and demand satisfaction, such as Sidama and South West Ethiopia, face different programmatic circumstances from Somali, where low modern-method use coexists with high unmet need. Central Ethiopia and Sidama likewise should not be assigned identical priorities merely because both belonged to historical SNNPR.

Geographically differentiated programming should consider contraceptive prevalence, unmet need, total demand, and demand satisfaction together. Where unmet need is high, availability, accessibility, acceptability, and continuity of contraceptive services warrant attention. Where total demand is low, fertility preferences, reproductive intentions, and the social context of contraceptive decision-making may be especially relevant.

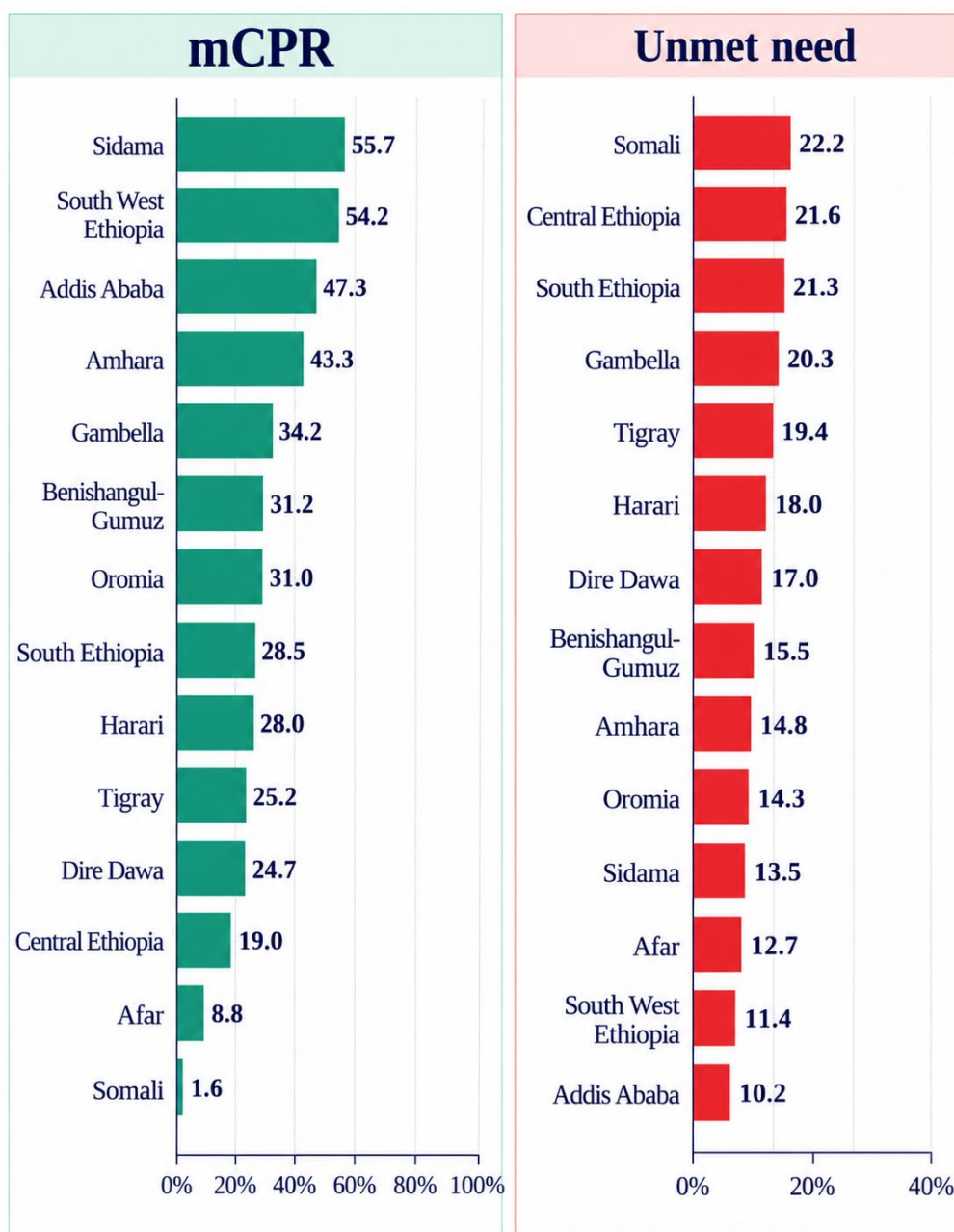
These descriptive estimates do not establish causal explanations. Service availability, education, wealth, urbanization, gender norms, and fertility preferences may contribute to geographic differences, but their independent roles require further investigation. The regional analysis identifies where disparities are concentrated, not why they arise.

9.5.8 Synthesis: One national transition, multiple regional pathways

Between 2000 and 2024–25, Ethiopia achieved substantial improvements in modern contraceptive prevalence and demand satisfaction, alongside a marked reduction in unmet need. Yet these achievements emerged from very different regional trajectories. Amhara, Oromia, and reconstructed SNNPR experienced substantial gains; Addis Ababa maintained comparatively high coverage; and Afar and Somali remained at very low levels of modern-method use.

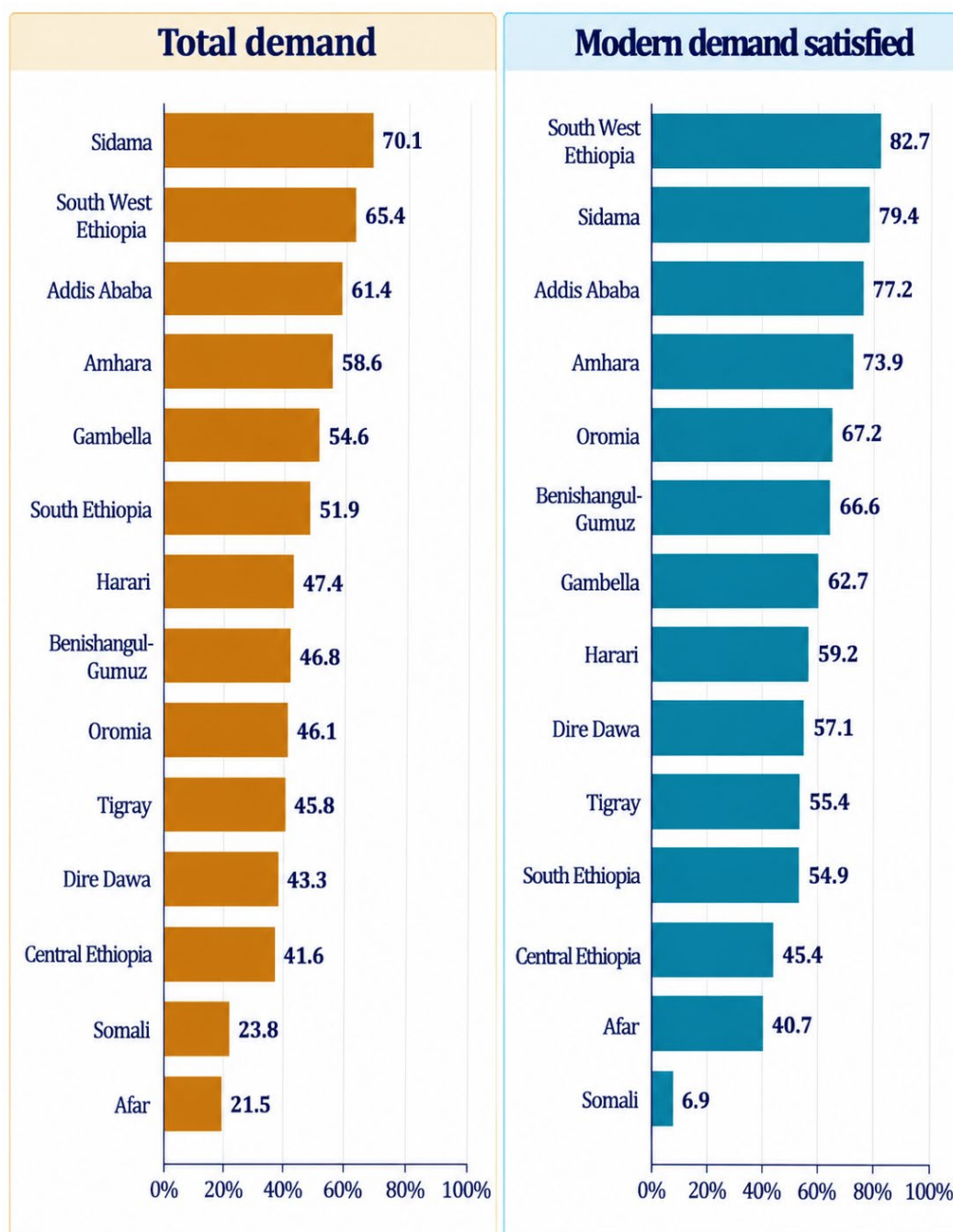
The contemporary configuration adds another dimension: the four successor regions of historical SNNPR differ sharply, demonstrating that historical administrative aggregates can obscure important geographic inequalities. The policy challenge is not only to sustain national progress but to understand and address the distinct reproductive-health circumstances of regions that remain behind. Ethiopia has experienced one national family-planning transition, but that transition has followed multiple regional pathways.

Figure 9.5. Regional variation in modern contraceptive prevalence and unmet need for family planning across Ethiopia's 14 current regions, EDHS 2024–25.



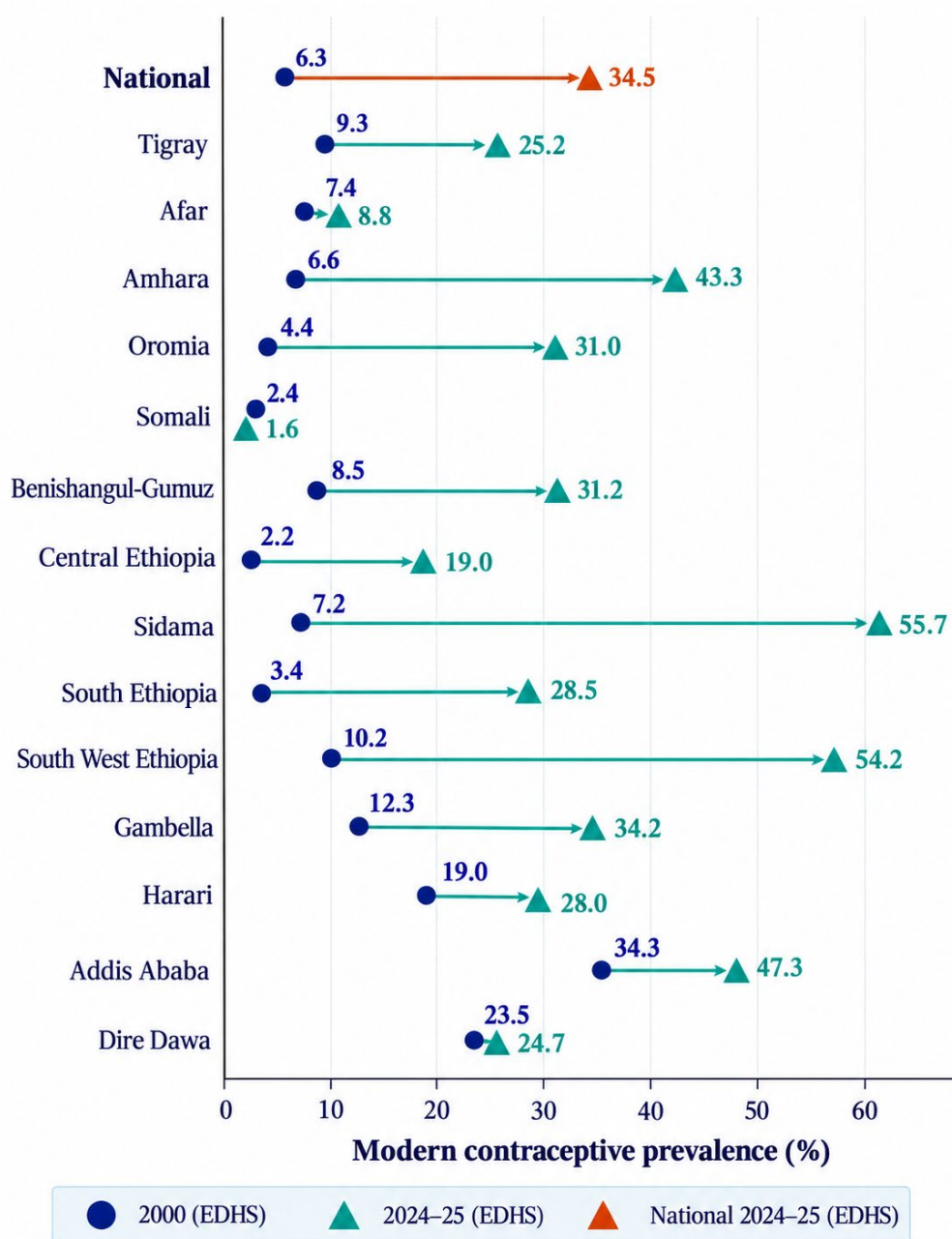
Note: The left panel presents modern contraceptive prevalence (mCPR), defined as the percentage of currently married women aged 15–49 using a modern contraceptive method. The right panel presents unmet need for family planning, defined as the percentage of currently married women aged 15–49 who wish to postpone or avoid pregnancy but are not using contraception, according to DHS classification criteria. Regions are ranked independently in descending order for each indicator. The four successor regions of the former Southern Nations, Nationalities and Peoples’ Region (SNNPR)—Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia—are presented separately. All values are percentages. Rankings reflect point estimates and do not necessarily indicate statistically significant differences between regions. Source: Author’s analysis of the Ethiopia Demographic and Health Survey (EDHS) 2024–25, using certified regional family-planning estimates.

Figure 9.6. Regional variation in total demand for family planning and demand satisfied by modern contraceptive methods across Ethiopia’s 14 current regions, EDHS 2024–25.



Note: The left panel presents total demand for family planning, defined as the percentage of currently married women aged 15–49 who are using any contraceptive method (modern or traditional) or have an unmet need for family planning. The right panel presents demand satisfied by modern methods, defined as the percentage of total family-planning demand met through modern contraceptive use. Regions are ranked independently in descending order for each indicator. The four successor regions of the former Southern Nations, Nationalities and Peoples’ Region (SNNPR)—Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia—are presented separately. All values are percentages. Rankings reflect descriptive point estimates and do not necessarily indicate statistically significant differences between regions. Source: Author’s analysis of the Ethiopia Demographic and Health Survey (EDHS) 2024–25, using certified regional family-planning estimates.

Figure 9.7. Changes in modern contraceptive prevalence among currently married women aged 15–49, National and 14 current regions, Ethiopia, EDHS 2000–2024/25.



Note: Modern contraceptive prevalence (mCPR) is defined as the percentage of currently married women aged 15–49 who are using a modern contraceptive method. Dark-blue circles represent EDHS 2000 estimates, while teal triangles represent EDHS 2024–25 estimates. The national 2024–25 estimate is highlighted in orange. Connecting lines indicate the direction and magnitude of change in percentage points between the two observed survey estimates; they do not imply a continuous or linear trend. The four successor regions of the former Southern Nations, Nationalities and Peoples’ Region (SNNPR)—Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia—are presented separately for both periods using geographically reconstructed historical estimates. All values are percentages. Regional differences and temporal changes are descriptive and do not necessarily indicate statistical significance. Source: Author’s analysis of the Ethiopia Demographic and Health Surveys (EDHS) 2000 and 2024–25, using certified national and geographically harmonized regional mCPR estimates.

9.6 Adolescent Childbearing in Ethiopia: Geographic Change, 2000–2024/25

9.6.1 Executive synthesis

The proportion of women aged 15–19 who had already had a live birth or were pregnant with their first child fell from 16.3% in 2000 to 9.9% in 2024–25 (-6.4 percentage points; -39.3% relative change). The decline was not uniform over time: prevalence was slightly higher in 2005, declined by 2011, remained broadly similar in 2016, and declined again by 2024–25. Regional trajectories demonstrate that national improvement coexists with uneven geographic progress.

9.6.2 Indicator, data and analytical approach

Source: A01_HISTORICAL_CERTIFICATION.xlsx, EVIDENCE worksheet; five EDHS rounds, 75 survey–geography observations (National and 14 current regions per round). Indicator: percentage of women aged 15–19 with at least one live birth OR currently pregnant with their first child. This is adolescent childbearing prevalence, NOT the adolescent birth rate per 1,000 women. Survey estimates and reported confidence intervals are taken from the certified panel; percentage-point changes and regional rankings are derived from the estimates. Historical observations for four former SNNPR successor regions rely on a documented GIS cluster crosswalk. The panel reports structural validation gates as passed, but its regional status is “estimated—structural gates passed”; national estimates are benchmark-certified.

9.6.3 National trend

Figure 9.8. National adolescent childbearing prevalence, EDHS 2000–2024/25. Points are observed survey estimates, not interpolations.

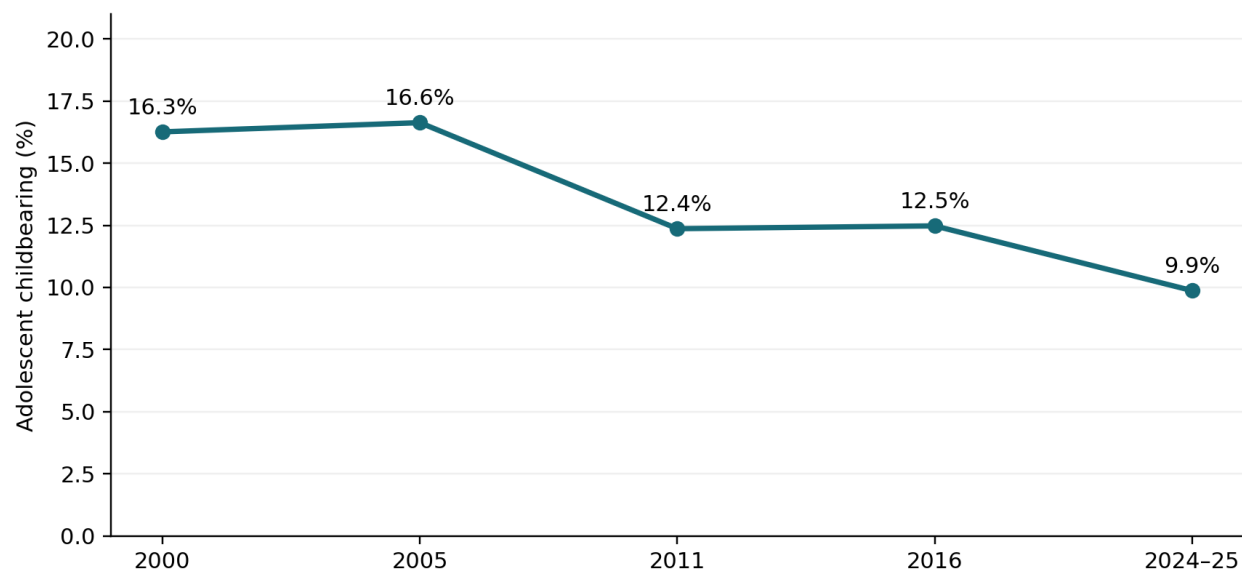
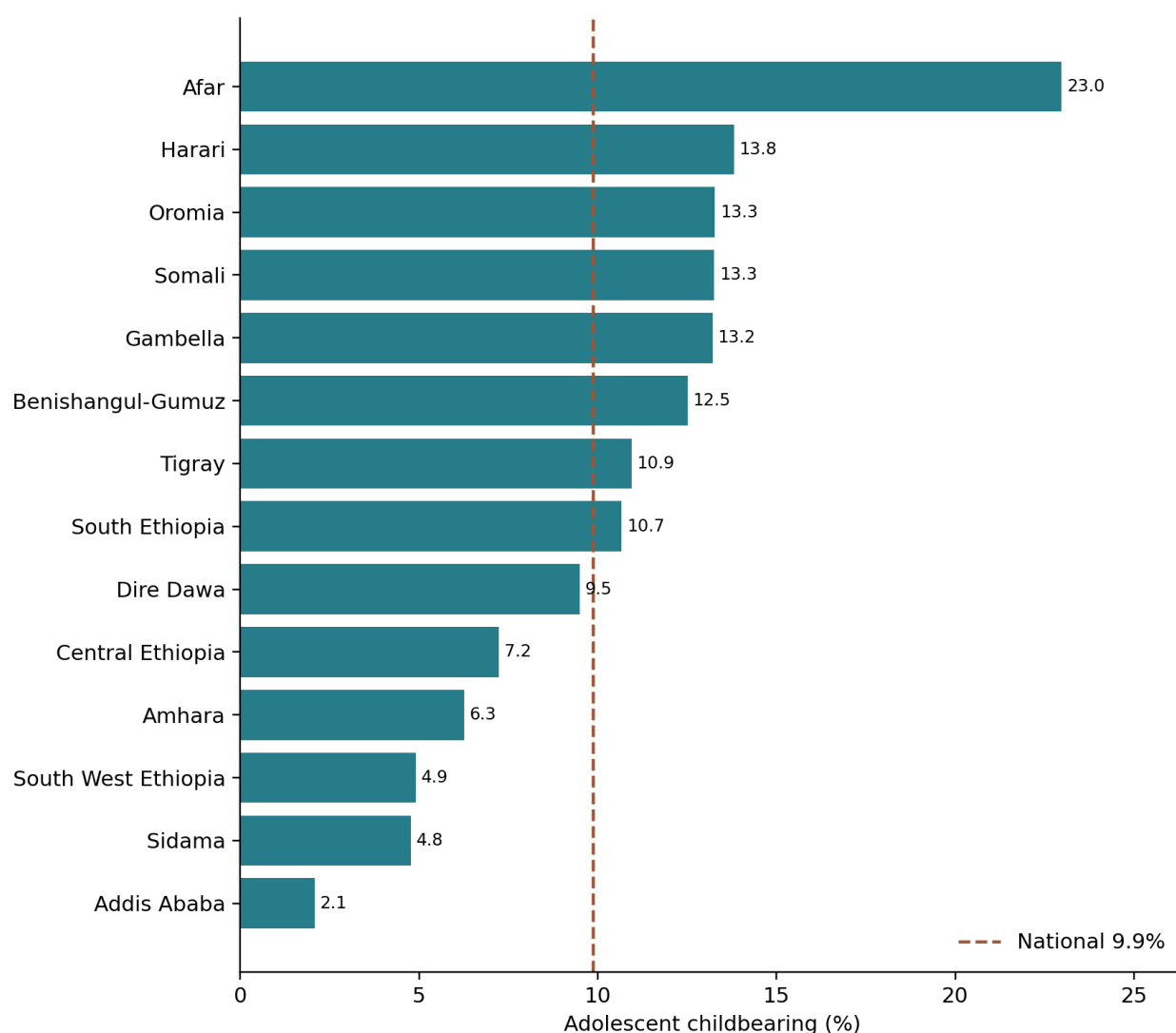


Table 9.3. National prevalence and uncertainty. Confidence intervals are supplied by the certification workbook; they are not reconstructed from rounded values.

EDHS survey	Prevalence (%)	95% CI (%)	Unweighted n
2000	16.26	14.36–18.16	3,584
2005	16.63	14.68–18.58	3,252
2011	12.36	10.49–14.24	3,835
2016	12.48	10.52–14.43	3,498
2024–25	9.87	8.31–11.44	4,841

9.6.4 Regional geographic distribution in 2024–25

Figure 9.9. Regional adolescent childbearing prevalence, 2024–25. Dashed reference line denotes the national estimate.



The 2024–25 regional distribution ranges from 2.1% in Addis Ababa to 23.0% in Afar, a spread of

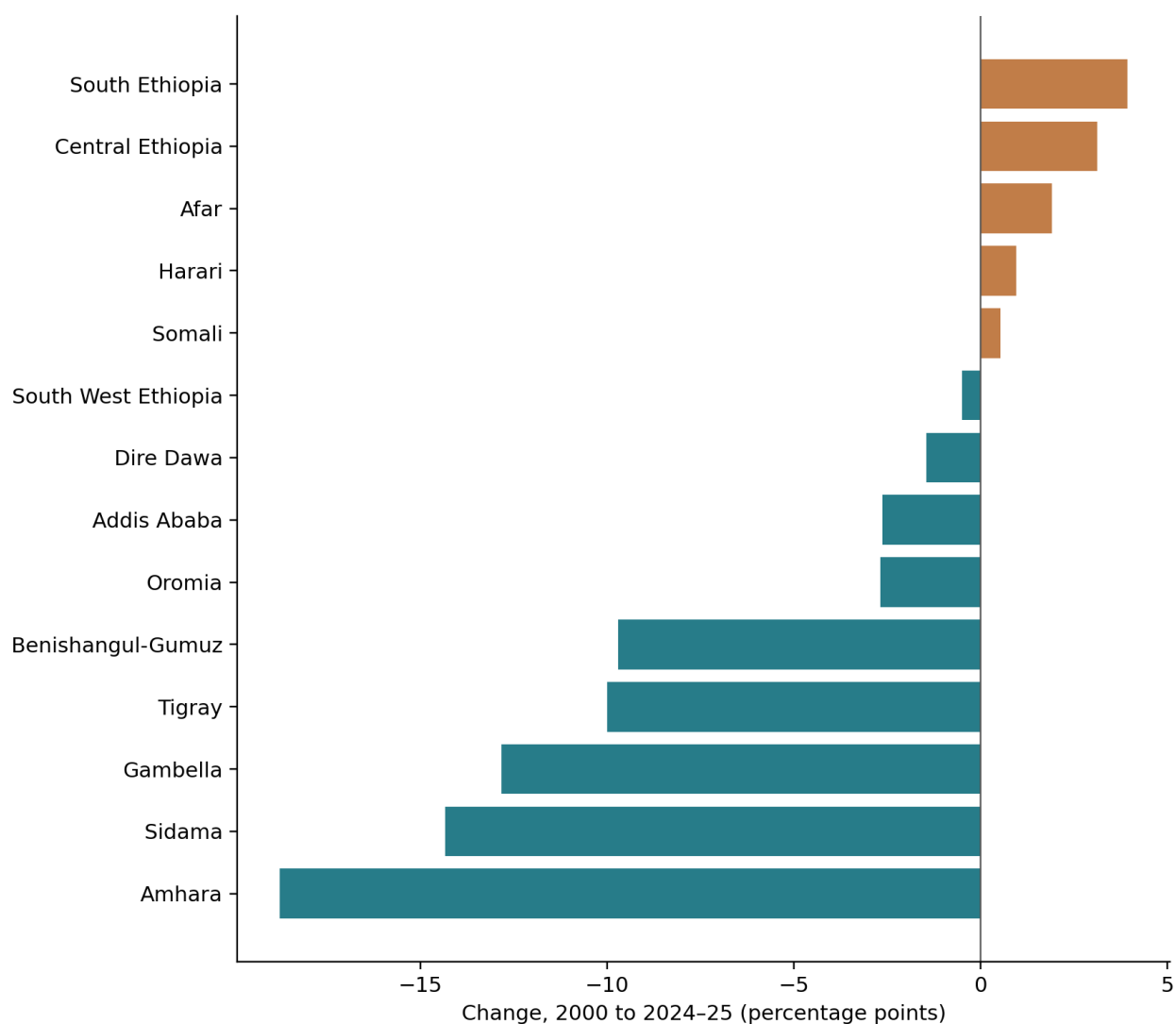
20.9 percentage points. These are descriptive geographic contrasts; differences are not assumed statistically significant without appropriate design-based comparisons.

Table 9.4. Adolescent childbearing prevalence (%) by current region and EDHS survey. Δ pp = 2024–25 minus 2000. Regional historical reconstructions are subject to the certified GIS crosswalk and survey-sample precision.

Geography	2000	2005	2011	2016	2024–25	Δ pp
National	16.3	16.6	12.4	12.5	9.9	-6.4
Afar	21.1	20.3	15.1	23.4	23.0	+1.9
Harari	12.9	21.9	14.5	16.9	13.8	+1.0
Oromia	16.0	19.0	15.8	17.0	13.3	-2.7
Somali	12.7	19.5	19.2	18.7	13.3	+0.5
Gambella	26.0	30.8	20.5	16.2	13.2	-12.8
Benishangul-Gumuz	22.2	27.1	19.3	13.6	12.5	-9.7
Tigray	20.9	14.7	12.0	12.0	10.9	-10.0
South Ethiopia	6.7	14.2	7.7	14.7	10.7	+3.9
Dire Dawa	11.0	13.7	7.6	12.5	9.5	-1.5
Central Ethiopia	4.1	5.0	1.5	9.3	7.2	+3.1
Amhara	25.0	20.3	11.6	8.3	6.3	-18.8
South West Ethiopia	5.4	18.5	17.2	3.3	4.9	-0.5
Sidama	19.1	10.1	10.8	9.5	4.8	-14.3
Addis Ababa	4.7	4.3	2.6	3.0	2.1	-2.6

9.6.5 Geographic change and trajectory heterogeneity

Figure 9.10. Change in adolescent childbearing prevalence by region, 2000 to 2024–25. Negative values indicate declines.



Note: The figure presents changes in adolescent childbearing prevalence, expressed in percentage points, between the 2000 and 2024–25 Ethiopia Demographic and Health Surveys (EDHS). Adolescent childbearing refers to the percentage of women aged 15–19 who have begun childbearing, generally defined as having had a live birth or being pregnant with their first child. Changes are calculated as the 2024–25 prevalence minus the 2000 prevalence. Negative values (teal bars extending left of zero) indicate reductions in adolescent childbearing, whereas positive values (brown bars extending right of zero) indicate increases. The vertical reference line at zero indicates no change.

The figure reveals pronounced geographic heterogeneity. Amhara experienced the largest reduction, approximately 19 percentage points, followed by Sidama, Gambella, Tigray, and Benishangul-Gumuz. In contrast, South Ethiopia and Central Ethiopia registered the largest increases, approximately 4 and 3 percentage points, respectively, followed by Afar, Harari, and Somali. These divergent trajectories suggest that national trends conceal substantial differences in the pace and direction of change across regions.

Geographic comparability requires particular caution. Ethiopia's regional administrative boundaries changed substantially between 2000 and 2024–25, especially following the subdivision

of the former Southern Nations, Nationalities, and Peoples' Region (SNNPR). Consequently, historical estimates for Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia must be based on appropriately reconstructed 2000 geographic populations to support direct comparison with their 2024–25 successor regions. The figure should be interpreted as representing changes within harmonized geographic units only if such reconstruction was performed and validated. Otherwise, differences involving successor regions may partly reflect changes in geographic composition rather than genuine temporal change.

The bars represent descriptive differences in survey estimates, not statistically tested changes. Because confidence intervals are not displayed, neither the statistical significance of individual regional changes nor the significance of differences between regions can be determined from this figure alone. Differences may also be influenced by survey sampling variability, particularly in regions with smaller adolescent samples. Finally, the indicator measures the proportion of adolescents who have begun childbearing; it should not be interpreted as the adolescent birth rate, which is expressed as births per 1,000 women aged 15–19.

Source: Ethiopia Demographic and Health Surveys (EDHS), 2000 and 2024–25; regional estimates and percentage-point changes derived from the chapter's analytical dataset.

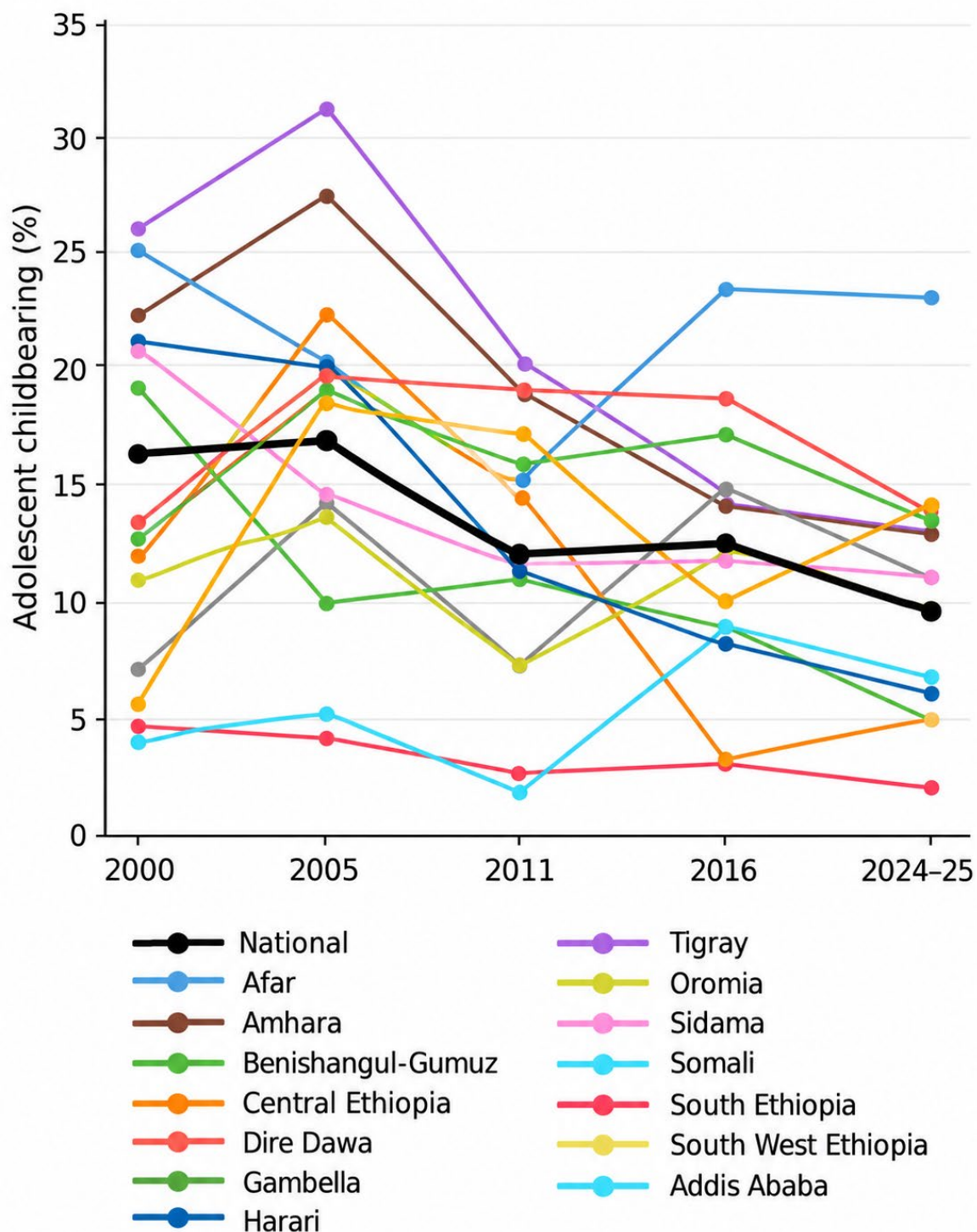
The largest absolute decline occurred in Amhara (-18.8 percentage points), whereas South Ethiopia experienced the least decline or largest increase (+3.9 percentage points). Regional differences in starting levels matter: a large percentage-point decline does not necessarily imply a low final prevalence. Inference about temporal changes requires survey-design-aware variance estimates and, where relevant, covariance information.

9.6.6 Interpretation for population policy

Adolescent childbearing provides a behavioral and life-course complement to modern contraceptive prevalence, skilled birth attendance, and the maternal-care continuum. Its geographic distribution cannot be interpreted as a direct consequence of any one service indicator. Differences in marriage timing, schooling, contraceptive access, social norms, and adolescent fertility preferences may contribute, but the present descriptive panel cannot identify causal mechanisms.

The next stage should juxtapose adolescent childbearing with the certified regional women's education series and service-coverage outcomes, ensuring that denominators, age groups, reference periods, and geographic reconstruction methods remain explicit. Such ecological comparisons should be framed as hypothesis-generating rather than individual-level associations.

Figure 9.11. Five-survey regional trajectories; black line identifies the national series. Lines connect observed surveys and do not imply annual measurements.



9.7 Skilled Birth Attendance in Ethiopia: Geographic Transformation, 2000–2024/25

9.7.1 Executive findings

The certified MH01 panel documents a rise in national skilled birth attendance (SBA) from 5.7% in 2000 to 64.1% in 2024–25, an increase of 58.3 percentage points. Progress accelerated after 2011, but regional coverage remains uneven. In 2024–25, Addis Ababa reached 98.1%, whereas Afar and Somali were 34.9% and 37.6%, respectively.

9.7.2 Data and analytical approach

Source: Chapter13_13_EDHS_Sentinel_Master_v1_4_2(2).xlsx, MH01 worksheet, certified observed records. Five survey periods (2000, 2005, 2011, 2016, 2024–25) × National plus 14 current regions = 75 observed estimates. Values are percentages. Confidence intervals are reproduced from the source. Regional change is the 2024–25 minus 2000 percentage-point difference. Regional comparisons are descriptive, not causal or formal significance tests. The 2030 projection rows are excluded.

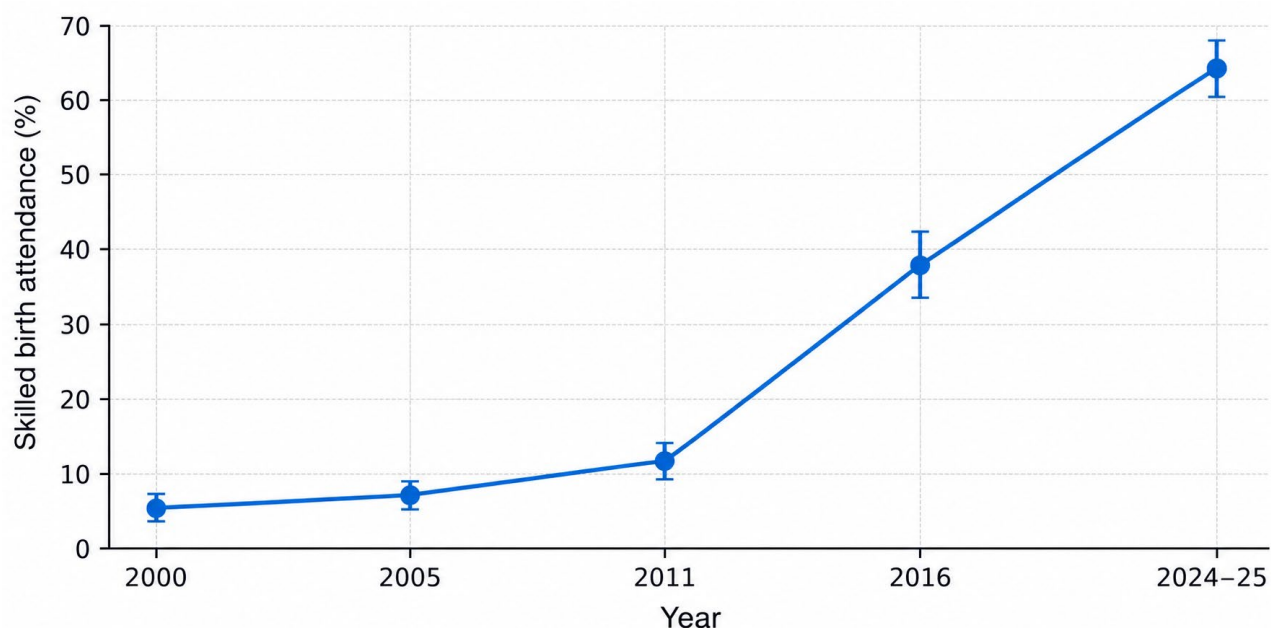
9.7.3 National trend

Table 9.5. National skilled birth attendance by EDHS survey, 2000–2024/25

EDHS	SBA (%)	95% CI	Unweighted N	Clusters
2000	5.7	4.7–6.8	4,176	538
2005	7.0	5.6–8.3	3,907	527
2011	11.4	9.7–13.2	4,446	589
2016	37.3	33.2–41.5	4,171	633
2024-25	64.1	60.0–68.1	5,112	787

Note. Confidence intervals and sample counts are as recorded in the certified MH01 panel.

Figure 9.12. National skilled birth attendance, EDHS 2000–2024/25. Error bars show source-reported 95% confidence intervals.



Note: Skilled birth attendance (SBA) is defined as the percentage of live births occurring during the reference period that were assisted at delivery by a skilled health professional, according to the definitions applied in the respective Ethiopia Demographic and Health Surveys (EDHS). The figure presents national SBA estimates for 2000, 2005, 2011, 2016, and 2024–25. Vertical error bars represent source-reported 95% confidence intervals, reflecting sampling uncertainty around each survey estimate. Skilled birth attendance increased substantially over the study period, from approximately 6% in 2000 to 64% in 2024–25, with particularly rapid gains after 2011. Despite this progress, approximately one-third of births in 2024–25 were not attended by a skilled health professional. The estimates describe attendance at delivery and should not be interpreted as measures of facility delivery, quality of obstetric care, or access to emergency obstetric services. Differences in survey reference periods and classifications of skilled providers should be considered when interpreting historical trends. The connecting lines illustrate temporal patterns; they do not imply continuous annual measurement or establish the statistical significance of changes between surveys. Source: Ethiopia Demographic and Health Surveys (EDHS), 2000, 2005, 2011, 2016, and 2024–25.

9.7.4 Regional levels and historical change

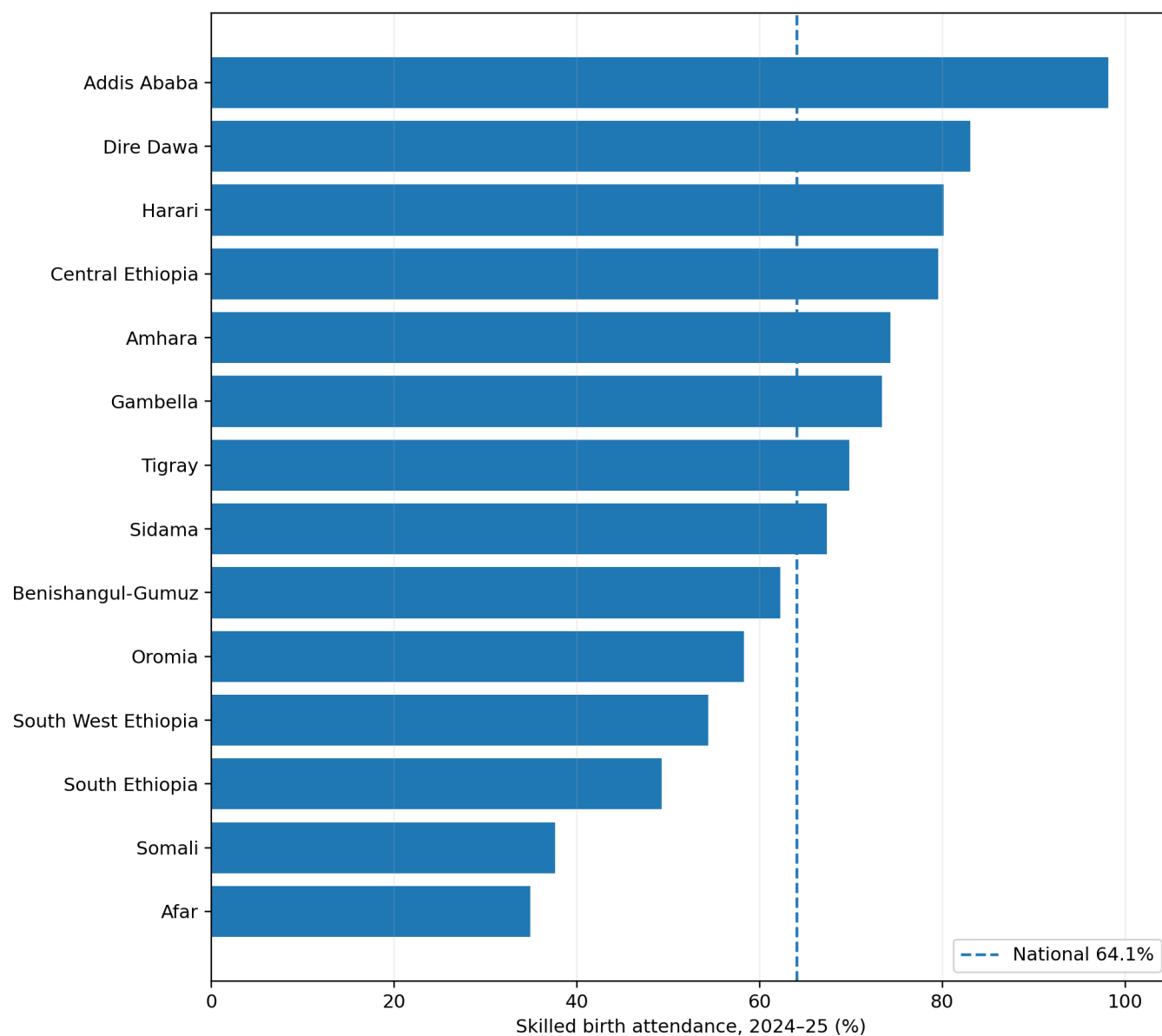
Table 9.6. Skilled birth attendance by geography, 2000 and 2024–25, and percentage-point change

Geography	2000	2005	2011	2016	2024– 25	Δ pp
National	5.7	7.0	11.4	37.3	64.1	+58.3
Addis Ababa	74.7	81.2	83.6	98.4	98.1	+23.5
Dire Dawa	35.7	28.9	42.1	64.1	83.1	+47.4
Harari	23.9	33.3	35.9	58.8	80.1	+56.3
Central Ethiopia	4.3	11.4	6.5	51.1	79.6	+75.3
Amhara	3.2	4.6	11.1	37.8	74.3	+71.2
Gambella	29.8	17.5	26.8	52.2	73.4	+43.6
Tigray	5.7	7.0	15.0	72.8	69.8	+64.1
Sidama	2.6	2.1	1.8	37.3	67.4	+64.8
Benishangul-Gumuz	7.0	8.9	9.9	37.2	62.3	+55.3
Oromia	4.8	6.4	9.6	27.4	58.3	+53.5
South West Ethiopia	4.3	3.4	11.6	37.2	54.4	+50.1
South Ethiopia	5.7	2.6	4.5	36.5	49.3	+43.5
Somali	10.2	7.3	9.1	26.0	37.6	+27.5
Afar	7.1	3.1	8.4	22.4	34.9	+27.8

Note. Percentages are rounded to one decimal; Δ pp is calculated from unrounded values. Historical regional estimates follow the source’s certified current-region geography reconstruction.

9.7.5 Contemporary geographic inequality

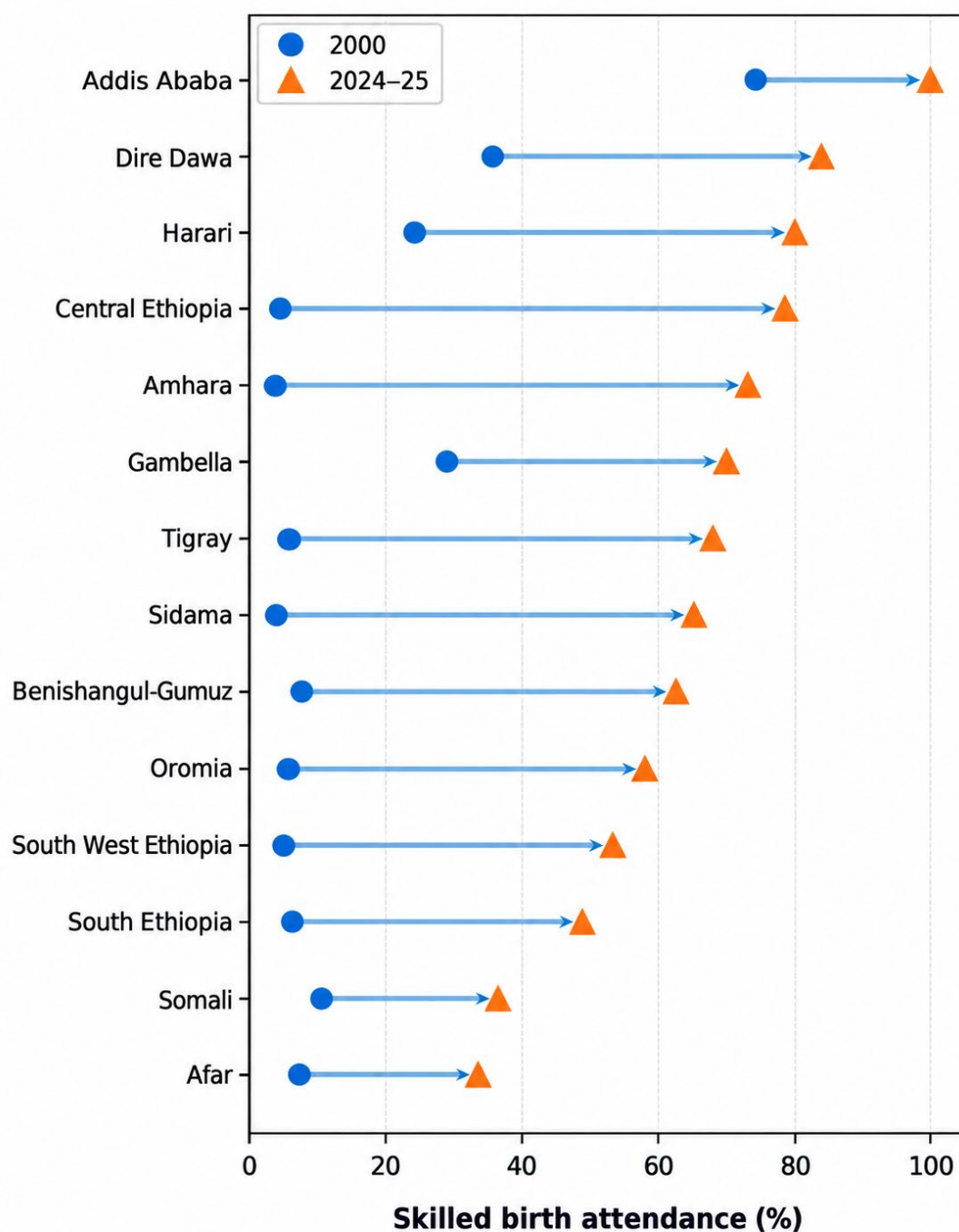
Figure 9.13. Regional skilled birth attendance in 2024–25. Dashed line indicates the national estimate.



The regional range in 2024–25 was 63.2 percentage points. Addis Ababa (98.1%), Dire Dawa (83.1%), Harari (80.1%), and Central Ethiopia (79.6%) were among the highest. Afar (34.9%) and Somali (37.6%) were lowest.

9.7.6 Long-run regional transitions

Figure 9.14. Regional skilled birth attendance in 2000 and 2024–25. Connecting lines indicate the absolute change in percentage points. Source: Ethiopia Demographic and Health Surveys (EDHS).



The figure compares skilled birth attendance (SBA) across Ethiopia's 14 current administrative regions in 2000 and 2024–25. SBA refers to the percentage of live births assisted at delivery by a skilled health professional, according to the provider classifications applied in the respective Ethiopia Demographic and Health Surveys (EDHS). Blue circles represent estimates for 2000, while orange triangles represent estimates for 2024–25. The connecting horizontal lines indicate the magnitude and direction of change

between the two survey periods, measured in percentage points. Regions are ordered by their 2024–25 SBA prevalence.

All 14 regions experienced substantial improvements in skilled birth attendance, although the magnitude of change varied considerably. Addis Ababa recorded the highest SBA prevalence in 2024–25, approaching universal coverage (approximately 98%), followed by Dire Dawa, Harari, and Central Ethiopia. Particularly large absolute gains occurred in Central Ethiopia, Amhara, Tigray, and Sidama. Despite improvements, substantial geographic inequalities persisted, with Afar and Somali recording the lowest SBA prevalence in 2024–25, at approximately 35–38%. These differences underscore the continuing challenge of achieving equitable access to skilled delivery care across Ethiopia.

9.7.7 Geographic comparability: Changes in administrative boundaries

9.7.8 Relation to the maternal-care continuum (MH02)

The national MH01 SBA estimate of 64.1% is higher than the previously recovered MH02 maternal-care continuum estimate of 26.6% in 2024–25 (a descriptive difference of 37.5 percentage points). These indicators have different definitions and potentially different denominators. Their difference is not an individual-level attrition or dropout estimate. A formal linkage requires the MH02 operational definition and comparable populations.

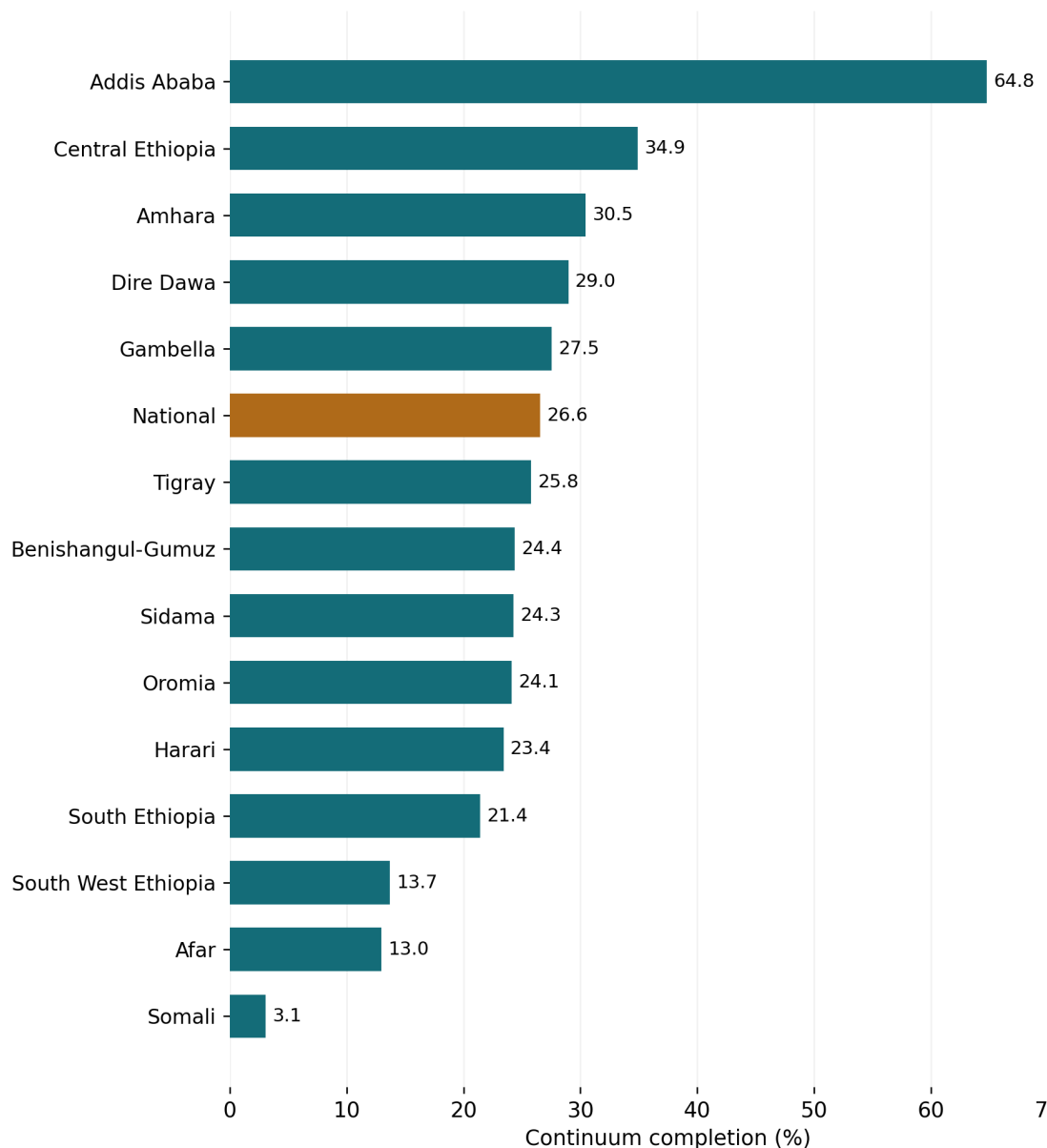
9.7.9 Methodological qualifications and source

The MH01 sentinel master marks the historical panel as certified. This document reproduces that panel rather than independently re-running the DHS microdata. The MH01 2024–25 national estimate (64.1%) differs from a previously encountered Chapter 4 estimate (62.9%); reconciliation of provider classification, eligibility, and survey-processing decisions is needed before treating these as interchangeable. The reported confidence intervals are source-provided, and no regional change significance tests are asserted. No projections are used.

9.8 Maternal-care continuum

National MH02 completion increased from 3.6% in 2011 to 10.0% in 2016 and 26.6% in 2024–25, a 23.0-percentage-point gain over the observed period. In 2024–25, Addis Ababa led at 64.8%, compared with 3.1% in Somali—a 61.7-point difference. The national estimate lies below the estimates for Addis Ababa, Central Ethiopia, Amhara, Dire Dawa, and Gambella.

Figure 9.15. Geographic ranking of maternal-care continuum completion by national and current region, Ethiopia, EDHS 2024–25



Note. Values are observed percentages. National is highlighted separately; regional ordering is descriptive.

Central Ethiopia recorded the largest observed 2011–2024/25 gain (+33.7 percentage points), followed by Amhara (+28.0). Somali changed only from 1.4% to 3.1%. Tigray declined from

30.8% in 2016 to 25.8% in 2024–25, and Somali declined from 4.3% to 3.1%; neither observed decline can be interpreted as statistically significant without appropriate variance estimates.

Figure 9.16. Regional trends in completion of the maternal-health care continuum, Ethiopia, EDHS 2011, 2016, and 2024–25

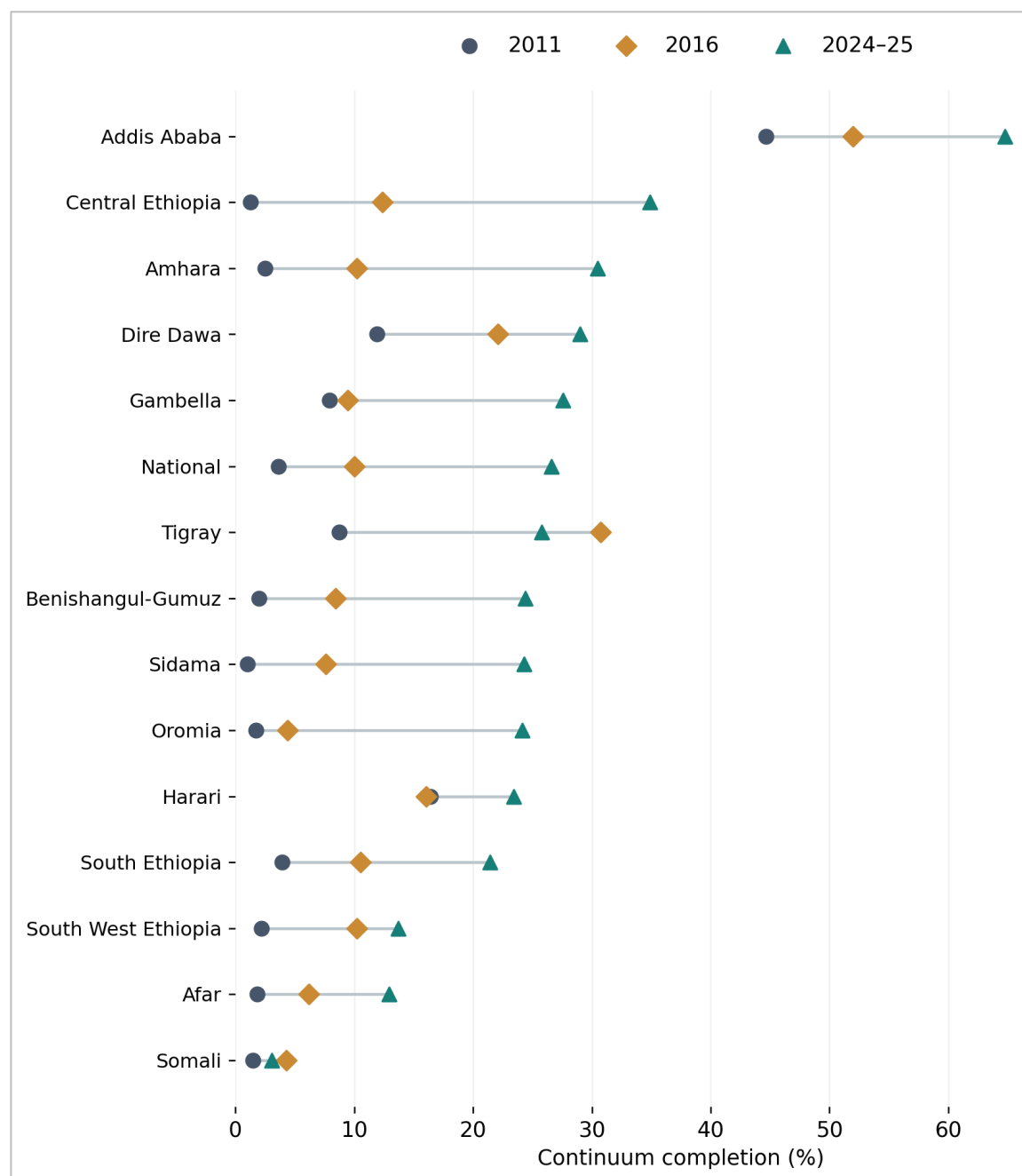


Table 9.5. Maternal-care continuum completion by national and current region, Ethiopia, EDHS 2011, 2016, and 2024–25

Geography	2011 (%)	2016 (%)	2024–25 (%)	Change (pp)
Addis Ababa	44.7	52.0	64.8	+20.1
Central Ethiopia	1.2	12.4	34.9	+33.7
Amhara	2.5	10.2	30.5	+28.0
Dire Dawa	11.9	22.1	29.0	+17.1
Gambella	7.9	9.5	27.5	+19.6
National	3.6	10.0	26.6	+23.0
Tigray	8.7	30.8	25.8	+17.0
Benishangul-Gumuz	2.0	8.4	24.4	+22.4
Sidama	1.0	7.6	24.3	+23.3
Oromia	1.8	4.4	24.1	+22.4
Harari	16.4	16.0	23.4	+7.0
South Ethiopia	3.9	10.5	21.4	+17.5
South West Ethiopia	2.2	10.2	13.7	+11.5
Afar	1.8	6.2	13.0	+11.1
Somali	1.4	4.3	3.1	+1.6

Note. Change is 2024–25 minus 2011, calculated from full-precision observed estimates; displayed estimates are rounded to one decimal. National is not an unweighted regional mean. Source: Ethiopia Demographic and Health Surveys (EDHS), 2011, 2016, and 2024–25; national and regional continuum completion estimates derived from the chapter's harmonized analytical dataset.

The figure and table illustrate national and regional changes in completion of the maternal health care continuum across three Ethiopia Demographic and Health Surveys (EDHS): 2011, 2016, and 2024–25. Continuum completion refers to the proportion of eligible women who received the full sequence of maternal health services, comprising antenatal care (ANC), delivery care, and postnatal care (PNC), as operationalized in the chapter's analytical framework. The indicator captures continuity of care across successive stages of pregnancy, childbirth, and the postpartum period rather than utilization of any single service. The precise ANC threshold, delivery-care criterion, PNC timing requirement, and eligible denominator are defined in the Methods section and should be applied consistently when interpreting comparisons.

Dark gray circles represent 2011 estimates, orange diamonds represent 2016 estimates, and teal triangles represent 2024–25 estimates. Horizontal connecting lines illustrate the range of observed

continuum completion across the three survey periods for each geographic unit; they do not represent confidence intervals. Values are expressed as percentages, and regions are displayed in descending order of their 2024–25 continuum completion estimates, with the national estimate included for comparison.

National and regional patterns: National continuum completion increased substantially, from approximately 4% in 2011 to 10% in 2016 and 27% in 2024–25. This improvement indicates that a growing proportion of women received the full sequence of maternal health services, although nearly three-quarters of eligible women still did not complete the continuum in 2024–25. The national trajectory therefore reflects considerable progress alongside persistent discontinuity between successive stages of maternal care.

Geographic differences remained pronounced. Addis Ababa consistently recorded the highest continuum completion, increasing from approximately 45% in 2011 to 65% in 2024–25. Central Ethiopia and Amhara also experienced substantial improvements, reaching approximately 35% and 31%, respectively, by 2024–25. Dire Dawa, Gambella, and Tigray recorded completion levels around 26–29%. In contrast, Somali, Afar, and South West Ethiopia remained among the lowest-performing regions, with completion levels of approximately 3%, 13%, and 14%, respectively, in 2024–25.

The figure also reveals that progress was not uniform or necessarily sustained. Tigray's estimated continuum completion was lower in 2024–25 than in 2016, despite remaining above its 2011 level. Somali exhibited persistently low completion across all three surveys, with little net improvement. These patterns warrant further investigation into service availability, accessibility, continuity, and the effects of regional disruptions; the figure itself does not establish their underlying causes.

Geographic comparability: Ethiopia's administrative geography changed substantially during the study period, particularly with the subdivision of the former Southern Nations, Nationalities, and Peoples' Region (SNNPR). Historical estimates for Central Ethiopia, Sidama, South Ethiopia, and South West Ethiopia should be interpreted according to the chapter's validated geographic harmonization procedures. Comparisons across surveys also depend on consistent indicator construction, eligibility criteria, and recall periods. The figure presents descriptive survey estimates without confidence intervals; consequently, differences between years or regions should not automatically be interpreted as statistically significant.

Public health interpretation: Completion of the maternal health care continuum is a more demanding indicator than individual coverage measures such as ANC attendance, skilled birth attendance, or PNC utilization. A woman may receive one or two services yet fail to complete the entire sequence. Consequently, improvements in individual service coverage do not necessarily translate into equivalent gains in continuum completion. The persistent geographic disparities underscore the importance of strengthening referral systems, integrating antenatal, delivery, and postnatal services, reducing financial and geographic barriers, and ensuring that women remain connected to appropriate care throughout pregnancy, childbirth, and the postpartum period.

9.8.1 The four former SNNPR successor regions

The 2024–25 MH02 estimates vary substantially across Central Ethiopia (34.9%), Sidama (24.3%), South Ethiopia (21.4%), and South West Ethiopia (13.7%). This ranking differs from the certified mCPR pattern: Sidama (55.7%) and South West Ethiopia (54.2%) lead on contraceptive prevalence, whereas Central Ethiopia (19.0%) is relatively low on mCPR but comparatively high on MH02. These are different indicators with different eligible populations and service pathways; the contrast does not establish a causal relationship.

9.8.2 Cross-domain comparison: mCPR versus MH02, 2024–25

Cross-domain comparison of modern contraceptive prevalence and maternal-care continuum completion, four former SNNPR successor regions, 2024–25

Region	mCPR (%)	Maternal Health Care Continuum (%)
Central Ethiopia	19.0	34.9
Sidama	55.7	24.3
South Ethiopia	28.5	21.4
South West Ethiopia	54.2	13.7

Sources: certified Chapter 3 regional mCPR estimates and MH02 certified historical observations. Cross-domain rankings are descriptive and cannot be used to infer individual-level associations.

9.8.3 Implications for population policy

The geographic evidence suggests that aggregate gains can coexist with large differences in continuity of maternal services. Regional policy assessment should distinguish improvements in a single contact, such as skilled birth attendance, from completion of a multi-contact maternal-care pathway. The Addis Ababa–Somali disparity, the unusually strong rise in Central Ethiopia, and the non-monotonic observations in Tigray and Somali merit targeted follow-up with survey precision, denominator, and service-component audits.

For the broader Chapter 9 synthesis, these findings complement—but should not be conflated with—modern contraceptive prevalence, adolescent childbearing, and women’s education. The next analytical step is a region-by-region comparison using certified, definitionally comparable observed indicators, followed by the child-marriage analysis.

9.9 Women's Education

Ethiopia's quarter-century education record points to two related but distinct transitions. The first is a marked reduction in the proportion of women without any formal education. The second is a more selective transition toward completing secondary school or advancing beyond it. Nationally, the certified no-education series declined from 75.2% in 2000 to 31.4% in 2024–25. In the new analysis of women aged 20–24, the estimated share completing secondary or higher education rose from approximately 3.9% to 24.2% over the same period. These indicators have different age universes and should not be interpreted as components of a single distribution.

Geographic differences remain substantial. Among women aged 20–24 in 2024–25, the preliminary secondary-completion estimates range from about 10–11% in Afar and Somali to about 39–43% in Dire Dawa, Harari, and Addis Ababa. These descriptive differences warrant attention, but precise rankings—particularly among regions with similar point estimates—should not be interpreted as statistically established without the corresponding design-based intervals.

9.9.1 Scope and measurement

The historical education-access series is drawn from the previously certified WED01/WED02 analyses and uses their established definitions and denominators. The newer CH09_04 extension estimates the percentage of de facto resident females aged 20–24 whose highest educational attainment is completed secondary or higher, based on DHS household-person recode (PR) education categories. Girls aged 15–19 are supplementary rather than the principal analytic group, because many have not yet reached an age at which secondary completion can reasonably be assessed.

The 20–24 measure describes attainment in repeated cross-sectional surveys, not longitudinal progress of the same individuals. Survey weights and clustered sample designs were incorporated in the CH09_04 computation. The script completed its computational gates and recorded 32 survey-estimation warnings; the detailed warning and precision-audit files were not available for this manuscript. Accordingly, new CH09_04 point estimates are presented as provisional descriptive findings, rather than formally certified publication estimates.

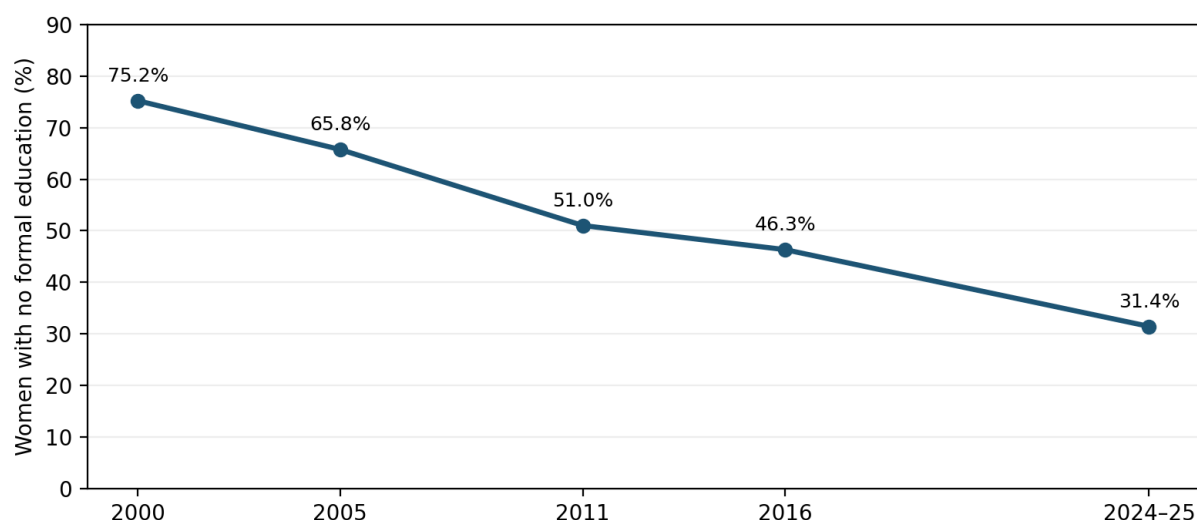
9.9.2 National educational transformation

9.9.3 Declining exclusion from formal education

The national prevalence of no formal education declined from 75.2% in 2000 to 65.8% in 2005, 51.0% in 2011, 46.3% in 2016, and 31.4% in 2024–25. The net change was –43.8 percentage points. The sequence indicates substantial and sustained progress, although the surveys alone do not identify the relative contributions of policy, demographic replacement, urbanization, or other influences.

Figure 9.18. National prevalence of no formal education, five EDHS rounds, 2000–2024/25.

Source: previously certified WED02 series.



9.9.4 Beyond access: completion of secondary schooling

Among women aged 20–24, the new secondary-or-higher attainment estimates were approximately 3.9% in 2000, 5.8% in 2005, 9.6% in 2011, 11.5% in 2016, and 24.2% in 2024–25. The implied increase of approximately 20.4 percentage points suggests an important expansion of educational attainment beyond initial school entry. Because this is a newly constructed age-specific indicator, its detailed precision diagnostics remain to be reviewed before the numerical trend is treated as final.

Figure 9.19. Estimated completion of secondary or higher education among women aged 20–24, 2000–2024/25.

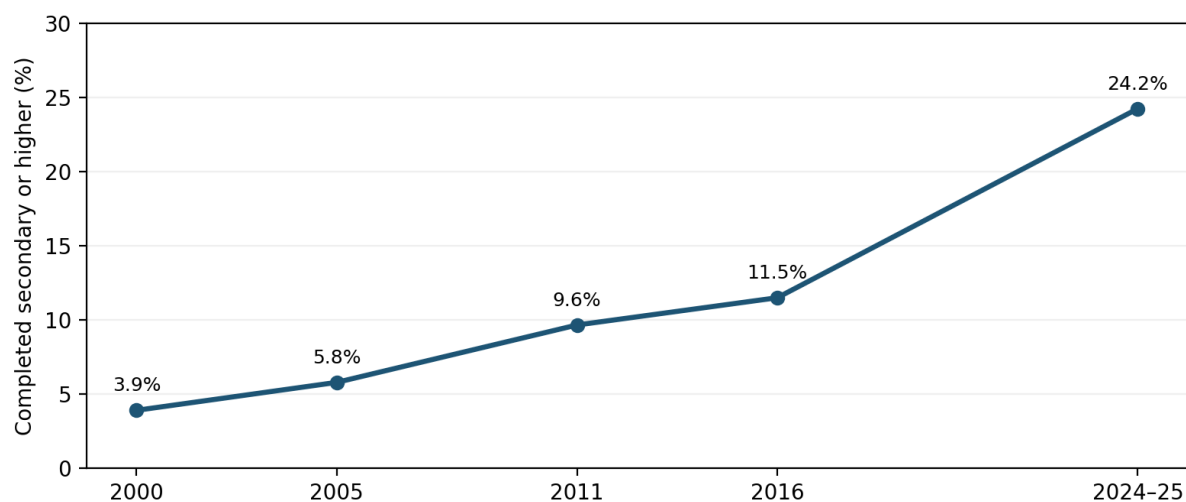


Table 9.6. National education indicators, EDHS 2000–2024/25.

EDHS	No formal education, certified (%)	Secondary or higher, age 20–24, provisional (%)
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2000	75.2	3.9
2005	65.8	5.8
2011	51.0	9.6
2016	46.3	11.5
2024-25	31.4	24.2

9.9.5 Geography of educational change

9.9.6 Regional contrasts in lack of formal education

The certified historical WED02 estimates indicate that educational exclusion declined across the regions shown below, although the magnitude of change differed considerably. For example, the decline was approximately 51.0 percentage points in Amhara and 49.8 points in Tigray, compared with 23.7 points in Somali and 24.5 points in Afar. These figures describe change in prevalence, not the absolute number of women without schooling. Historical comparison is restricted to the established regional units; successor regions of the former SNNPR are not retrospectively assigned separate pre-2024–25 values.

Table 9.7. Historical geography of no formal education, EDHS 2000–2024/25.

Source: certified WED02. SNNPR is the historical pooled geography; no retrospective successor-region allocation is implied.

Geography	2000 (%)	2024–25 (%)	Change (pp)
National	75.2	31.4	-43.8
Tigray	78.1	28.3	-49.8
Afar	85.3	60.7	-24.5
Amhara	83.6	32.6	-51.0
Oromia	75.8	34.4	-41.5
Somali	89.2	65.6	-23.7
Benishangul-Gumuz	77.0	30.8	-46.2
Central Ethiopia	69.6	24.7	-44.9
Sidama	70.2	19.6	-50.6
South Ethiopia	80.9	32.5	-48.4
South West Ethiopia	76.4	34.7	-41.6
Gambella	59.8	17.0	-42.8
Harari	53.6	23.4	-30.2
Addis Ababa	24.9	6.1	-18.8
Dire Dawa	46.4	24.1	-22.3

9.9.7 Secondary attainment among women aged 20–24

The preliminary 2024–25 regional estimates suggest pronounced differences in secondary-or-higher attainment. Addis Ababa (43.3%), Harari (41.1%), and Dire Dawa (38.6%) have the highest point estimates in this analysis; Afar (10.6%) and Somali (11.3%) have the lowest. Benishangul-Gumuz has a relatively high point estimate (35.5%), but previously reported intervals for this region were wide. Accordingly, differences between neighboring ranks should not be presented as statistically significant without design-based comparisons.

Figure 9.20. Completed secondary or higher education among women aged 20–24 by current region, EDHS 2024–25.

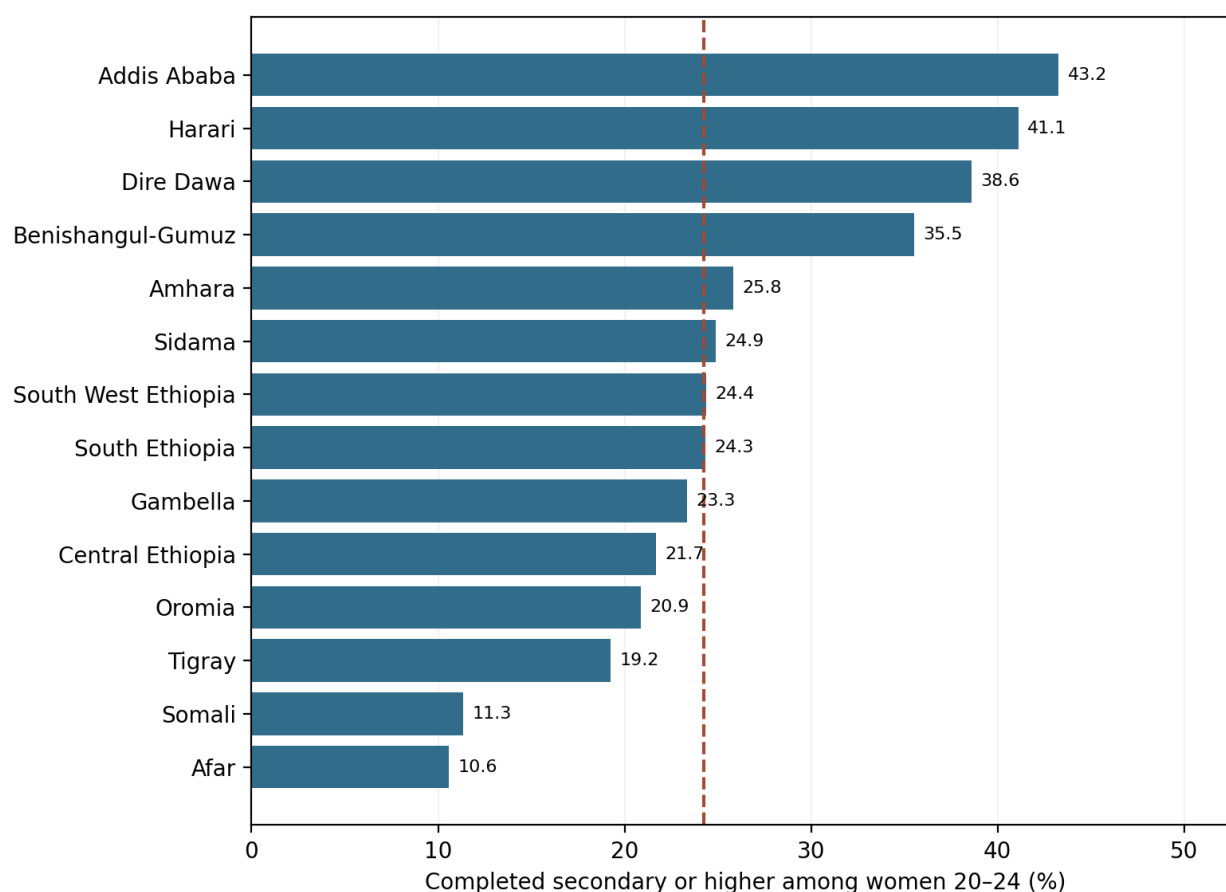


Table 9.8. Women aged 20–24 with completed secondary or higher education by current region, EDHS 2024–25.

Current region	Secondary or higher, age 20–24 (%)
Addis Ababa	43.2
Harari	41.1
Dire Dawa	38.6
Benishangul-Gumuz	35.5
Amhara	25.8
Sidama	24.9
South West Ethiopia	24.4
South Ethiopia	24.3
Gambella	23.3
Central Ethiopia	21.7
Oromia	20.9
Tigray	19.2
Somali	11.3
Afar	10.6

9.9.8 Interpretation and implications

The contrast between reduced educational exclusion and more limited secondary completion is substantively important. Having entered formal education is not equivalent to having completed secondary school. A country can make considerable progress in reducing the proportion of women with no schooling while retaining substantial barriers to progression, persistence, and completion. These two indicators therefore capture different stages of educational transformation.

Regional patterns suggest that the next phase of educational equity cannot be understood solely through national averages. In Afar and Somali, the combination of relatively high no-education prevalence and low secondary-completion estimates points to continuing challenges at both the entry and attainment stages. Urban administrations exhibit much higher secondary-attainment point estimates, but these contrasts may reflect multiple overlapping differences in access, migration, socioeconomic composition, and schooling opportunities. The available descriptive analysis does not establish which factors explain the gaps.

Amhara and Tigray show substantial long-run reductions in no education, but their contemporary secondary-completion estimates remain below the provisional national value for women aged 20–24. This illustrates why a strong historical reduction in exclusion need not translate into an equally high contemporary level of advanced attainment. These comparisons are suggestive rather than a direct decomposition, given the differing age universes.

In sum, Ethiopia's educational transformation over the past quarter-century is visible both in the sharp decline in women's exclusion from formal schooling and in the emerging expansion of completed secondary education among young adult women. Yet progress in access and progress in attainment are not interchangeable. The regional evidence suggests that substantial inequalities persist in the transition from entering school to completing higher levels of education. A validation-first analytical approach enables these achievements and remaining disparities to be described with appropriate precision, while recognizing the limitations of the newest age-specific estimates.

9.10 Education, Agency, and Gender Power

9.10.1 Educational expansion and the question of power

Ethiopia's long-term expansion of women's formal education provides an important context for examining gender relations, but educational attainment and the exercise of power are not equivalent outcomes. The education analysis preceding this section documents substantial reductions in educational exclusion and increased secondary-school completion among young women. The question considered here is whether change in the educational landscape has been accompanied by change in women's participation in household decisions, acceptance of restrictive gender norms, and fear within intimate relationships. These dimensions are related in theory, but they must be measured and interpreted separately.

The analysis uses four sentinel constructs. NEG1 measures acceptance of wife beating when a wife goes out without informing her husband; NEG2 measures reported partner fear; POS2 measures joint decision-making over husband or partner earnings; and POS1 concerns women's own informed sexual and reproductive health decision-making. Higher NEG1 and NEG2 values are less favorable, whereas higher POS2 and POS1 values indicate more participation or agency within their particular definitions. The indicators have different eligible populations, histories of measurement, and validation statuses. Consequently, their percentages should not be added, averaged, or treated as a common empowerment scale.

9.10.2 National patterns: progress is not uniform across dimensions

The national NEG1 series indicates that acceptance of the specified wife-beating justification declined from 56.2% in 2000 to 39.5% in 2024–25, a reduction of approximately 16.7 percentage points. The intervening pattern was not monotonic: the estimate was 64.2% in 2005, 43.2% in 2011, and 43.3% in 2016. The long-run reduction is therefore substantial, but it should not be described as a steady year-by-year decline. Moreover, NEG1 captures endorsement of one stated justification, not actual exposure to violence or the full range of gender norms.

Reported partner fear (NEG2) fell from 62.1% in 2016 to 41.7% in 2024–25, a difference of approximately 20.4 percentage points. This comparison suggests a meaningful shift in the measured experience of fear within the eligible survey population. Because the supplied comparable series contains two observed time points, it cannot establish when the change occurred or whether it followed a linear trajectory. It also cannot establish that the reduction was caused by educational gains.

Joint decision-making over partner earnings (POS2) tells a different story. The national estimates were 68.3% in 2011, 69.8% in 2016, and 64.2% in 2024–25. The latest estimate is about 4.1 percentage points below the first observation, providing no basis for claiming sustained national improvement in this particular measure. Importantly, joint decision-making should not be equated with independent control over income: a joint decision may reflect shared negotiation, but it does not by itself reveal bargaining parity, coercion, or who ultimately determines the outcome.

POS1 is retained in the conceptual framework because informed sexual and reproductive health decision-making is an important dimension of agency. However, the sentinel workbook identifies an unresolved anchor mismatch for its 2024–25 series. Its reported national value (67.7%) is therefore not used here to support substantive trend claims, regional rankings, or conclusions about the extent of reproductive autonomy. The hold applies to this particular indicator and does not alter the status of the previously certified analyses.

9.10.3 The geography of gender power

The 2024–25 regional results reveal marked geographic heterogeneity across the three interpretable observed indicators. For NEG1, the reported estimates range from 10.8% in Addis Ababa to 56.3% in South West Ethiopia. Afar (53.6%) and Sidama (53.2%) also have relatively high reported acceptance of the specified justification, whereas Somali (15.9%) has a comparatively low value. These figures illustrate that geographic patterns cannot be reduced to a simple urban–rural or uniformly ordered regional gradient.

NEG2 exhibits a different regional configuration. Reported partner fear is 56.5% in Oromia, 49.9% in Gambella, and 48.7% in both Sidama and South West Ethiopia, compared with 14.8% in Addis Ababa and 23.9% in Dire Dawa. The contrast between NEG1 and NEG2 is analytically important: a region may report relatively low acceptance of one violence-justifying norm without reporting equally low partner fear. These are different questions, asked of potentially different eligible populations, and their apparent divergence should be treated as a substantive finding for interpretation rather than as an inconsistency to be corrected.

POS2 likewise shows an uneven geography of participation in economic decisions. The observed estimate reaches 80.5% in Amhara, 76.4% in Harari, and 74.3% in Addis Ababa, but is 40.6% in Gambella, 50.0% in Somali, 50.9% in Sidama, and 52.7% in Oromia. These comparisons describe regional patterns in the measured indicator. They do not demonstrate that women in one region have uniformly greater economic autonomy across all household domains.

9.10.4 Connecting education to agency without presuming causation

The educational and gender-power evidence, considered together, is consistent with the proposition that social transformation proceeds at different speeds across domains. Schooling can improve literacy, information access, economic prospects, and the ability to navigate institutions. Yet the translation of these capabilities into bargaining authority and freedom from fear may depend on household resources, labor-market opportunities, partnership dynamics, prevailing norms, and local institutions. The descriptive survey series cannot distinguish among these pathways.

The regional comparisons reinforce the need for caution. Addis Ababa combines relatively favorable values on several observed gender-power measures with a comparatively high level of young women’s secondary attainment. Nevertheless, other regions do not necessarily follow the same pattern across all dimensions. In particular, a low NEG1 percentage should not be taken as proof of low partner fear, and a high POS2 percentage should not be interpreted as evidence that

other forms of gender inequality have been resolved. Any formal assessment of educational gradients or regional associations would require indicator-specific microdata analysis, harmonized denominators, and appropriate survey-design adjustment. Ecological contrasts alone cannot identify individual-level effects.

9.10.5 Implications for policy and program design

These findings support an integrated, rather than substitutional, approach to policy. Expanding and sustaining girls' secondary education remains valuable, but education policy should not be expected to replace direct efforts to reduce violence-justifying norms, address fear and coercion in intimate relationships, or strengthen women's meaningful participation in household decisions. The indicators also point toward differentiated regional responses: the geographic distribution of restrictive norms is not identical to that of partner fear or joint economic decision-making. Program priorities should therefore be informed by the particular outcome and local context, rather than by a single ranking of "empowerment."

9.10.6 Interpretive limitations

The estimates are descriptive, survey-weighted summaries of distinct constructs. Their denominators and available years differ; NEG1 does not measure experienced violence; NEG2 is not interchangeable with NEG1; POS2 captures joint decisions rather than sole control; and POS1 remains on hold because of the documented anchor mismatch. No statistical tests of differences between regions, age groups, or survey years are claimed in this narrative. Regional point estimates and their uncertainty should be read together in the accompanying evidence tables. The observed trends do not establish causal effects of education, policy, or other exposures. Historical geography should remain harmonized to the appropriate 11-region framework; the contemporary 2024–25 comparisons cover National plus 14 current regions.

9.10.7 Synthesis

Ethiopia's expansion of women's education is a major component of its quarter-century social transformation. The gender-power indicators suggest accompanying reductions in some restrictive norms and in reported partner fear, but they do not reveal a uniformly improving pattern of decision-making authority. The central lesson is not that education has failed, nor that empowerment can be inferred from schooling alone. It is that educational opportunity, household negotiation, social norms, and freedom from fear are distinct dimensions of change—and that geography helps explain why they should be examined together without being conflated.

9.10.8 Evidence tables

Table 9.9. National observed trends in gender-power indicators

Indicator	2000	2005	2011	2016	2024– 25	First–last change (pp)
NEG1: wife-beating norm	56.2	64.2	43.2	43.3	39.5	-16.7
NEG2: partner fear	—	—	—	62.1	41.7	-20.4
POS2: joint earnings decisions	—	—	68.3	69.8	64.2	-4.1
POS1: informed SRH decisions	—	—	—	—	67.7	+0.0

Note. Values are percentages. — indicates no comparable numeric observation in the supplied sentinel table. Changes compare the earliest and latest available observations for each indicator; the baseline year therefore differs. POS1 is subject to an anchor mismatch and should not be used for an unqualified inference.

Table 9.10. National and 14 current regions: four gender-power dimensions, EDHS 2024–25

Geography	NEG1 (%)	NEG2 (%)	POS2 (%)	POS1 (%)
National	39.5	41.7	64.2	67.7
Tigray	32.5	33.6	71.9	44.6
Afar	53.6	35.7	59.4	62.3
Amhara	37.7	27.4	80.5	62.1
Oromia	45.0	56.5	52.7	71.8
Somali	15.9	25.8	50.0	89.5
Benishangul-Gumuz	31.0	38.5	71.9	76.0
Central Ethiopia	36.1	36.6	65.8	80.2
Sidama	53.2	48.7	50.9	68.0
South Ethiopia	45.4	45.9	67.0	74.6
South West Ethiopia	56.3	48.7	68.5	72.4
Gambella	38.6	49.9	40.6	69.8
Harari	24.6	28.8	76.4	62.4
Addis Ababa	10.8	14.8	74.3	51.2

Dire Dawa	25.3	23.9	59.3	67.7
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Note. NEG1 = acceptance of wife beating when a wife goes out without telling her husband; NEG2 = partner fear; POS2 = joint decisions over husband/partner earnings; POS1 = own informed sexual and reproductive health decision-making. Higher NEG1/NEG2 values indicate less favorable outcomes; higher POS1/POS2 values indicate greater measured participation or agency. POS1 values are displayed solely for transparent evidence accounting, subject to the source’s anchor-mismatch hold; they are not certified for substantive ranking.

Table 9.11. Regional estimates, 95% confidence intervals, and sample sizes, EDHS 2024–25

9.10.9 NEG1 — wife-beating norm

Geography	Estimate %	95% CI	Unweighted n
National	39.5	37.0–42.0	21395
Tigray	32.5	29.0–36.3	1746
Afar	53.6	49.5–57.6	1359
Amhara	37.7	34.2–41.3	1743
Oromia	45.0	39.0–51.0	2122
Somali	15.9	11.5–21.5	1466
Benishangul-Gumuz	31.0	25.5–37.1	1168
Central Ethiopia	36.1	32.1–40.4	1523
Sidama	53.2	49.3–57.1	1883
South Ethiopia	45.4	41.1–49.8	1658
South West Ethiopia	56.3	51.3–61.2	1539
Gambella	38.6	32.1–45.4	1246
Harari	24.6	20.8–28.9	1104
Addis Ababa	10.8	8.6–13.6	1673
Dire Dawa	25.3	20.7–30.6	1165

9.10.10 NEG2 — partner fear

Geography	Estimate %	95% CI	Unweighted n
National	41.7	39.3–44.1	6857
Tigray	33.6	28.4–39.2	585
Afar	35.7	27.5–44.7	489
Amhara	27.4	23.3–31.9	590
Oromia	56.5	51.4–61.4	703
Somali	25.8	19.5–33.2	439
Benishangul-Gumuz	38.5	33.3–44.0	441
Central Ethiopia	36.6	30.4–43.2	463
Sidama	48.7	42.1–55.3	578
South Ethiopia	45.9	40.5–51.4	540
South West Ethiopia	48.7	42.5–55.0	525
Gambella	49.9	40.0–59.8	345
Harari	28.8	22.7–35.8	365
Addis Ababa	14.8	10.4–20.6	437
Dire Dawa	23.9	18.8–29.9	357

9.10.11 POS2 — joint earnings decisions

Geography	Estimate %	95% CI	Unweighted n
National	64.2	61.6–66.6	12090
Tigray	71.9	67.2–76.1	966
Afar	59.4	52.2–66.2	887
Amhara	80.5	76.2–84.2	1033
Oromia	52.7	47.3–58.0	1242
Somali	50.0	42.5–57.5	885
Benishangul-Gumuz	71.9	63.9–78.6	773

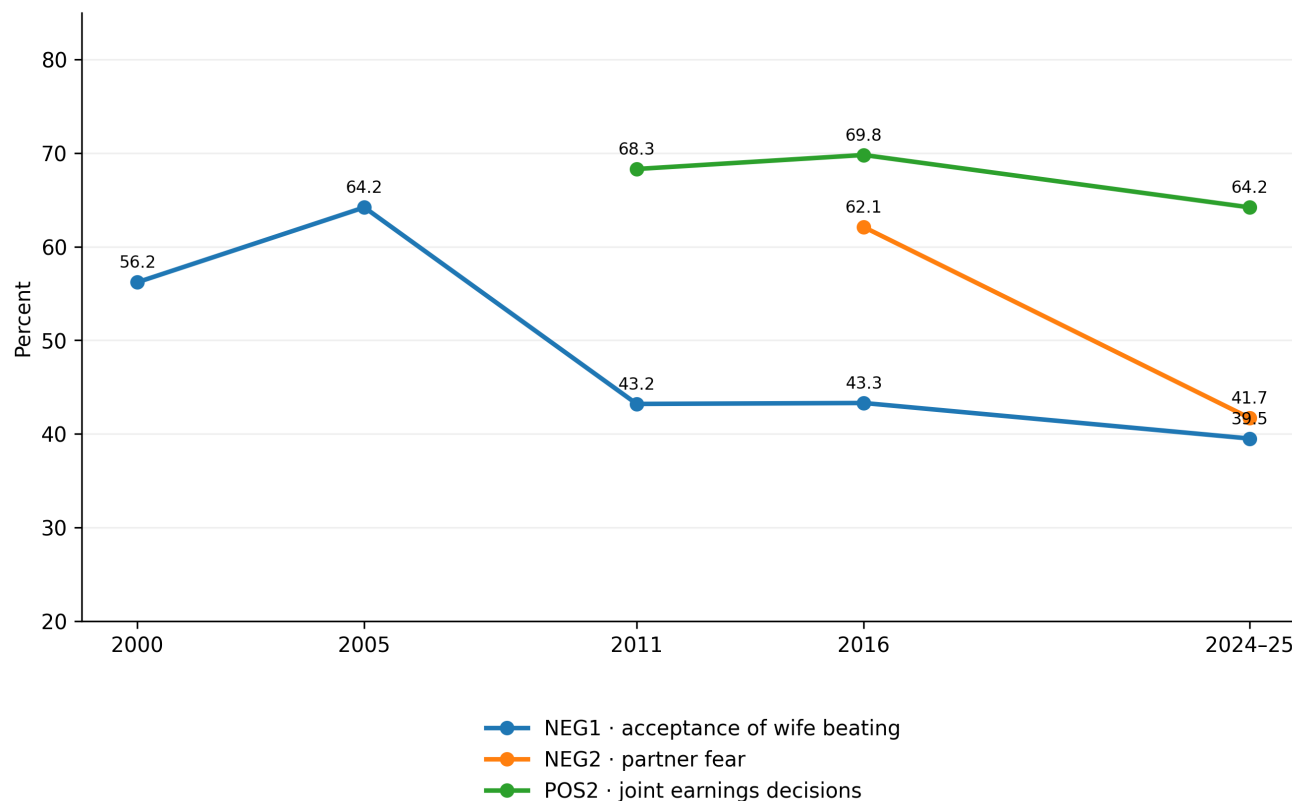
Central Ethiopia	65.8	61.4–70.0	863
Sidama	50.9	45.3–56.4	998
South Ethiopia	67.0	61.4–72.2	1019
South West Ethiopia	68.5	64.0–72.7	848
Gambella	40.6	34.2–47.4	747
Harari	76.4	67.8–83.2	588
Addis Ababa	74.3	70.2–78.0	677
Dire Dawa	59.3	54.3–64.2	564

9.10.12 POS1 — informed SRH decisions

Geography	Estimate %	95% CI	Unweighted n
National	67.7	65.3–70.1	13007
Tigray	44.6	39.0–50.2	1020
Afar	62.3	55.5–69.2	1019
Amhara	62.1	57.0–67.2	1052
Oromia	71.8	67.0–76.6	1376
Somali	89.5	84.1–95.0	952
Benishangul-Gumuz	76.0	70.8–81.2	786
Central Ethiopia	80.2	76.0–84.4	900
Sidama	68.0	64.9–71.0	1118
South Ethiopia	74.6	70.3–78.9	964
South West Ethiopia	72.4	68.0–76.8	1054
Gambella	69.8	66.2–73.3	806
Harari	62.4	57.0–67.7	641
Addis Ababa	51.2	44.5–57.9	723
Dire Dawa	67.7	61.8–73.7	596

9.10.13 Figures

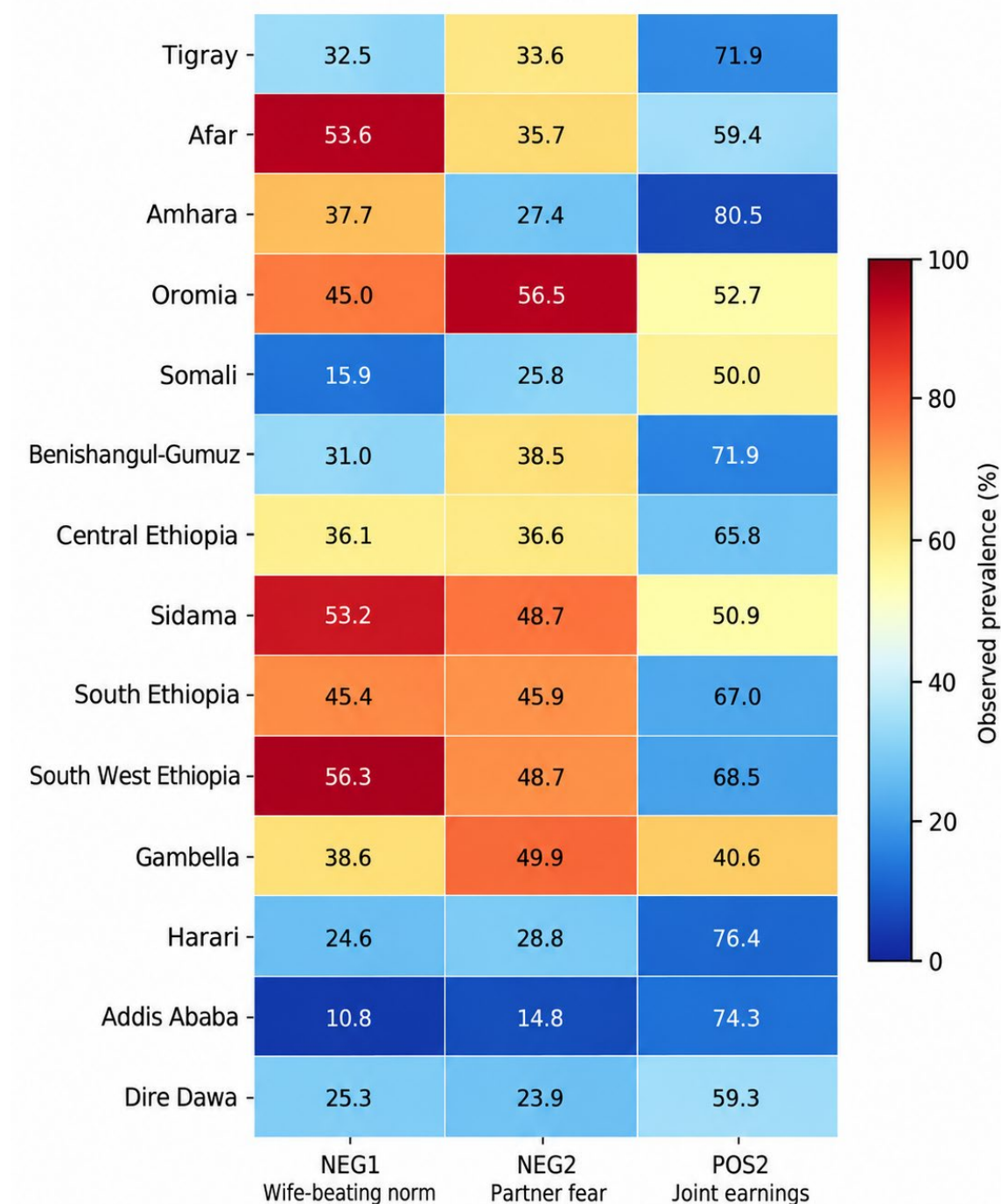
Figure 9.21. National trajectories in three dimensions of gender power



Notes. Values are observed national survey estimates. The indicators have different eligible populations and survey availability. POS1 is not plotted because the 2024–25 anchor remains on hold. Line segments join observed time points only; they are not annual estimates.

The heatmap below presents three dimensions of women's gender norms, partner-related experiences, and household decision-making across Ethiopia's 14 current administrative regions, using data from the 2024–25 Ethiopia Demographic and Health Survey (EDHS). Each cell reports the observed prevalence (%) of the corresponding indicator. The indicators are NEG1 (acceptance of wife beating if a wife goes out without informing her husband), NEG2 (partner fear), and POS2 (joint decision-making regarding the husband's or partner's earnings). These indicators represent conceptually distinct dimensions of gender power and should not be interpreted as interchangeable measures or combined into a single index.

Figure 9.22. Regional variation in gender-power indicators, EDHS 2024–25



Source: Ethiopia Demographic and Health Survey (EDHS), 2024–25; regional estimates from the chapter's gender-power analytical dataset (NEG1, NEG2, and POS2).

NEG1 — Acceptance of wife beating: This indicator measures the percentage of women endorsing wife beating under the specified circumstance. Higher prevalence indicates greater acceptance of a restrictive gender norm, not the observed prevalence of intimate partner violence. The highest values were recorded in South West Ethiopia (56.3%), Afar (53.6%), and Sidama (53.2%), while Addis Ababa (10.8%), Somali (15.9%), and Harari (24.6%) recorded the lowest

values. Regional differences indicate substantial geographic variation in the social acceptability of wife beating.

NEG2 — Partner fear: This indicator captures the survey-defined experience of fear in relation to a husband or intimate partner. Higher prevalence indicates greater reported partner fear and therefore a more adverse dimension of gender power. Oromia recorded the highest prevalence (56.5%), followed by Gambella (49.9%) and Sidama and South West Ethiopia (48.7% each). Addis Ababa recorded the lowest prevalence (14.8%), followed by Dire Dawa (23.9%) and Somali (25.8%). Partner fear should not be interpreted as equivalent to measured intimate partner violence or used to infer the prevalence of specific forms of abuse without additional evidence.

POS2 — Joint decision-making over partner earnings: This indicator measures the percentage of eligible women reporting joint participation in decisions concerning their husband's or partner's earnings. Higher prevalence indicates greater reported participation in household economic decision-making, although joint decision-making does not necessarily imply independent financial control or equal bargaining power. Amhara recorded the highest prevalence (80.5%), followed by Harari (76.4%) and Addis Ababa (74.3%). Gambella recorded the lowest prevalence (40.6%), followed by Somali (50.0%) and Sidama (50.9%).

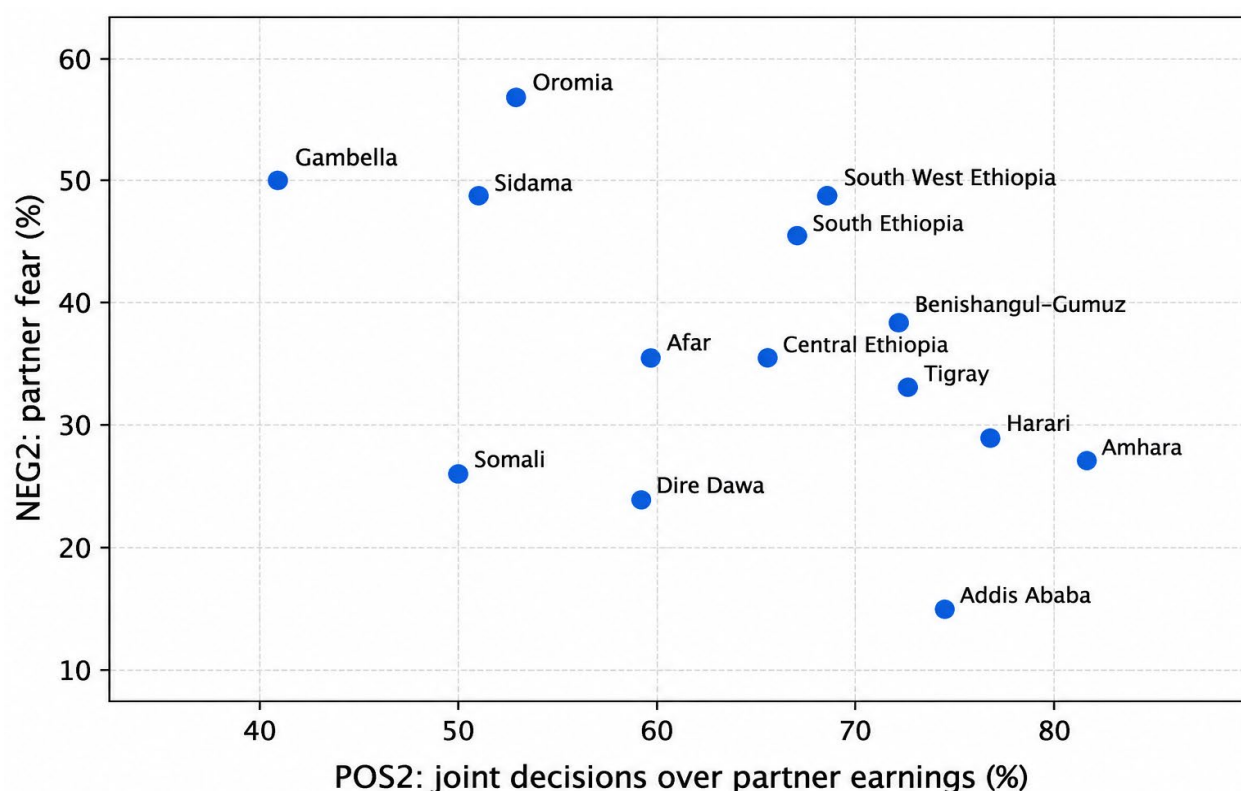
Color interpretation: For NEG1 and NEG2, higher values are represented by progressively darker red shades, indicating more restrictive norms or greater reported partner fear; lower values are represented by darker blue shades. For POS2, the interpretation is reversed: higher values are represented by darker blue shades, indicating greater joint participation in economic decisions, whereas lower values appear in warmer colors. Thus, red represents a less favorable outcome and blue a more favorable outcome across all three indicators. The color scales are intended to facilitate interpretation of each indicator's direction, not to establish equivalence in their substantive meanings.

Cross-regional interpretation: The heatmap demonstrates that favorable outcomes in one dimension of gender power do not necessarily coincide with favorable outcomes in another. For example, Amhara combines relatively low acceptance of wife beating (37.7%) and partner fear (27.4%) with the highest reported joint economic decision-making (80.5%). Conversely, South West Ethiopia exhibits the highest acceptance of wife beating (56.3%) while reporting comparatively high joint decision-making (68.5%). Oromia combines elevated partner fear (56.5%) with relatively modest joint decision-making (52.7%). These contrasting profiles underscore the multidimensional character of women's agency and gender power and caution against interpreting any single indicator as a comprehensive measure of empowerment.

Methodological considerations: The figure presents descriptive regional estimates, not adjusted associations or causal relationships. The three indicators have distinct definitions, eligibility criteria, and survey-specific denominators; therefore, their percentages should not be added, averaged, or directly compared as if they represented the same underlying population or construct. Confidence intervals are not displayed, and apparent regional differences should not automatically be interpreted as statistically significant. In addition, regional averages may conceal substantial within-region variation associated with education, household wealth, urban–rural residence, age,

and other social characteristics. The POS2 measure reflects joint decision-making rather than independent economic autonomy. Interpretation of NEG2 should remain consistent with the precise survey question and eligible population used in the certified analytical dataset.

Figure 9.23. Regional relationship between joint economic decision-making and partner fear, Ethiopia, EDHS 2024–25



Source: Ethiopia Demographic and Health Survey (EDHS), 2024–25; regional estimates derived from the chapter's gender-power analytical dataset (POS2 and NEG2).

The figure examines the geographic relationship between two dimensions of women's agency and gender power across Ethiopia's 14 current administrative regions, using data from the 2024–25 Ethiopia Demographic and Health Survey (EDHS). The horizontal axis represents POS2, the percentage of eligible women reporting joint participation in decisions concerning their husband's or partner's earnings. The vertical axis represents NEG2, the percentage of eligible women reporting partner fear, as defined by the corresponding survey indicator. Each point represents one region, with its position determined by the observed prevalence of the two indicators.

Regional patterns: The scatterplot reveals considerable geographic heterogeneity in the relationship between joint economic decision-making and partner fear. Addis Ababa combines relatively high joint decision-making (74.3%) with the lowest reported partner fear (14.8%), representing a comparatively favorable profile on both dimensions. Amhara (80.5% and 27.4%) and Harari (76.4% and 28.8%) also combine high reported economic participation with relatively

low partner fear. Conversely, Oromia records the highest partner fear (56.5%) despite joint decision-making of 52.7%, while Gambella combines the lowest joint decision-making (40.6%) with elevated partner fear (49.9%). These regional contrasts illustrate that participation in household economic decisions and freedom from partner fear do not necessarily advance together.

South West Ethiopia provides a particularly informative example, combining comparatively high joint economic decision-making (68.5%) with elevated partner fear (48.7%). South Ethiopia exhibits a similar pattern (67.0% and 45.9%). These findings suggest that reported participation in financial decisions may coexist with restrictive or unequal interpersonal power relations.

Conversely, Somali reports relatively low joint economic decision-making (50.0%) but also comparatively low partner fear (25.8%), demonstrating that lower reported economic participation does not invariably correspond to greater partner fear.

Analytical interpretation: The distribution of regional observations does not reveal a simple or uniform relationship between POS2 and NEG2. Although some regions with high joint economic decision-making exhibit relatively low partner fear, others combine substantial economic participation with elevated fear. The observed heterogeneity supports treating women's agency and gender power as multidimensional rather than assuming that improvements in one domain automatically produce favorable outcomes in another. It also highlights the importance of examining regional social contexts, gender norms, educational opportunities, economic conditions, and household relationships when interpreting women's empowerment.

Methodological considerations: The figure presents unadjusted, cross-sectional regional estimates. Each point represents a regional aggregate rather than an individual woman; consequently, the observed distribution must not be interpreted as an individual-level association between economic decision-making and partner fear. Such an interpretation would risk ecological fallacy. The figure does not establish causality, directionality, or the statistical significance of associations.

Confidence intervals are not displayed, and differences between regions may partly reflect sampling variability, particularly where eligible sample sizes are small. Furthermore, the two indicators have distinct survey eligibility criteria and denominators, limiting direct interpretation of their joint distribution as though they were measured among an identical population. Regional averages may also conceal substantial within-region inequalities associated with education, wealth, age, residence, and other characteristics.

Public health and policy implications: The regional patterns suggest that policies intended to strengthen women's economic participation should not assume that greater involvement in household financial decisions necessarily eliminates fear or unequal power within intimate relationships. Economic participation, reproductive autonomy, equitable gender norms, and freedom from coercion are related but distinct dimensions of empowerment that may require complementary interventions. The contrasting regional profiles underscore the value of geographically differentiated approaches that address local social and institutional conditions rather than relying exclusively on national averages or a single empowerment indicator.

9.11 Population Prospects: Ethiopia and Viet Nam, 2025–2050

9.11.1 Purpose and comparative rationale

This concluding section revisits a central argument developed in Adugna’s 2019 Ethiopia 2050 conference manuscript: demographic change and development capacity must be considered together. The earlier study compared Ethiopia with Viet Nam, a country whose demographic transition offered a contrasting trajectory, and linked population growth to ten domains of development, including water, food, urbanization, energy, transport, health care and education. The present update retains that comparative lens while replacing historical projection graphics with the United Nations World Population Prospects 2024 medium-variant estimates and projections (Adugna, 2019; United Nations, 2024).

9.11.2 Source, measurement and interpretation

Population totals are midyear national counts, expressed in millions, for Ethiopia and Viet Nam. Both series use the United Nations World Population Prospects 2024 medium projection; 2025 is treated as the starting-year UN estimate/projection, and later dates are projected outcomes. The analysis reports the 2025–2050 change in absolute numbers, proportional growth, and the difference between the two countries. No new cohort-component model, subnational projection or age-specific forecast was estimated. These projections are conditional on assumptions about future fertility, mortality and migration; they are not forecasts of policy effects.

Table 9.12. Projected population of Ethiopia and Viet Nam, 2025–2050

Year	Ethiopia (millions)	Viet Nam (millions)	Difference (%)
2025	135.5	101.6	+33.4
2030	152.9	104.3	+46.6
2035	170.5	106.5	+60.1
2040	188.5	108.4	+73.9
2045	206.7	109.7	+88.4
2050	225.0	110.0	+104.5

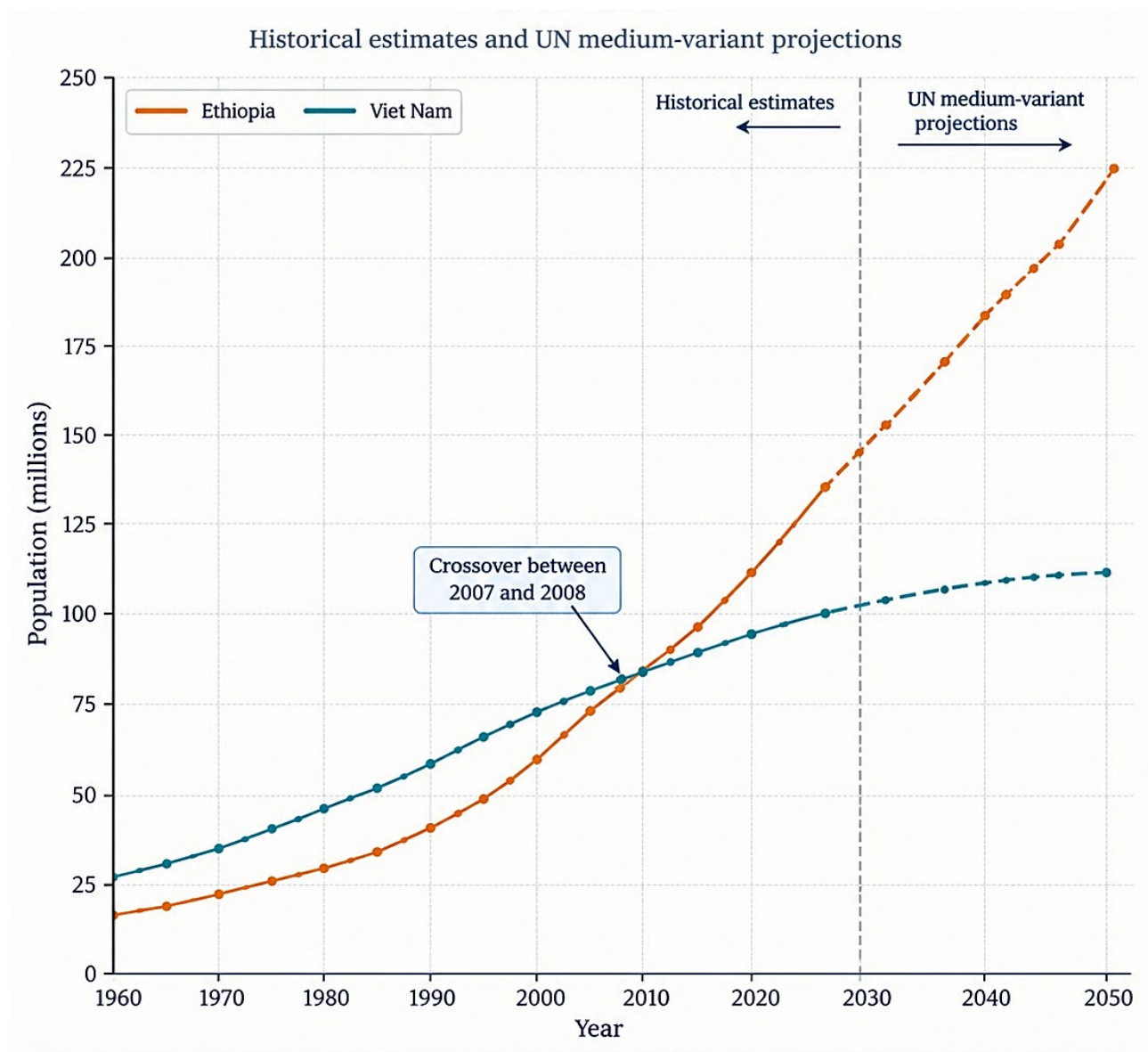
Note. Population estimates are expressed in millions. Difference (%) is calculated as $[(\text{Ethiopia} - \text{Viet Nam}) \div \text{Viet Nam}] \times 100$; positive values indicate the percentage by which Ethiopia’s population exceeds Viet Nam’s. The percentages use the one-decimal population values shown in the table. The 2025 values serve as the baseline and 2030–2050 figures are conditional population

projections, not observed counts. By 2050, Ethiopia's projected population is approximately 104.5% larger than Viet Nam's (slightly more than double).

Source. United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects 2024, medium variant; population values as supplied.

Between 2025 and 2050, Ethiopia is projected to increase from 135.5 to 225.0 million, adding 89.5 million people (66.1%). Viet Nam is projected to increase from 101.6 to 110.0 million, adding 8.4 million (8.3%). Ethiopia's projected numerical gain is thus more than ten times Viet Nam's, even though both countries begin the period with populations exceeding 100 million.

Figure 9.24. Ethiopia and Viet Nam: historical population crossover and projected trajectories, 1960–2050



Sources: World Bank, World Development Indicators (historical midyear population, 1960–2025); UN DESA, World Population Prospects 2024, medium variant (2025–2050 projections). Solid

lines = historical estimates; dashed lines = projections. The crossover occurs between annual observations for 2007 and 2008; the precise crossing date is not observed.

Historical turning point. In 2007, Ethiopia had approximately 83.10 million people and Viet Nam 83.63 million; by 2008, Ethiopia had reached 85.54 million against Viet Nam’s 85.18 million. Ethiopia thus overtook Viet Nam between the two annual observations. This is a stronger historical anchor for the comparison than beginning the figure in 2025: two populations of almost identical size subsequently followed markedly different trajectories. The crossover is descriptive and does not, by itself, identify the reasons for their divergent demographic or economic histories.

Table 9.12. Selected population estimates and projections for Ethiopia and Viet Nam, 1960–2050

Year	Ethiopia (millions)	Viet Nam (millions)
1960	21.38	32.53
1980	34.43	52.49
2000	67.41	77.15
2006	80.70	82.17
2007	83.10	83.63
2008	85.54	85.18
2010	90.54	87.46
2020	118.92	98.08
2025	135.47	101.60
2030	152.86	104.30
2040	188.45	108.40
2050	225.02	110.00

Source. United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects 2024, medium variant.

Note. Population figures are expressed in millions and rounded to two decimal places. The values for 1960–2025 are historical population estimates; those for 2030, 2040, and 2050 are projections from the United Nations World Population Prospects 2024 medium variant. The table reports selected benchmark years rather than a complete annual series. Ethiopia and Viet Nam had nearly equal estimated populations in 2007 (83.10 million and 83.63 million, respectively). By 2008, Ethiopia’s estimated population (85.54 million) had exceeded Viet Nam’s (85.18 million), placing the crossover between those two annual observations. The subsequent divergence reflects

differences in their population trajectories, but the table alone cannot establish the causes of those differences. By 2050, the medium-variant projections place Ethiopia at 225.02 million and Viet Nam at 110.00 million. Projections are conditional on demographic assumptions, particularly future fertility, mortality, and migration; they are not observed counts or certain forecasts. Comparisons should therefore distinguish historical estimates from future projections and recognize uncertainty around the projected values.

9.11.3 The divergence in scale

The comparison is most revealing in the widening absolute difference between the two populations. In 2025 Ethiopia exceeds Viet Nam by approximately 33.9 million people. By 2050, the difference reaches approximately 115.0 million. The two trajectories are not simply different in starting size: they imply markedly different additions to the population requiring food, schooling, jobs, housing, infrastructure and health services over the same 25-year horizon.

The contrast should not be interpreted as evidence that population growth alone determines development. Viet Nam's historical progress reflects interacting changes in fertility, girls' education, reproductive health, economic policy, institutional capacity and integration into markets. Ethiopia's future outcomes will similarly depend on public investment, governance, productivity, equity and the effective exercise of reproductive choice. A comparison of two countries is illustrative, not a causal identification strategy.

9.11.4 Population momentum and the education–agency connection

The preceding sections documented major expansion in educational attainment alongside uneven changes in gender norms and decision-making. This matters for the population outlook because education, reproductive autonomy and access to voluntary family planning can shape fertility preferences and the ability to realize them. However, fertility decline does not immediately halt growth: large cohorts already born continue to enter reproductive ages, sustaining births even as average family size decreases. This is the mechanism of population momentum.

The 2019 manuscript drew attention to girls' secondary-school completion, access to contraception and women's decision-making as mutually reinforcing priorities. That policy logic remains relevant, but the updated chapter should not treat a particular education target as a mathematically demonstrated path to the UN medium projection. The projection is a reference trajectory, not the modeled consequence of any single policy package.

9.11.5 Implications for development and public health

First, service expansion must be judged against changing denominators. Rising numbers of clinics, classrooms or connections may coexist with limited improvement in population-adjusted coverage when population growth is rapid. Planning should report both absolute provision and rates per person, alongside geographic equity and service quality. In particular, maternal, newborn and child-health systems need capacity sufficient to meet the needs of successive large birth cohorts.

Second, human-capital investment is both an immediate public good and a long-run demographic investment. Secondary completion for girls, quality teaching, equitable access to higher education, and the removal of barriers to women’s employment strengthen capabilities irrespective of fertility outcomes. Access to rights-based contraception and respectful reproductive care should be understood as enabling informed choice, not as instruments for imposing demographic targets.

Third, population growth magnifies the consequences of deficits in urban planning, food systems, clean water, energy and transport. These are among the ten development domains identified in the 2019 Ethiopia 2050 paper. The relevant policy question is not whether the country can “support” a particular population in the abstract, but whether investment, productivity and institutional performance can improve sufficiently to raise living standards as the number of residents increases.

Fourth, Viet Nam offers a useful comparator for examining how demographic transition can coincide with broader socioeconomic transformation. Yet policy transfer must account for Ethiopia’s distinct agrarian structure, geographic inequalities, political economy and health-system constraints. Viet Nam’s trajectory is an informative counterpoint rather than a template that can be mechanically replicated.

9.11.6 Limits of the comparison

The exercise uses only national population totals. It therefore cannot identify the spatial distribution of future growth, dependency ratios, the number of births, or the financing required for specific services. Neither the medium projection nor the Ethiopia–Viet Nam contrast supplies a counterfactual estimate of what Ethiopia’s population would be under a specified education or family-planning intervention. Uncertainty generally increases with projection horizon, and future shocks to fertility, mortality or migration could produce departures from the plotted paths.

In sum, the next quarter century will be shaped not only by the pace of demographic transition but also by the capacity of public institutions and communities to translate social progress into improved well-being. The Ethiopia–Viet Nam comparison sharpens the question posed in the author’s 2019 paper: can development gains outpace the growth in the population they must serve? By 2050, Ethiopia’s projected population of roughly 225 million makes this a defining public-health and development challenge. The appropriate response is sustained investment in education, women’s agency, voluntary reproductive health services, productivity and equitable infrastructure—not population targets detached from human rights.

9.12 Discussion

9.12.1 One national transition, multiple transformations

The central finding of this chapter is not that Ethiopia has completed a demographic transition, but that several related transitions have proceeded at different speeds. Modern contraception expanded markedly, adolescent childbearing declined, skilled attendance at delivery increased, women’s

educational exclusion fell, and maternal-care continuity improved. Yet each gain is qualified by geographic divergence, differences between service contact and completion, and the persistence of unequal gender power. Demographic transition theory anticipates interconnected changes in fertility, survival, and social organization, but it does not require those changes to occur simultaneously or uniformly (Bongaarts, 2017; Cleland et al., 2006).

This distinction matters for policy. A national mean is useful for measuring aggregate progress, but it is an incomplete description of the populations and places that must be reached next. Ethiopia's observed pattern is better described as an uneven transformation: substantial advances in some domains and regions coexist with plateaus, residual exclusion, and adverse interpersonal norms in others. The policy challenge therefore changes as progress accumulates—from expanding first access toward improving equity, continuity, effective choice, and quality (Victora et al., 2012; World Health Organization [WHO], 2016).

The chapter's evidence is primarily descriptive. The findings support a coherent interpretation of concurrent demographic and health changes, not a claim that any single population policy, schooling expansion, or health-sector initiative caused them. This caution is especially important when comparing regions whose social, ecological, and institutional circumstances differ.

9.12.2 Population policy: From demographic objectives to implementation capacity

Ethiopia's 1993 National Population Policy linked demographic dynamics to development planning. Subsequent health-extension, reproductive-health, and sector-transformation initiatives increasingly translated broad policy objectives into service-delivery institutions. The chapter's policy chronology suggests institutional continuity in the pursuit of improved reproductive health and human development, but the existence of a policy is not evidence of its implementation intensity or impact (Transitional Government of Ethiopia, 1993; Federal Ministry of Health [FMoH], 2021).

The empirical results suggest a practical way to judge policy maturation. Early gains may be visible in the number of people reached by a service; later gains require attention to who remains excluded, whether services meet expressed preferences, and whether multiple contacts form an effective continuum. A plateau in an aggregate indicator need not signify a policy failure, just as a rising demand-satisfied ratio need not signify increasing use when its denominator changes. Population policy must be evaluated against well-defined outcomes and implementation conditions rather than broad demographic targets alone (Cleland et al., 2006; United Nations Population Fund [UNFPA], 2023).

Policy also operates through domains that are not reducible to fertility: education, gender relations, infrastructure, and the conditions under which children and young adults become healthy and productive. This broader conception aligns population planning with rights-based reproductive health and long-term investments in human capabilities (UNFPA, 2023; United Nations Department of Economic and Social Affairs [UN DESA], 2024).

9.12.3 Family planning: A major expansion followed by a consequential plateau

Among currently married women aged 15–49, modern contraceptive prevalence increased from 6.3% in 2000 to 35.3% in 2016, before registering 34.5% in 2024–25. Unmet need fell from 35.2% to 15.4% over 2000–2024–25. These are consequential long-run changes, consistent with the role of voluntary family planning in enabling reproductive preferences and improving maternal and child health (Cleland et al., 2006; Starbird et al., 2016). The small difference between 2016 and 2024–25, however, is better described as a near plateau than as continued rapid expansion.

The accompanying demand measures sharpen the interpretation. Total demand declined from 58.2% in 2016 to 50.9% in 2024–25, while demand satisfied by modern methods reached 67.7%. Because demand satisfied is a ratio with total demand in its denominator, it can rise even without a corresponding increase in contraceptive prevalence. The distinction is substantive: improved demand satisfaction and increased uptake are not synonymous. The chapter's joint presentation of prevalence, unmet need, demand, and satisfaction therefore avoids the misleading comfort of a single headline indicator (Bradley et al., 2012; UNFPA, 2023).

Regional inequality remains particularly striking: modern contraceptive prevalence in 2024–25 ranged from 1.6% in Somali to 55.7% in Sidama. This contrast does not, by itself, establish that differences are caused by culture, supply, security, or geography; each is a plausible contributor requiring targeted study. It does demonstrate that national averages conceal substantially different program environments. A regionally differentiated response should combine reliable commodity availability, respectful counseling, method choice, community engagement, and monitoring of unmet need rather than apply a uniform coverage target (Starbird et al., 2016; FMoH, 2021).

9.12.4 Wealth inequality and the meaning of contraceptive choice

The family-planning wealth analysis shows that national progress has not erased socioeconomic inequality. The 2024–25 modern contraceptive prevalence of 16.2% among the poorest quintile illustrates the distance between aggregate achievement and access among disadvantaged women. Wealth quintiles are relative household asset rankings within each survey, not absolute income categories; their differences must therefore be interpreted as relative socioeconomic gradients rather than directly measured purchasing-power gaps (Rutstein & Johnson, 2004).

Coverage differences can arise from both constrained access and differences in expressed fertility intentions. Neither explanation can be assumed from prevalence alone. The distinction between spacing and limiting adds another dimension: contraceptive use may reflect postponement of the next birth rather than a preference for a smaller completed family. In a population with substantial desired family size, rising spacing demand can coexist with continued population growth and momentum (Bongaarts, 2017; Cleland et al., 2006).

The appropriate program goal is informed and voluntary reproductive choice, not maximization of a particular method or reduction of fertility by administrative means. Disaggregated tracking of unmet need, demand satisfied, and method mix provides a more defensible account of equitable access than prevalence alone (UNFPA, 2023).

9.12.5 Adolescent childbearing: A life-course transition with uneven geography

The prevalence of adolescent childbearing—women aged 15–19 who had already given birth or were pregnant with a first child—declined from 16.3% in 2000 to 9.9% in 2024–25, a reduction of 6.4 percentage points. This measure is distinct from the adolescent birth rate per 1,000 women and should not be interpreted as that rate. The observed decline is important because early childbearing can interrupt schooling, constrain employment options, and compound health vulnerabilities, although the direction and magnitude of these relationships depend on social context (WHO, 2024; UNFPA, 2023).

Adolescent childbearing links the chapter’s education, family-planning, and maternal-health themes. School retention, opportunities to complete secondary education, access to confidential adolescent-responsive services, and the social norms governing marriage and reproductive autonomy may operate together. Yet the cross-sectional EDHS patterns do not identify the contribution of any one pathway. Policy should therefore treat adolescent childbearing as both a reproductive-health concern and a marker of the broader life-course opportunity structure (WHO, 2024; FMoH, 2021).

9.12.6 Skilled birth attendance: Large gains, incomplete equity

The certified skilled birth attendance (MH01) series documents a national increase from 5.7% in 2000 to 64.1% in 2024–25. This is one of the chapter’s largest observed service-coverage gains and signals a major shift in where and with whom women give birth. The regional range remains wide: Addis Ababa reached 98.1%, compared with 34.9% in Afar and 37.6% in Somali. These contrasts reinforce the need to interpret national service expansion alongside geography, referral capability, and workforce distribution (WHO, 2016; FMoH, 2021).

Skilled attendance is an essential but incomplete proxy for safe childbirth. It does not directly measure respectful care, the availability of emergency obstetric interventions, timely referral, or maternal and newborn outcomes. Nor can increases in attendance alone establish a reduction in mortality. The shift from counting attended births toward evaluating effective, timely, high-quality care is consistent with global evidence that poor-quality services can limit the health benefits of expanding access (Kruk et al., 2018; WHO, 2016).

9.12.7 The maternal-care continuum: Why contact is not completion

The maternal-health continuum (MH02) provides a more demanding view of service delivery than any single contact indicator. National completion rose from 3.6% in 2011 to 10.0% in 2016 and 26.6% in 2024–25. The improvement is substantial, yet the 2024–25 level indicates that completion of the analytically defined antenatal–delivery–postnatal sequence remains much less common than skilled attendance alone. This is not a contradiction: the two indicators measure different service constructs, eligible populations, and conditions (WHO, 2016, 2022).

The geographic gradient is exceptionally large. Addis Ababa recorded 64.8% continuum completion in 2024–25, whereas Somali recorded 3.1%, a difference of 61.7 percentage points. Central Ethiopia and Amhara registered strong observed gains, while Somali changed little from

its low starting level. These results highlight an implementation problem that cannot be solved by promoting a single encounter: women must be able to enter care early, navigate delivery services, and obtain appropriate postnatal follow-up (WHO, 2016, 2022).

Importantly, the source publication extract for MH02 did not itself reproduce the full eligibility, component-service, and confidence-interval specification. The interpretation here is therefore descriptive and subject to the certified MH02 definition being carried into the final exhibit notes. The indicator should not be presented as an externally standardized WHO continuum without confirming exact equivalence.

9.12.8 Women’s education: Broadening access versus completing the transition

The chapter documents a sharp reduction in women reporting no formal education, from 75.2% in 2000 to 31.4% in 2024–25. A separate analysis among women aged 20–24 indicates an increase in completed secondary or higher education from approximately 3.9% to 24.2%. The two figures describe different eligible populations and cannot be subtracted or treated as a common educational distribution. Together, however, they distinguish two policy challenges: overcoming exclusion from schooling and ensuring progression to meaningful completion (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020; UNFPA, 2023).

Education has broad potential relevance to fertility intentions, health literacy, care-seeking, employment, and women’s bargaining position. Yet schooling is not a universal causal lever whose effects can be assumed identical across regions. Institutional opportunity, labor-market access, household norms, and local service environments can shape whether additional schooling translates into greater autonomy. The contrast between progress in educational attainment and the uneven gender-power indicators discussed below is therefore analytically instructive rather than paradoxical (Kabeer, 1999; UNESCO, 2020).

9.12.9 Gender norms and agency: Progress in one dimension does not guarantee another

The chapter’s gender-power analysis deliberately separates acceptance of wife beating if a wife goes out without informing her husband (NEG1), reported partner fear (NEG2), and joint decision-making over partner earnings (POS2). These are not interchangeable measures. NEG1 is an attitude, NEG2 concerns reported fear, and POS2 describes participation in a specific household economic decision. A woman’s participation in joint decisions should not be treated as independent financial control, nor should partner fear be relabeled as measured intimate-partner violence (Kabeer, 1999; WHO, 2021).

The regional scatterplot illustrates the importance of this distinction. Addis Ababa combines 74.3% joint earnings decision-making with 14.8% partner fear; Amhara combines 80.5% with 27.4%; and Harari combines 76.4% with 28.8%. Yet South West Ethiopia combines 68.5% joint decision-making with 48.7% partner fear, while Oromia has 52.7% joint decision-making and the highest partner fear, 56.5%. Somali shows 50.0% joint decision-making but 25.8% partner fear. These contrasts rule out a simplistic reading that higher economic participation invariably means lower fear at the regional level.

For policy, the implication is that education, economic participation, freedom from coercion, and equitable norms require separate indicators and potentially distinct interventions. For analysis, the implication is ecological restraint: regional aggregate associations cannot establish individual-level relationships. The POS1 indicator remains under an unresolved anchor-validation hold and is not used here as a certified basis for synthesis (Kabeer, 1999; WHO, 2021).

9.12.10 Geography as a central organizing principle

The most consistent cross-domain finding is geographic heterogeneity. Regions that lead in one indicator need not lead in another; gaps in contraceptive prevalence, skilled attendance, continuum completion, educational attainment, and partner fear differ in both magnitude and direction. A single regional league table cannot capture these overlapping disadvantages. The case for geographically responsive planning is therefore empirical, not merely administrative (Victora et al., 2012; Kruk et al., 2018).

The chapter's 14-region contemporary framework makes differences visible that older geographic aggregations obscured. Nevertheless, historical comparison requires careful reconstruction of the former SNNPR into successor regions. Such harmonization is essential to avoid confusing a change in boundaries with a change in the underlying population outcome. Where estimates for a successor region have been reconstructed, the chapter relies on its certified crosswalk rather than assuming that the historical SNNPR average applies uniformly to all successor regions.

Equity-oriented implementation should combine national benchmarks with region-specific diagnostics of service access, quality, workforce capacity, transportation, schooling, and gender norms. These are hypotheses for local investigation, not causal conclusions established by the chapter's maps. Geographic targeting must also be paired with attention to inequalities within regions, including those related to wealth, residence, and education (Victora et al., 2012).

9.12.11 Ethiopia and Viet Nam: Population momentum and development capacity

The final section places the chapter's historical findings alongside United Nations World Population Prospects 2024 national population trajectories for Ethiopia and Viet Nam through 2050. The historical population crossover around 2007–2008 is analytically useful because the two countries subsequently followed divergent demographic paths. It should not be interpreted as a controlled experiment or evidence that a particular Vietnamese policy would yield the same result in Ethiopia (UN DESA, 2024).

Population momentum means that substantial growth can continue even as fertility declines, because a youthful age structure generates large cohorts entering reproductive ages. Consequently, the relationship between reproductive-health progress and future population size is neither immediate nor one-to-one. The appropriate development question is whether education systems, health services, employment opportunities, food and water systems, housing, and infrastructure can expand with population needs while preserving individual rights and environmental sustainability (Bloom et al., 2003; UN DESA, 2024).

Viet Nam is valuable as a comparator of demographic trajectories and development choices, but national differences in historical institutions, urbanization, economic structure, and fertility preferences preclude causal inference. The chapter's projection exercise uses the UN medium variant; it does not estimate new subnational forecasts or test alternative policy scenarios. Projections are conditional, uncertain representations of possible demographic futures, not predictions of health-system capacity or development outcomes.

9.12.12 An integrated policy agenda: What the next phase requires

Across the domains, the evidence points toward a shift in policy emphasis. Family planning requires informed choice and equity beyond a national prevalence target. Adolescent reproductive health requires life-course opportunity, not only clinical services. Maternal health requires continuity and quality beyond single contacts. Educational policy must emphasize progression and completion, not merely initial access. Gender policy must confront coercion and restrictive norms even where participation in household decisions appears high. And population planning must anticipate the service and infrastructure needs associated with momentum (FMoH, 2021; WHO, 2016, 2022; UNFPA, 2023; UN DESA, 2024).

This agenda benefits from a small, carefully specified dashboard of complementary indicators: contraceptive prevalence, unmet need, demand satisfied, adolescent childbearing, skilled birth attendance, certified continuum completion, educational attainment and completion, and separately defined gender-power measures. Reporting should preserve national and regional estimates, survey-year definitions, eligible populations, and uncertainty wherever available. Success in one domain should trigger scrutiny of the next constraint rather than premature claims of system-wide transformation.

The chapter's most important practical message is that demographic and health progress should be assessed by the distribution and durability of gains. A transition becomes developmentally consequential when the population can exercise reproductive choice, obtain effective care, complete education, live free of coercion, and access opportunities commensurate with its changing size and composition.

9.12.13 Limitations and directions for research

This synthesis combines indicators with different denominators, recall periods, age groups, and survey availability. Historical regional harmonization introduces additional assumptions, and smaller regional samples may yield imprecise estimates. Some apparent changes could reflect questionnaire wording, service definitions, or reporting behavior. Cross-sectional observations do not identify causal effects of population policy, education, or service expansion. The figures should therefore be read as an integrated descriptive account, not as a single multivariate model.

Further work could investigate mechanisms behind the post-2016 contraceptive plateau, separate changes in reproductive demand from supply constraints, assess attrition between successive maternal-care stages, examine regional differences in secondary-school completion, and analyze individual-level and multilevel relationships between education and gender power. Prospective

policy analysis would require explicit alternative projection assumptions and independently validated subnational demographic baselines. None of these analyses is implied to have been completed by the present chapter.

Finally, careful source provenance remains essential. The EDHS estimates reported here come from the chapter's certified analytic products; the external literature supplies interpretation and context. MH02 component definitions and POS1 certification status must remain visible in the final publication package.

9.12.14 Conclusion

Ethiopia's quarter-century record is a story of consequential progress without uniform convergence. The expansion of contraception and skilled delivery, reduction in adolescent childbearing, increase in women's schooling, and improvement in maternal-care continuity demonstrate the possibility of change. Their uneven geographic and social distribution—and the coexistence of educational and economic participation with persistent partner fear—demonstrate why progress cannot be summarized by any single indicator. Looking toward 2050, the challenge is to translate demographic transformation into equitable health, human capabilities, and development opportunities. Population policy, public health, and development planning must therefore be treated not as separate agendas, but as mutually dependent commitments.

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