POLICY BRIEF

What Derive Fertility Behaviors: Policy Insights from a Meta-Analysis

KEY POINTS

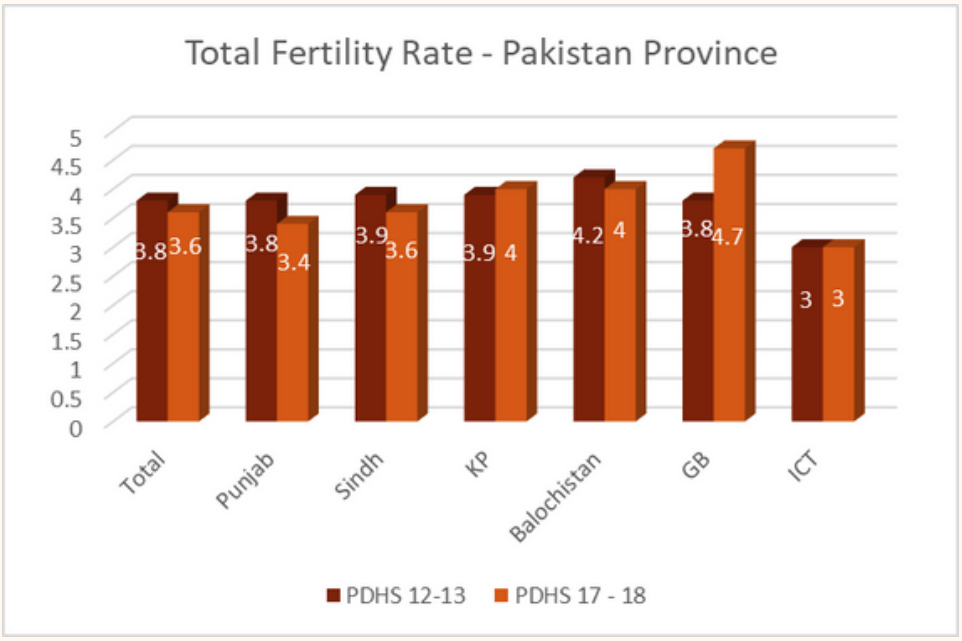
Age of women, child gender, and number of surviving children are the most consistent determinants of fertility behaviour.

- Women tend to shift toward family-limiting after age 30, leading to a marked increase in contraceptive use.
- Persistent son preference drives continued childbearing; couples without sons are less likely to stop fertility and more likely to delay contraception.
- Couples with a higher number of surviving children—especially when they have both sons and daughters—show a substantially higher likelihood of adopting contraception.

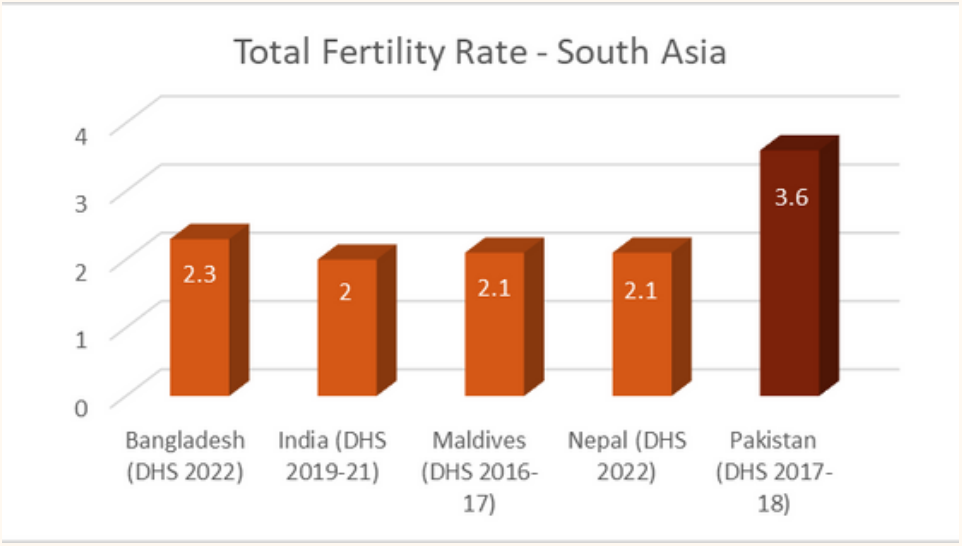
Need for Integrated Policies

- Without addressing social norms, son preference, and inequality, family planning programmes alone cannot accelerate fertility decline.
- Policy must shift from access-only approaches to integrated, evidence-based reforms targeting empowerment, equity, and cultural change.

BACKGROUND



Pakistan's population exceeds 242 million and is projected to rise sharply over the next decades. Despite progress, fertility remains well above replacement level.[1] The decline in fertility has slowed in recent years, reflecting persistent gaps in contraceptive uptake and delayed progress in reproductive health outcomes.



Regional comparisons show Pakistan also lags behind South Asia in contraceptive prevalence, with slower fertility decline and high unmet need. This sustained population growth continues to strain public services, employment, and resource availability, particularly in urban areas.

Without accelerated fertility reduction and inclusive family planning strategies, Pakistan risks widening socioeconomic disparities and missing its demographic dividend. The meta-analysis study synthesized findings from empirical studies conducted between 1968 and 2025 on fertility determinants in Pakistan. Using multilevel meta-regression across three key outcomes—contraceptive use, ideal family size, and total fertility rate (TFR)—it identifies female age (30+), number of living children, and child gender composition as the most consistent predictors of fertility behavior.

[1] This is the level at which a population replaces itself from one generation to the next. It's generally defined as a rate of 2.1 children per woman.

CHALLENGES → RECOMMENDATIONS

Policy Gaps

Fragmented Policies: Past family planning efforts focused narrowly on access and service delivery, overlooking cultural norms. Weak integration across sectors led to fertility issues remain siloed within health policy, with limited linkages to education, labour, and social protection.

Socioeconomic Disparities in Fertility Behaviour: Fertility remains highest among poorer, less-educated, and rural households—not only due to limited access to services, but also because higher child mortality leads families to continue childbearing until a desired number of surviving children is reached.

Policy Recommendations

USE DIGITAL AND COMMUNITY PLATFORMS FOR TARGETED BEHAVIOUR CHANGE

LEAD ACTORS: POPULATION WELFARE AND HEALTH DEPARTMENTS, IN COORDINATION WITH NADRA, PEMRA, AND PROVINCIAL SOCIAL MEDIA CELLS.

ACTION: MOVE BEYOND GENERIC AWARENESS TO AUDIENCE-SPECIFIC, RELATABLE MESSAGING.

- Use TikTok, YouTube, radio, TV, and WhatsApp helplines to share age-appropriate and culturally relevant messages for young couples, parents, and older women. Partner with Lady Health Workers, teachers, religious leaders, and community influencers to co-create content in Urdu and regional languages.
- Conduct community and mosque-based dialogues to promote delayed marriage and birth spacing.
- Train nikah registrars and union councils to verify CNIC-based age using NADRA to discourage child marriage.

ENHANCE ACCESS TO FAMILY PLANNING THROUGH SERVICE INTEGRATION AND WOMEN'S ECONOMIC EMPOWERMENT

LEAD ACTORS: POPULATION WELFARE DEPARTMENTS, HEALTH DEPARTMENTS, BISP/EHSAAS, WOMEN DEVELOPMENT DEPARTMENTS, PPHI, MNCH PROGRAMS.

POLICY DIRECTION: LINK REPRODUCTIVE AUTONOMY WITH SKILLS, INCOME OPPORTUNITIES, AND INTEGRATED SERVICE DELIVERY.

- Embed family planning counseling and mobile FP units at cash transfer sites, skills centers, and workplaces, ensuring women can receive services during routine visits without extra travel or cost
- Add family health and FP modules to vocational training and entrepreneurship programs, so reproductive autonomy is strengthened alongside women's income and skills development.
- Institutionalize parity-based counseling protocols at every birth and prioritize long-acting methods (LARCs) for women 30+ or those who have completed family size, promoting informed, life-stage appropriate contraceptive choices.
- Bundle FP counseling with postnatal care, immunization, and nutrition outreach, allowing women to access information and services at existing touchpoints.

IMPROVE LOCAL ACCOUNTABILITY AND DATA-DRIVEN DECISION-MAKING

FEDERAL & PROVINCIAL POPULATION WELFARE DEPARTMENTS, PBS, PRCS, POPULATION COUNCIL, DISTRICT HEALTH OFFICES.

POLICY DIRECTION: STRENGTHEN LOCAL PLANNING, MONITORING, AND ACCOUNTABILITY THROUGH TIMELY, TRANSPARENT DATA.

- Establish a Family Planning Data Observatory integrating PDHS, MICS, and routine service delivery data. This centralized platform would allow provinces and districts to monitor trends in fertility intentions, contraceptive uptake, and service gaps in real time, supporting evidence-based policy adjustments rather than relying on outdated survey cycles.
- Enable district-level micro-planning based on age, parity, and socioeconomic characteristics, not broad rural/urban categories. This would ensure that interventions address the diverse realities across regions where community needs differ sharply even within the same province.
- Link budget allocations and staff performance to service quality, continuation rates, and client satisfaction. Performance-based financing can incentivize frontline workers, facility staff, and district managers to prioritize informed choice, respectful care, and follow-up, instead of focusing only on numbers of users or distributions.

CONCLUSION & ACKNOWLEDGMENT

Pakistan's fertility transition remains incomplete, shaped less by access and awareness than by deep-rooted social norms, economic inequality, and gender dynamics. The meta-analysis study shows that women's age, surviving children, and son preference are the strongest drivers of fertility behavior. Accelerating fertility decline will require a decisive policy shift—from fragmented, access-oriented initiatives toward integrated, gender-responsive, and behaviorally informed strategies. By embedding family planning within broader frameworks of women's empowerment, social protection, and community engagement, Pakistan can move closer to achieving sustainable population stabilization and inclusive development.

Acknowledgment

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