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# Leaving School Early in Bihar: Girls' Secondary Dropout, Its Associated Costs, and the Missing Evidence for Gaya

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## *Abstract*

*Girls in Bihar's government secondary schools left school more often than boys in 2019-20 to 2021-22 but less often in 2022-23 and 2023-24, and leaving early is associated with earlier marriage, higher fertility, worse child survival and lower likely earnings. This paper uses only published secondary data (UDISE+, NFHS-4 and NFHS-5, Census 2011 and PLFS 2023-24) to describe the problem, with reference to Gaya district. Bihar girls' dropout in classes IX–X averaged 21.0% in 2019-20 to 2021-22 and reached 28.8% in 2022-23. Over the five years to 2023-24 the trend is upward (+1.5 points a year) but cannot be told apart from chance (p = 0.27), and the rate was 1.3 to 2.0 times that of India's girls. NFHS-5 shows that only 28.8% of Bihar women have 10 or more years of schooling and 40.8% marry before 18. Women with no schooling have 1.6 more children (3.8 vs 2.2), and their infants face 23 more deaths per 1,000 than those of women with 10+ years of schooling. Across Bihar's 38 districts, those with more schooled women have less child marriage (correlation −0.64), as reported in a companion paper. Gaya's female literacy rose from 53.3% (Census 2011) to 67.6% (PLFS 2023-24), leaving a 13-point gap with males; the two figures come from different surveys, so the change is indicative. Gaya's own dropout rate is not openly published, and the open district tables report classes IX–X together, so a class-VIII-to-X measure cannot be built; this data gap is itself a finding. All results are associations, not causal effects. The paper closes with policy options and a data agenda.*

***Keywords:*** *Girls' Dropout, Secondary Education, Bihar, Gaya, Human Capital, Child Marriage, UDISE+, NFHS-5.*

***JEL Codes:*** *I21, I25, J16, O15.*

## Introduction

Bihar loses more of its girls from secondary school than most Indian states, and Gaya Ji, a district of about 4.4 million people, is part of that pattern. A girl who leaves after class VIII or IX loses two or three years of learning. She is also more likely to marry early, to have children sooner and more often, and to earn less. These associations extend to her children and to the district economy.

### The Bihar Context

In the Ministry of Education's UDISE+ data, Bihar's girls' dropout rate at the secondary stage (classes IX–X) was 21.4% in 2021-22, against 12.3% for girls across India [1][2]. Enrolment in Bihar's government schools fell from 21.99 million in 2021-22 to 17.47 million in 2023-24, a drop of 20.6% [1].

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NFHS-5 (2019-21) finds that only 28.8% of Bihar women aged 15–49 have completed 10 or more years of schooling, against 41.0% nationally, and that 40.8% of women aged 20–24 were married before 18, against 23.3% nationally [4].

**The Gaya Context**

Gaya's Census 2011 population was about 4.39 million, with a sex ratio of 937 females per 1,000 males; female literacy was 53.3% against male literacy of 73.3% [5]. In PLFS 2023-24 the same two literacy figures were 67.6% and 80.7% [5]. Literacy has improved, but a gap between women and men remains.

**Research Gap**

To the author's knowledge, most studies of girls' schooling in Bihar examine a single policy, such as bicycles or stipends, or the state as a whole. Few link dropout figures to later economic outcomes using open data only, and few state how little can be shown for one district when district dropout rates are not published. This paper aims to do both.

**Objectives**

- To measure the level and trend of girls' dropout in Bihar's government secondary schools, and the gap with boys.
- To describe the educational and demographic profile of Gaya district from Census 2011 and PLFS 2023-24.
- To show, from NFHS data, how years of schooling are associated with marriage age, fertility and child survival among Bihar women, and to summarise the 38-district comparison reported in a companion paper [13].
- To illustrate, with stated assumptions, the earnings difference associated with leaving school early.
- To suggest policy measures relevant to Gaya.

**Hypotheses**

**H1:** Girls' dropout in Bihar is higher than boys' dropout (tested year by year, 2019-20 to 2023-24).

**H2:** Districts where more women have 10+ years of schooling have lower child marriage (reported in full in the companion paper [13]).

**H3:** Women with more schooling have lower fertility and lower infant mortality.

**Literature and Conceptual Framework**

- **Why Schooling Pays.** The standard starting point is the human capital model: each extra year of school raises a person's productivity, and wages follow. Psacharopoulos and Patrinos (2018) review 1,120 estimates from 139 countries (1950–2014) and report an average private return of 9% per year of schooling, with women's returns higher on average than men's [6]. For a girl in Bihar this is a benchmark for what an early exit may cost.
- **The Wider Cost of Girls Leaving School.** A World Bank synthesis links limited educational opportunities for girls to lower earnings, higher child marriage and early childbearing, poorer child health and weaker decision-making; it puts the global loss of lifetime earnings at $15–30 trillion [7]. It also notes that globally only three in four girls complete lower secondary school, and in low-income countries only one in three [7].
- **Marriage and the Next Generation.** Sekhri and Debnath (2014), using Indian data and age at menarche as an instrument, find that delaying a mother's marriage by one year raises the chance that her child can complete the hardest arithmetic and reading tasks by 3.5 percentage points [8]. Early marriage can reduce a mother's schooling and harm her children's education, while better marriage prospects may partly offset this. This paper reports associations, not causal effects.
- **Dropout by Sex Across Indian States.** Gochhayat and Ravindran (2025), using NSSO 75th-round data and a multinomial logistic regression, find that girls are more likely than boys to never enrol or to drop out, and that female dropout rises more steeply at ages 16–18. They

report female dropout above male dropout in Bihar [12]. This is consistent with H1 and with the UDISE+ figures for 2019-22, though not with those for 2022-24 (Section 4.1).

- **What has Been Tried in Bihar.** The best-known study is Muralidharan and Prakash (2017) on the Cycle programme, which gave bicycles to girls entering secondary school. Their triple-difference design compares girls with boys, and Bihar with neighbouring Jharkhand, before and after the programme. They find that exposure raised girls' age-appropriate secondary enrolment by about 30% and cut the gender gap by about 40% [9]. The gains were largest in villages far from a secondary school, which suggests that distance and safety are real barriers. Bihar has also run other schemes aimed at girls' schooling, such as uniform, stipend and completion-incentive support, but this paper does not evaluate them.
- **Framework Used Here.** The problem is treated as a chain: supply and household constraints, then dropout, then early marriage and early childbearing, then lower earnings, poorer child health and weaker bargaining power. Section 4 describes the first links with UDISE+ and Census data. Section 5 describes the later links with NFHS data. Each link is shown as an association only.

**Data and Methods**

- **Design**

The study is a descriptive and associational analysis of published secondary data. No primary survey was done. Every number is taken from, or computed from, the sources below.

| Source | What it gives | Used for |
|---|---|---|
| UDISE+ (Ministry of Education), via parliamentary annexures [1][2][3][14][15] | Dropout, transition and retention rates by sex, Bihar and India; government-school enrolment | Sections 4.1–4.2 |
| Education for All in India analysis of UDISE+ 2021-22 to 2024-25 [10] | Bihar transition, retention and enrolment series | Section 4.2 |
| NFHS-5 (2019-21) Bihar compendium [4] | Schooling, child marriage, fertility, district figures in the companion paper [13] | Sections 4.4, 5 |
| NFHS-4 (2015-16) Bihar report [11] | Earlier round, for change over time | Section 4.4 |
| Census 2011 and PLFS 2023-24 for Gaya, via IndiaStat [5] | Literacy by sex, population, sex ratio | Section 4.3 |

- **Definitions**

The *dropout rate* is the share of pupils enrolled in a class in one year who are neither in that class nor the next in the following year. The *retention rate* is the share of children who entered class 1 and reach the end of class 10. The *transition rate* is the share of children in the last class of one stage who move to the first class of the next. A *percentage point* (pp) is the plain difference between two percentages (28.8% minus 22.8% is 6.0 pp).

- **Statistical Tools**

The analysis uses simple comparisons of rates and gaps and a straight-line trend fitted to yearly values. The district correlation and fitted line are reported in the companion paper [13] and summarised in Section 4.4. Each tool is explained in plain language in the Appendix. Calculations were run in Python (SciPy) on the published figures.

- **Limit on Statistical Power**

The trend rests on five yearly values. With so few points, even a real effect often fails to reach the usual $p < 0.05$ bar. A non-significant result here means "not enough data to tell", not "no effect", and a significant result on so few points should not be over-read. Group differences in NFHS tables carry no published sampling error, so no tests are run on them.

- **Earnings Arithmetic**

Section 5 applies the 9% per year return to schooling [6] to illustrate the proportional earnings difference associated with extra years. It is an illustration with a global average, not an estimate for Gaya.

## Results

- **Dropout Level, Trend and the Gap with Boys**

Bihar girls' dropout in classes IX–X averaged 21.0% in 2019-20 to 2021-22 and reached 28.8% in 2022-23 (Table 1, Figure 1). Bihar boys' dropout was lower than girls' in the first three years and higher in the last two.

**Table 1: Dropout rate, classes IX–X, Bihar and India, 2019-20 to 2023-24 (%)**

| Year | Bihar Girls | Bihar Boys | Gap, Girls Minus Boys (Points) | India Girls | Bihar Girls ÷ India Girls |
|---|---|---|---|---|---|
| 2019-20 | 22.7 | 20.0 | +2.7 | 15.1 | 1.50 |
| 2020-21 | 19.0 | 16.3 | +2.7 | 14.2 | 1.34 |
| 2021-22 | 21.4 | 19.5 | +1.9 | 12.3 | 1.74 |
| 2022-23 | 28.8 | 30.3 | −1.5 | 15.4 | 1.87 |
| 2023-24 | 25.1 | 26.2 | −1.1 | 12.6 | 1.99 |

Source: UDISE+ via Ministry of Education Lok Sabha annexure [14], which agrees with a Rajya Sabha annexure [15]. The 2020-21 figure for India's girls is 14.2% in these annexures and 13.7% in a later answer [16]; the later figure would change that year's ratio from 1.34 to 1.39.

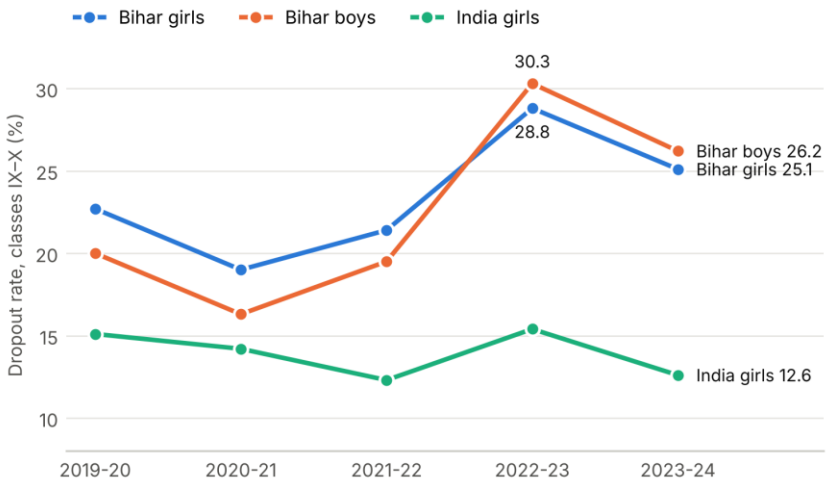



**Figure 1: Dropout rate, classes IX–X, Bihar girls, Bihar boys and India girls, 2019-20 to 2023-24 (%)**

Source: as Table 1.

- **Trend:** A straight-line fit over the five years 2019-20 to 2023-24 gives a slope of +1.46 points a year (standard error 1.07, 95% confidence interval −1.96 to +4.88, p = 0.267). The line leans upward, but with five points and this much year-to-year movement it cannot be told apart from chance. The fair reading is that dropout was high and unstable, not that it was proven to be rising. Boys' dropout follows a similar path (slope +2.64 points a year, p = 0.155).
- **Gap with boys (H1):** In each of 2019-20, 2020-21 and 2021-22, Bihar girls dropped out more often than Bihar boys, by 2.7, 2.7 and 1.9 points (mean 2.4). This supports H1 for those three years. In 2022-23 and 2023-24 the gap reversed: boys' dropout (30.3% and 26.2%) was higher than girls' (28.8% and 25.1%) by 1.5 and 1.1 points. Over the five years the mean gap is +0.9 points and it changes sign, so the data do not show a lasting disadvantage for girls in dropout. The fair reading is that girls' dropout in Bihar is high, and that the sharp rise of 2022-23 hit boys at least as hard. No formal test is reported: five yearly values from one state, with a gap that changes sign, are too few to support one. Nationally the pattern is different: India's girls dropped out less than boys in all five years (for example 12.3% against 13.0% in 2021-22).

- **Against India:** Bihar girls' dropout was 1.50, 1.34, 1.74, 1.87 and 1.99 times that of India's girls in the five years, an absolute excess of 7.6, 4.8, 9.1, 13.4 and 12.5 points, so the distance from the national rate has widened.

- **Transition and Retention**

On 2021-22 figures, about one in three Bihar girls who entered class 1 had left before the end of class 10, and the step from class VIII to IX was where many were lost.

**Table 2: Transition and retention, Bihar girls, 2021-22 and 2024-25 (flagged)**

| Bihar Girls | 2021-22 | 2024-25 (Flagged) |
|---|---|---|
| Dropout, classes IX–X (%) | 21.4 | 6.8 |
| Transition, class VIII to IX (%) | 76.2 | 68.9 |
| Transition, class X to XI (%) | 56.4 | 66.0 |
| Retention, class 1 to class 10 (%) | 64.9 | 37.8 |
| Lost before class 10, per 100 entrants | 35.1 | 62.2 |

Source: UDISE+ via [3][10]. Retention is a synthetic ratio (it compares different cohorts in one year).

- **Why 2024-25 is Flagged:** The 2024-25 report shows Bihar girls' dropout at 6.8% and boys' at 7.0% (India: girls 9.6%, boys 13.3%) [3]. A fall of 18.3 points in one year, alongside a 27-point swing in retention, does not look like a real change in children's behaviour. The sources do not explain it, and it may reflect a change in how the series is measured. All 2024-25 transition, retention and dropout figures are therefore shown only for transparency. They are not used for trend or gap tests, conclusions or policy options. The same caution applies to the all-student 2024-25 retention figures for Bihar (35.9%) and India (62.9%) [3].
- **Enrolment:** Secondary enrolment (classes IX–X) fell from 3.62 million to 2.77 million between 2021-22 and 2024-25 (−23.5%) [10], and government-school enrolment fell from 21.99 million to 17.47 million between 2021-22 and 2023-24 (−20.6%) [1]. Some of this fall may be better counting rather than lost children; the sources do not separate the two.

- **Gaya District: Literacy Profile**

Gaya's reported female literacy is 14.2 points higher in PLFS 2023-24 than in Census 2011, against 7.3 points for males, so the reported male–female gap is 6.9 points smaller.

**Table 3: Literacy in Gaya district, Census 2011 and PLFS 2023-24**

| Gaya Literacy | Census 2011 | PLFS 2023-24 | Change |
|---|---|---|---|
| Male (%) | 73.31 | 80.65 | +7.34 pp |
| Female (%) | 53.34 | 67.56 | +14.22 pp |
| Male–female gap (pp) | 19.97 | 13.09 | −6.88 pp |
| Gender parity index (female ÷ male) | 0.728 | 0.838 | +0.110 |

Source: IndiaStat district tables [5]. A parity index of 1.0 means equal literacy. Gaya's 2011 population was 4,391,418, with 2,124,852 females and 2,266,566 males, a sex ratio of 937 [5].

- **Cautions:** The two columns come from different surveys. PLFS is designed mainly to give state-level estimates, so its district figures can carry wide sampling error, and the 6.9-point narrowing should be read as indicative, not exact. The figures are also literacy levels for all ages, so they say less about today's school-age girls than a measure for young cohorts would.

- **Schooling and Marriage: The State Pattern and the District Picture**

In Bihar, school attendance falls faster for girls than for boys at the secondary ages. Girls' attendance drops from 88% at ages 11–14 to 67% at ages 15–17 (−21 points), and boys' from 88% to 73% (−15 points) [4]. One in three girls aged 15–17 (33%) is out of school, against 27% of boys.

Only 28.8% of Bihar women have 10+ years of schooling, up 6.0 points from 22.8% in NFHS-4 (a 26% relative rise) [4][11]. The figure for men is 42.8%, a 14.0-point gap, and for India's women 41.0%, a 12.2-point gap [4]. Urban women (48.0%) are 1.9 times as likely as rural women (25.2%) to have reached this level. Median years of schooling are 2.0 for women and 5.0 for men [4]. Of women aged 20–24, 40.8% married before 18, against 23.3% for India, a ratio of 1.75 [4].

The district comparison is reported in full in a companion paper [13] and summarised here. Across Bihar's 38 districts, those with more schooled women have clearly less child marriage: the correlation is −0.64 (95% confidence interval −0.80 to −0.41), and each extra point of women with 10+ years of schooling goes with about 0.77 fewer points of early marriage. The pattern appears in both NFHS rounds and remains after allowing for each district's urban share and SC and ST share, but it cannot be separated from women's general literacy, which tracks schooling closely. H2 is therefore supported as an association, not as proof of cause. Gaya's share of women with 10 or more years of schooling rose from 24.5% to 30.7% (Bihar: 22.8% to 28.8%), and its share of women aged 20–24 married before 18 fell from 54.4% to 42.8% (Bihar: 42.5% to 40.8%). In NFHS-5 Gaya ranks 16th highest of 38 districts on schooling and 20th lowest on child marriage. Its fall in child marriage, 11.6 points, is the second largest in Bihar, but single-district changes are the least certain in survey data, so it should be read as a result to check against later survey rounds, not as a finding about programme effects.

**Socio-Economic Outcomes Associated with Leaving School Early**

In Bihar, women with no schooling have 1.6 more children than women with 12+ years, and their babies are 1.7 times as likely to die in infancy. These are NFHS-5 associations. They show how groups differ, not what one extra year of school would cause.

**Table 4: Schooling and Selected Outcomes among Bihar Women, NFHS-5**

| Indicator, Bihar NFHS-5 [4] | Less Schooling | More Schooling | Ratio or Gap |
|---|---|---|---|
| Total fertility rate (children per woman): no schooling vs 12+ years | 3.8 | 2.2 | 1.73×; 1.6 more children |
| Teenage childbearing (%): no schooling vs 12+ years | 25 | 8 | 3.1× |
| Infant deaths per 1,000 births: mothers with no schooling vs 10+ years | 54 | 31 | 1.74×; 23 more deaths |
| Women with 10+ years of schooling (%): rural vs urban | 25.2 | 48.0 | urban 1.9× |
| Married before 18 (%): rural vs urban | 43.4 | 27.9 | rural 1.56× |

The fertility and infant-mortality rows are consistent with H3 in direction and size. The published figures carry no sampling error, so no significance test is possible. The gaps are large, but other things that go with schooling, such as household wealth, caste and place of residence, also play a part.

- **Earnings:** At the global average return of 9% per year of schooling [6], a person with n more years of schooling earns more by a factor of 1.09 to the power n. The difference is measured from the point of view of the girl who leaves early, so what she forgoes, as a share of the earnings of the classmate who stays, is:

$$\text{forgone share} = 1 - 1 \div (1.09)^n$$

**Table 5: Earnings gain for the girl who stays and earnings forgone by the girl who leaves, at a 9% return per year of schooling**

| Years of Schooling Lost (n) | Earnings Gain for the One who Stays | Earnings Forgone by the one who Leaves |
|---|---|---|
| 1 | 9.0% | 8.3% |
| 2 | 18.8% | 15.8% |
| 4 | 41.2% | 29.2% |

A girl who leaves after class VIII instead of class X (two years) would therefore earn about 16% less than a classmate who finishes class X, and one who leaves after class VIII instead of completing class XII (four years) about 29% less. The gain and the forgone share differ because the gain is measured against the lower earner and the forgone share against the higher earner. This is an illustration using a global average, not an estimate for Gaya. It also assumes that girls can find paid work, which is itself uncertain. The World Bank synthesis points the same way at global scale, with lifetime-earnings losses of $15–30 trillion linked to limited education for girls [7].

- **Marriage and Fertility:** Leaving school and marrying early appear to go together. In Bihar 40.8% of women aged 20–24 married before 18 [4], and across Bihar's 38 districts those with more schooling had less early marriage (Section 4.4). Early childbearing may then shorten or end any chance of returning to school; the teenage-childbearing gap of 25% against 8% is consistent with this.
- **Child Health and the Next Generation:** The gap of 23 infant deaths per 1,000 births between children of mothers with no schooling and those with 10+ years is the clearest household-level cost in the data, since each infant death carries a medical and emotional cost. The wider effect on children's learning is less certain. Sekhri and Debnath find that later marriage of the mother goes with better learning outcomes for her child, but this is an estimate for India as a whole, not for Gaya [8].
- **Agency and the Local Economy:** The World Bank synthesis also links girls' secondary education to more decision-making power and participation in work [7]. If Gaya follows the state pattern, early exit from school could limit these gains. With about a third of Bihar's girls aged 15–17 out of school (Section 4.4), a district like Gaya risks losing part of the skilled labour that rising female literacy (Section 4.3) is meant to deliver.

**Discussion and Policy Implications**

The evidence supports two firm findings and one cautious one. Firm: on 2021-22 figures Bihar lost about one in three girls before the end of class 10, and girls' dropout exceeded boys' in each year of 2019-22 (H1 supported for those years, though not for 2022-24, when boys' dropout was higher). Firm as an association: across all 38 districts (companion paper [13]), those with more schooled women have clearly less child marriage (H2 supported). Cautious: lower fertility and infant mortality go with more schooling across groups of mothers (H3 consistent in direction and size, with no significance test possible).

Three points temper the story. First, the apparent closing of the gender gap in 2024-25 coincides with a sharp swing in the retention figure, so it should not be read as success. Second, Gaya's own girls' dropout cannot be measured from open sources, so statements about Gaya rest on its literacy profile and on Bihar-wide patterns. Third, Gaya's literacy gap appears to have narrowed from 20.0 to 13.1 points, which hints that younger cohorts are in school more than earlier ones, but all-age literacy from two different surveys cannot show this directly.

A fourth point concerns the framing. The five-year series shows that girls' dropout in Bihar was higher than boys' only in 2019-22, and that the rise of 2022-23 was larger for boys. The case for action therefore rests less on a girl-specific excess than on the fact that Bihar's secondary schools lose a large share of all children, and that for girls early exit is associated with early marriage and early childbearing (Section 5).

**Policy Options, Tied to the Evidence**

- **Lower the distance and safety cost of getting to school:** The Cycle programme raised girls' secondary enrolment by about 30%, with the largest gains where the nearest secondary school was far away [9]. In a district with scattered villages, transport support and secondary schools nearer to settlements are the best-evidenced levers.
- **Focus on the class VIII to IX step:** In 2021-22 the transition rate for Bihar girls was 76.2% [3][10], so roughly one in four did not move on. Tracking each girl at the end of class VIII and following up with her family and school would target this step. The 2024-25 transition figure is not used here until the series break is explained (Section 4.2).
- **Treat early marriage and dropout as one problem:** With 40.8% of women marrying before 18 [4], keeping girls in school to class X helps only if marriage is also delayed. Block-level programmes that pair scholarships with marriage-age awareness are a logical step.
- **Publish district dropout and transition rates:** The analysis here is limited mainly by the lack of Gaya-level figures. District- and block-level UDISE+ tables, split by sex and social group, would let local officials see which blocks lose girls.
- **Keep girls' secondary completion as a district target:** Women's schooling rose in 37 of 38 districts, including Gaya (24.5% to 30.7%), but 42.8% of Gaya's young women were still married before 18 in NFHS-5. Monitoring both indicators would show whether Gaya keeps its recent progress.

**Limitations**

- **Small samples:** The trend uses five yearly values, so power is low. Non-significant results are inconclusive, not negative, and a single p-value near 0.05 should not be over-read.
- **Checking of district values:** The district results summarised in Section 4.4 come from the companion paper [13], which describes how the district values were checked against the official fact sheets and where that check is incomplete.
- **Ecological association:** District-level and group-level patterns do not show what happens to an individual girl, and none of the results is a causal estimate.
- **Series break:** The 2024-25 UDISE+ dropout fall for girls (25.1% to 6.8%) and the retention swing are not explained in the sources. They are reported but not used for tests, conclusions or policy.
- **Source disagreement for Gaya:** Published figures differ: overall literacy of 63.67%, 66.35% and 54.8%; a sex ratio of 937 or 932; a population of 4,391,418 or 4,379,383. The paper uses the IndiaStat Census and PLFS tables throughout.
- **Different surveys:** Census 2011 and PLFS 2023-24 differ in design, and PLFS district estimates may carry wide sampling error. NFHS-4 and NFHS-5 district estimates also carry sampling error that the factsheets do not report.
- **Secondary sources:** Several figures are taken from compilations of UDISE+ and from aggregator tables. They should be checked against the primary UDISE+, NFHS, Census and PLFS publications.
- **Revised figures:** The same UDISE+ figure can differ between releases: India's girls' dropout in 2020-21 is 14.2% in the 2025 annexures used here and 13.7% in a 2026 answer [16]. The choice moves Bihar's ratio to India for that year from 1.34 to 1.39 and changes no conclusion.
- **No district dropout measure:** The open district tables available to the author (IndiaStat's compilation of UDISE+) report secondary enrolment for classes IX–X together, not class X alone, so a class-VIII-to-class-X cohort ratio for Gaya cannot be built from them. The official UDISE+ district reports, or a request to the district education office, could supply the class-wise enrolment by sex that is needed.
- **Sign change in the gender gap:** Girls' dropout exceeded boys' in 2019-22 and was lower in 2022-24. With five yearly values from one state this pattern is described, not tested.

**Conclusion**

Leaving school early is associated with large costs for Bihar's girls and their districts. Girls' secondary dropout in Bihar averaged 21.0% in 2019-20 to 2021-22 and reached 28.8% in 2022-23. It was higher than boys' in each of the three years 2019-22 (but lower in 2022-24, when boys' dropout rose more) and 1.3 to 2.0 times that of India's girls. Only 28.8% of Bihar's women have 10 or more years of schooling and 40.8% marry before 18, and across Bihar's 38 districts those with more schooled women have clearly less child marriage (correlation −0.64). Gaya lies near the state middle in NFHS-5 (30.7% schooling, 42.8% child marriage), but its child marriage fell by 11.6 points since NFHS-4. Women with no schooling have 1.6 more children and 23 more infant deaths per 1,000 than women with more education. At the global return to schooling of 9% a year, a girl who leaves two years early would earn roughly 16% less than a classmate who finishes, and one who leaves four years early roughly 29% less. This is an illustration, not an estimate for Gaya. Gaya's reported female–male literacy gap fell from 20.0 to 13.1 points between two different surveys, and 13 points remain. The district-level evidence is suggestive, not conclusive, and the data gaps are themselves a finding: until district dropout rates are published and tracked by sex, Gaya's girls cannot be counted when they leave.

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