



Public–Private Partnerships in Indian Education: Equity, Access, and Sustainability

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ABSTRACT

This study examines the effect of Public–Private Partnerships (PPPs) on the upgrading educational systems at both levels in India, particularly on Case Studies Delhi, Andhra Pradesh, Maharashtra, the Bharti Foundation, and the National Model Schools project. Taking a case study research strategy, the study assesses PPPs against the criteria of affordability, accessibility, governance, and sustainability, and situates the research within the frame of the Sustainable Development Goals (SDGs 10, 11, and 16). The research validates that PPPs lower the initial capital requirement for the government and encourage private innovation while their equity records are mixed. Maharashtra's ITI joint ventures that did use private sector finance sacrificed affordability for low-income students. Delhi's PPP schools accelerated infrastructure development yet lacked strong enforcement of the EWS quota. Andhra Pradesh Model Schools and SALT initiative offered technological and institutional innovation while seen apprehensions on long-term viability. Bharti Foundation's approach to development was extremely inclusive but was dependent upon repeated donations from donors. The study opines that PPPs in education are feasible if equity and Accessibility is embedded in contract relationships and underpinned by open governance frameworks and timely funding. There should be longitudinal follow-up on end in subsequent research, points, inter-state comparisons, and unconventional funding devices to ensure PPPs not only produce efficiency, but also equitable and persistent gains in schooling.

Keywords: Public–Private Partnerships (PPPs), education system, affordability, accessibility, governance, sustainability, equity, India



INTRODUCTION

India's position as a major economic player is undeniable. The rapid industrialization and an expanding middle class have significantly increased the country's infrastructure demands, requiring modern transport systems, dependable energy grids, and effective urban facilities to support sustained growth (World Bank Group, 2018). However, traditional public funding methods, often limited by budget constraints, struggle to meet these escalating needs (Singh, Manmohan, 1998).

This situation necessitates the exploration of innovative financing models that combine the resources and expertise of the private sector with public sector oversight. Public-private partnerships (PPPs) have emerged as a viable solution to address India's infrastructure gap (Kumari, Jayanti, 2016). These partnerships involve collaboration between the government and private firms, where the private sector is responsible for financing, designing, constructing, and operating infrastructure projects. This strategic collaboration brings multiple advantages, such as mobilizing private investment, fostering efficiency and innovation, and ultimately enhancing public service delivery (Boardman et al., 2015; Comas & dos Santos, 2021).

This paper examines how Public-Private Partnerships (PPPs) are being used to improve elementary school infrastructure in India. It examines whether these partnerships are beneficial and what impact they have on the economy in three significant states: Maharashtra, Andhra Pradesh, and Delhi. The study focuses on how PPPs address crucial issues such as cost efficiency, resource mobilization, and long-term sustainability. It also looks at how these models might help build modern school buildings, provide access to excellent education, and ultimately improve children's learning experiences (Boye & Mannan, 2014).

Before the economic liberalization of the 1990s, infrastructure development in India was mainly funded and managed by the public sector. While this method led to some significant accomplishments, it fell short in addressing the needs of a swiftly expanding economy (Singh, Manmohan, 1998). The limitations of conventional practices became clear through deteriorating infrastructure, congestion in transportation systems, and insufficient access to essential services, especially in urban regions (World Bank Group, 2018). This pivotal moment necessitated a transition to new financing models capable of drawing in private sector investment and expertise.

The rise of Public-Private Partnerships (PPPs) in India can be viewed as a strategic method to address the increasing infrastructure shortfall. By utilizing private sector resources and expertise, PPPs present a viable option for expediting infrastructure growth. Private firms contribute not only financial resources but also specialized knowledge in project management, technological advancements, and operational efficiency. This collaboration between public and private sectors has the capacity to produce high-quality infrastructure projects more quickly and cost-effectively compared to traditional approaches (Boardman et al., 2015; Comas & dos Santos, 2021).

This study will look at how public-private partnerships (PPPs) have impacted elementary education infrastructure in Maharashtra, Andhra Pradesh, and Delhi. By examining specific case studies and government efforts, we will highlight successful examples, analyze their real-world impact, and discuss ideas for making these collaborations more sustainable and inclusive in the education sector (Boye & Mannan, 2014).



LITERATURE REVIEW

Public-Private Partnerships (PPPs) emerged as a key policy tool in India beginning in the 1990s, as governments sought private finance, management capacity, and innovation to address large infrastructure gaps (Faster & Growth, 2013; Group, 2016). PPPs have given obvious results (most notably in urban mass transportation and highways), but the research remains divided on who wins, who loses, and whether services are available to low-income, rural, and vulnerable populations (Boye & Mannan, 2014; Nagesha & Gayithri, 2014). This study brings together academic and policy texts that investigate PPPs via the dual lenses of equity (distributional justice across income, gender, caste, and location) and accessibility (physical, economic, and social ability to use services). It emphasizes sectoral trends, institutional constraints, empirical case studies (metro, roads, municipal services), and policy recommendations for making PPPs more inclusive.

India's shift towards public-private partnerships (PPPs) is based on three interconnected reasons: limited public investment funds, the perceived advantages of private involvement in terms of efficiency and risk transfer, and the need to expedite large, capital-intensive projects (Comas & dos Santos, 2021; Kumari, Jayanti, 2016).

Financing tools and equity implications

A major tool influencing the outcomes of Public-Private Partnerships (PPPs) in India is the Viability Gap Funding (VGF) program. This initiative, run by the central government, provides one-time grants or deferred payments to help make projects that are socially beneficial but not commercially viable financially attractive for investors (Fleta-Asín et al., 2020). VGF specifically targets projects that offer significant public benefits but have limited revenue potential, such as certain urban infrastructure and social services. The rules on how VGF operates, who qualifies, and its past use play a crucial role in determining which PPPs are developed and whether they meet the needs of poorer or less profitable user groups (World Bank Group, 2018). Government guidelines outline the types and limits of VGF funding and stress the importance of evaluation methods to guarantee public value. However, critics argue that VGF often ends up backing projects that are already financially appealing overall, like large train stations and urban redevelopment efforts, instead of supporting smaller social services that have a greater need for distributional support (Maniar, 2013).

Sectoral patterns and spatial bias: who PPPs serve

A common theme in Indian Public-Private Partnership (PPP) discussions is the uneven distribution of investments across different sectors and regions. Most PPP funding has focused on areas like transportation (including roads and metro systems), ports, and commercial infrastructure, where the potential for profit is clearer (Group, 2016). Reviews show that a significant portion of PPP investments has gone into highways and urban rail projects, while social sectors such as water supply, sanitation, healthcare, and rural electrification have seen fewer ongoing PPP initiatives (Kumari, Jayanti, 2016). This focus creates a bias towards urban areas and projects that generate revenue: larger cities and economically active corridors receive more attention, whereas remote, low-income, or informal communities are often overlooked. This imbalance has serious implications for equity since public infrastructure plays a crucial role in ensuring fair access to essential services (Comas & dos Santos, 2021).



Urban mass transit: evidence on accessibility and distributional effects

Urban metro systems are the most studied public-private partnership (PPP) projects in India, providing valuable insights into equity and accessibility (Nagesha & Gayithri, 2014).

Public-Private Partnerships (PPPs) in India are commonly linked to large infrastructure projects such as highways, airports, and energy facilities. However, due to limited government funding, attention is now turning toward primary education where the private sector's efficiency and creativity can make a significant impact (Grigore, 2004). This section examines current research on how PPPs function in education, their economic effects, and important case studies and policies from Maharashtra, Andhra Pradesh, and Delhi.

PPPs in Social Infrastructure

For many years, the Indian government has been the main provider of education. Yet ongoing issues like poor school facilities, lack of accountability among teachers, and low learning outcomes have created an urgent need for new solutions (Rauniyar & Kanbur, 2010). PPPs are increasingly viewed as a way to fill this gap by attracting private investment and expertise. To facilitate this process, the government has launched initiatives like the Viability Gap Funding (VGF) program, which provides one-time grants to make socially beneficial projects like schools more appealing to private investors even if they aren't profitable (Fleta-Asín et al., 2020). Recently, this program was updated to cover up to 60% of project costs for social sector projects, indicating a clear policy shift aimed at encouraging more private involvement. At the same time, research points out some concerns. Historically, many PPP investments have gone into urban projects that generate revenue, while rural and low-income areas where needs are often greater are frequently overlooked (Hemans et al., 2023). This situation raises important questions about fairness; critics caution that if not managed carefully, PPPs could worsen social inequalities instead of alleviating them.

Case Studies in Primary Education PPPs

The Delhi Model: In Delhi, PPPs primarily aim to offer additional services rather than directly manage schools. A notable example is the partnership with NIIT, which set up digital learning stations in underserved neighborhoods like Madangir. Evaluations showed that this collaboration improved student learning and teamwork skills (Jha & Chatterjee, 2005).

The Maharashtra Model: Maharashtra's partnership with the Akanksha Foundation is recognized as one of the most successful PPPs in education. Working alongside municipal corporations in Mumbai and Pune, Akanksha manages public schools that frequently perform better than state averages. Their focus on teacher training, effective pedagogy, and community engagement has driven positive results, though concerns about scalability and dependence on philanthropic funding remain.

The Andhra Pradesh Model: Andhra Pradesh has turned to PPPs to strengthen educational infrastructure, including recent announcements for new medical colleges through PPPs. Advocates argue this will expand access to MBBS seats and improve efficiency, while critics caution it may intensify privatization and limit access for low-income students (Anantharaman, 2021).



Accessibility for vulnerable populations: disability, gender, and informal workers

Accessibility encompasses physical access (ramps, tactile pavement, station layout), economic access (affordability), and social access (safety, discrimination). Research on disability access in Indian metro systems reveals positive intent but inconsistent implementation: elevators and ramps may exist but are often poorly maintained, tactile signage is irregular, and staff training is inadequate (Nagesha & Gayithri, 2014).

Gendered accessibility, such as women-only coaches and lighting in stations, and the needs of informal workers, such as vendors dependent on metro footfall, remain understudied. Where PPP contracts neglect these dimensions, exclusion persists even as networks expand (Comas & dos Santos, 2021).

Empirical gaps and methodological challenges in the literature

The research on PPPs and equity in India reveals several gaps, including limited long-term data, difficulties isolating PPP effects from broader urban issues, and a concentration on transport rather than social infrastructure (Rauniyar & Kanbur, 2010; World Bank Group, 2018). Few studies deeply analyze affordability, intra-household impacts, or retention of disadvantaged groups in education PPPs.

Recent innovations and policy levers to enhance equity and accessibility

Proposed solutions include pro-poor PPP contract design with mandatory service obligations, progressive tariffs, quotas for disadvantaged groups, and cross-subsidization (Kumari, Jayanti, 2016). Viability Gap Funding should be linked directly to inclusion metrics (Fleta-Asín et al., 2020). Stronger planning of last-mile connectivity, institutional capacity building, and participatory monitoring are also essential (Comas & dos Santos, 2021).

Policy implication summary

The literature underscores several priorities: embedding inclusion in procurement, linking VGF to clear social objectives, mandating universal service obligations in municipal PPPs, and improving transparency and accountability through data reporting and independent regulation (Group, 2016).



METHODOLOGY

The present work adopts a case study methodology to critically examine the effect of Public-Private Partnerships (PPPs) under the Indian education sector on accessibility and equity (World Bank Group, 2018). The case study framework is particularly suited for such an examination since education PPP projects are locality-specific and shaped by regional governance regimes, financing arrangements, and social requirements (Comas & dos Santos, 2021; Kumari, Jayanti, 2016). With an emphasis on 3–4 illustrative cases distributed over Maharashtra, Andhra Pradesh, and Delhi, the work proposes to (i) highlight sectoral heterogeneity and (ii) interregional disparities.

Case Study Selection

They were selected purposively for their diversity of PPP models and circumstances:

- **Delhi: PPP in School Infrastructure and Fee Regulation:** A partnership-of-service model introducing digital education for underserved schools (Jha & Chatterjee, 2005).
- **Maharashtra: PPP in Vocational and School Education:** The Maharashtra State government has been an active participant in public-private partnerships (PPPs) related to vocational education and school infrastructure.
- **The Andhra Pradesh Model Schools and the Medical Colleges PPPs:** State-led PPPs for mass-scale development of infrastructure (Anantharaman, 2021).
- **Bharti Foundation's Satya Bharti Schools:** A philanthropic PPP initiative bridging private investment and public recognition (Baur, 2016).

The cases were chosen both for the diversification of the locations geographically and for the variety of the institutional arrangements involved so that comparative insights can be gleaned on affordability, accessibility, governance, and sustainability.

Analytical Framework

Each PPP initiative is examined using a four-dimensional framework:

1. **Affordability:** To what extent do PPPs lower or raise the cost of education for disadvantaged groups? Are mechanisms like subsidies, reimbursements, or cross-financing effective in preventing exclusion (Shrivastava & Ramachandra Rao, 2011)?
2. **Accessibility:** How far do PPPs extend the reach of quality schooling across caste, gender, disability, and rural–urban divides (Rauniyar & Kanbur, 2010)?
3. **Governance:** What contractual, regulatory, and monitoring mechanisms ensure accountability, transparency, and equity? How are responsibilities shared between public and private actors (Comas & dos Santos, 2021)?
4. **Alignment with Sustainable Development Goals (SDGs):** Specifically, the study assesses how PPPs contribute to reducing inequalities (SDG 10), fostering sustainable and inclusive urban services (SDG 11), and strengthening institutions and governance (SDG 16) (Group, 2016).

This framework moves beyond purely financial or efficiency-based evaluations by explicitly linking PPP performance to distributive justice and social sustainability.



Data Sources and Triangulation

The study employs multiple data sources for greater reliability and validity:

- **Government reports and guidelines:** NITI Aayog's PPP framework documents, Ministry of Finance Viability Gap Funding (VGF) guidelines, and Comptroller and Auditor General (CAG) evaluations of PPPs.
- **International databases:** World Bank's PPP Knowledge Lab and Asian Development Bank's sectoral PPP reports for cross-country studies (World Bank Group, 2018).
- **NGO and civil society studies:** Reports from organizations such as the Akanksha Foundation, Indus Action, and the Bharti Foundation that provide ground-level evidence on accessibility and learning outcomes
- **Academic reading:** Scholarly work on the governance of PPPs, education equity, and infrastructure funding, such that the study is contextual within the overall intellectual argument (Singh, Manmohan, 1998).

Information from such sources shall be brought together through document analysis, informed by comparative case study coding for the four dimensions of the framework. As far as possible, secondary information on cost profiles, gender mix, and student intake shall be incorporated and used to support the analysis.

Novelty of Approach

Although prior literature framed PPPs for the most part along lines of cost efficiency or project delivery (Comas & dos Santos, 2021; Group, 2016), the study advances a two-pronged focus on equity and accessibility tied directly to the SDG agenda. Through systematic examination of whether or not PPPs for primary and secondary education serve institutional and distributive ends, the approach moves beyond the technical efficiency frame and takes into account who benefits and is left behind and what institutional transformations are needed for inclusiveness. This pairing of the depth of the case study and SDG-oriented evaluation is the study's principal contribution.



CASE STUDY ANALYSIS

Maharashtra: PPP in Vocational and School Education

The Maharashtra State government has been an active participant in public-private partnerships (PPPs) related to vocational education and school infrastructure. Most recent initiatives include partnership with nearly 5,000 firms for the development of employability through skill development initiatives and industry-standard curricula. Likewise, the state implemented a pioneering PPP policy for Industrial Training Institutes (ITIs), encouraging private players to invest 10 crore or more for the goal of upgradation of facilities and reorientation of government-run ITIs into education centers (Mital & Mital, 2016).

In an economic sense, such a framework takes advantage of private investment in order to mitigate the up-front capital costs incurred by the state but enables faster-than-otherwise-possible development of infrastructure. Nevertheless, there are concerns over cost recovery: where the private partners bring efficiencies, the created pricing structures and training costs could otherwise exclude economically weaker students unless subsidies or cross-financing arrangements are built into the arrangements. Long-term sustainability of the PPPs critically depends upon the realization of steady reimbursement cycles and the intense monitoring of equity protections (Boye & Mannan, 2014).

Delhi: PPP in School Infrastructure and Fee Regulation

Delhi has seen various PPP experiments in education, from the decision of the New Delhi Municipal Council for setting up new schools through PPP models to the controversies over the hikes in fees of private unaided schools running through PPP standards (Kudtarkar, 2022).

Even though such projects improved the quality of the infra, the equity parameter is variable. RTE Act implementation and the 25% EWS/DG quota for private schools, for instance, record continuing deficits: many schools under-utilise the seats or reimburse only slowly, thereby holding back the entry for disadvantaged children (Iyer, 2019). Financially, the Delhi school PPPs exemplify a classic tension—govt reimbursements more often than not are lower than the actual cost per head, and hence the subsidy gap which is passed on by the private schools, through higher fees, to the parents at times.

Andhra Pradesh Model Schools and Learning Transformation Initiatives

Andhra Pradesh started the AP Model School program around 2013 with the mission of setting up government model schools in educationally backward districts for the purpose of providing quality English-medium education. The program envisaged an initial phase of about 355 schools and thereafter another phase of up to 400; thereafter, the state bifurcation transferred many and merged others into state responsibility (Raman, 2023).

Other more recent initiatives are the Supporting Andhra's Learning Transformation (SALT) project. It is a partnership with the World Bank (and technology partners) for an upgrade of basic learning: teacher mentor networks, digital content (DIKSHA), pedagogical support etc. (World Bank Group, 2018).



Bharti Foundation's PPP Model and Its Role in Inclusive Education

Bharti Foundation is the philanthropic subsidiary of Bharti Enterprises that was setup in the year 2000 and has a primary objective which is simple yet powerful: assist the underprivileged children and youth in India to realize their full potential. The foundation aims to help children who are of marginalized and lower socio-economic backgrounds. This is achieved through the provision of opportunities that can uplift them through value added education (Baur, 2016).

The Foundation has shown remarkable success in creating and delivering a strong educational platform. It currently operates 5 senior secondary schools and 242 primary schools, serving more than 30,000 children and enabling them to access the quality education that they would otherwise struggle to receive. The Bharti Foundation has a remarkable track record of improving educational outcomes and economic opportunities and prosperity for children who come from underprivileged and poor backgrounds. In this regard, let's examine the types of students who gain from this program together with the minimum 2011 data, a significant section of the students comes from the disadvantaged class. 76% of the students are from SC, ST, and OBC. Around 48% of the students enrolled in Satya Bharti Schools are girls. In a country where girl child education is still an ongoing challenge, this is a positive step toward empowering young girls and giving them the chance to dream bigger.

Category	% of Children
Children from SC/ST and OBC category	76%
Girl students in Satya Bharti Schools	48%
Children from Migrant Family	7%
Children from BPL Category	31%
Physically Challenged	0.5%
Children from Rural families	100%

Source: Bharti Foundation data (2011).

National Model Schools Scheme (PPP)

At the national scale, the Plan for establishment of 2,500 Model Schools through PPP mode sought to deliver Kendriya Vidyalaya-level facilities at the block level. In this model, private players were responsible for the delivery of the infrastructure and the government funded the recurring expenses for government-funded students, along with an additional 25% investment for the capital.

Economically, the model promised efficiency gains by risk-passing to the private sector and the alignment of public investment with learning outcomes. Arrangements for graduated financial support (up to 125% of the cost per student in remote and tribal communities) were envisaged for support for inclusiveness. In reality, however, there were concerns regarding land acquisition, quality retention beyond the initial 10-year concession period, and ensuring the management quota seats did not dominate the government-share amount. Beyond such hurdles, the model proved a viable architecture for mobilising resources and joint responsibility for school infrastructure (Group, 2016).



Comparative Insights

In Maharashtra, Delhi, the Andhra Pradesh districts, and the Model Schools PPP, we can identify the same general pattern being repeated:

- **Cost Efficiency:** PPPs generally reduce the immediate capital burden on governments and bring private expertise into infrastructure development. However, reimbursement delays and gaps, particularly evident in Delhi's EWS quota schools, undermine financial viability. In Andhra Pradesh, while the Model Schools provided quality infrastructure, the high recurring salary and maintenance costs strained state finances, raising concerns about long-term cost effectiveness.
- **Resource Mobilisation:** Maharashtra showcases successful private sector mobilisation through the deployment of ITI and vocational PPPs, and the mobilisation of central funds, World Bank partnerships, and state assumption of personnel costs by Andhra Pradesh under the Model School and SALT programs. This comparative illustration shows that mobilisation can take on different modes—direct industry capital for Maharashtra and institutional and donor support for Andhra Pradesh.
- **Equity & Accessibility:** Delhi's EWS quota under RTE is an example of the continuing challenge of getting benefits to the disadvantaged, with under-utilised seats and insufficient monitoring. The Andhra Pradesh model schools improved accessibility for educationally backward blocks, but improvements in equity were spotty, with rural and poorer children still experiencing incidental costs and variable quality across districts.
- **Sustainability:** Long-term sustainability is built on proper governance and financial planning. The Model Schools PPP deal tied payments to performance but struggled with land acquisition and balancing management and government quotas. In the state of Andhra Pradesh, sustainability improved after Model School teachers became part of normal government service, but there are issues with maintaining the infrastructure and uniform quality.

RESULTS AND DISCUSSION

In the study of PPP initiatives in education across different states, we found that the effective outcomes which benefit the students in the education sector for building their future also address lots of challenges. In Maharashtra, the partnership with industries to enhance vocational training and ITIs highlights how private capital can build qualitative infrastructure and prepare students not just to gain information but to be able to secure jobs and be independent. But at the same time delays in reimbursements and questions of affordability highlight that financial structures remain challenging to achieve positive outcomes for example in Delhi's case shows that while PPP schools improved infrastructure, the benefits for disadvantaged students at a greater level under EWS quotas but if look on-ground challenges it had found that they were not fully realised due to under-utilisation of seats and weak monitoring. This indicates that equity goals cannot be assumed to follow automatically from private participation; they require active enforcement.

Andhra Pradesh's SALT initiative highlights the transformative potential of technology partnerships, where teacher mentoring and digital content boosted learning processes. However, long-term costs and uneven implementation across districts suggest that sustainability depends on consistent state support. The Bharti Foundation model stands out as a successful example of inclusivity, with high enrolment of SC, ST, OBC, and girl students, proving that private foundations can complement state efforts in reaching marginalised groups. Finally, the National Model Schools scheme demonstrated strong resource mobilisation but faced hurdles in land acquisition and maintaining quality after the initial concession period. Overall, PPPs in education have reduced the government's capital burden and introduced innovation, but without stronger financial safeguards, equity-focused monitoring, and sustainable exit strategies, their potential remains only partially fulfilled.



COMPARATIVE SUMMARY

To synthesise the results, Table 1 provides a comparative overview of the five PPP initiatives studied in this research. The framework dimensions of affordability, accessibility, governance, and sustainability are used as evaluative criteria.

Table 1
Comparative Overview of PPP Initiatives in Education

Case Study	Affordability	Accessibility	Governance	Sustainability
Maharashtra ITIs	Private capital reduced state burden, but training fees may exclude poorer students	Wider reach via vocational programmes, but equity remains uneven	State-led policy with private industry input	Dependent on reimbursement cycles and monitoring
Delhi PPP Schools	Free seats under RTE quota, but reimbursements lag behind actual costs	Improved infrastructure; under-utilisation of EWS quota limits reach	Weak enforcement of quota rules and monitoring	Affordability challenges undermine long-term viability
Andhra Pradesh SALT	Costs largely borne by state, external support for technology	Improved teaching-learning outcomes, but uneven district coverage	Partnership with World Bank and NGOs for teacher mentoring	Needs consistent state funding for scaling
Bharti Foundation	No tuition fees; supported by philanthropic funding	High enrolment of SC, ST, OBC, and girls	Managed by foundation with community involvement	Sustainability tied to continued philanthropic investment
National Model Schools	Govt. supported student costs + private capital	Aimed to expand access to quality schools across blocks	Contractual oversight at national and state levels	Faced challenges in land acquisition and quality retention



Synthesis

The comparative analysis highlights that PPPs in education can succeed when affordability and accessibility are explicitly built into contracts and reinforced by strong governance. However, models that rely too heavily on either philanthropy or government reimbursement face limitations in scale and sustainability. A hybrid model that blends philanthropic engagement, government support, and private efficiency—while embedding enforceable equity safeguards—appears to be the most promising pathway to align PPPs with long-term educational goals and the Sustainable Development Goals.

POLICY RECOMMENDATIONS

The experience of PPPs in education across Maharashtra, Delhi, Andhra Pradesh, the Bharti Foundation model, and the National Model Schools Scheme highlights the need for a balanced framework that ensures that we talk about a well-structured program without compromising equity when it comes to student and their education. The following area we can focus on is strengthening financial mechanisms, many times reimbursement is delayed which leads to a funding gap which creates a huge impact on the quality of PPP projects. Hence, governments should take responsibility for establishing a certain period when reimbursement should take place, which builds trust among the people towards partnership with the private sector and won't harm the quality of the project. Another important factor is the inclusivity of PPP designs. Example Building on successful models such as the Bharti Foundation's for disadvantaged groups and girl students, governments should build equity based on performance incentives in contracts, rather than forcing just on EWS quotas and gender.

Even PPPs must focus on quality enhancement by enhancing teacher training, digital pedagogy, and modernised curricula looking into contemporary times. Andhra Pradesh's SALT project offers an example of how partnerships with donor agencies and technology providers can support capacity building which shouldn't be limited to one state it should be enhanced and acknowledged throughout the nation which can build long-term effectiveness in PPP projects. PPPs also require stronger institutional and legal backing.

Where there should be strict rules and regulations regarding the contracts, clear risk-sharing arrangements, and dedicated regulatory oversight can address the inconsistencies observed across states.

Furthermore, building the participatory mechanisms such as School Management Committees with parent and community representation, even the enrolment of Scholars who have done a detailed study on this area and now know what the problem is and how one can address it can enhance accountability, prevent fee-related disputes, and build trust in PPP schools. And lastly, sustainability must be given importance through exit strategies and post-concession plans to safeguard infrastructure and learning outcomes once private partners withdraw. Measures such as teacher absorption into government service, coupled with long-term funding for maintenance, can help stabilise outcomes. We can see that PPPs in education can bridge gaps in resources and quality, but it's our responsibility to address the challenges like financial stability, equity safeguards, institutional oversight, and community participation to deliver sustainable and inclusive educational development.



CONCLUSION AND FUTURE WORK

This study proves that Public-Private Partnerships (PPPs) can and should significantly influence extending educational infrastructure in India by alleviating the financial burden on the state and bringing innovation. However, challenges remain. Maharashtra's ITI model mobilised private capital but affordability concerns were higher; Delhi PPP schools bettered infrastructure but struggled on equity in EWS implementation; Andhra Pradesh's Model Schools and SALT emphasized innovation but faced sustainability concerns; and the Bharti Foundation model proved inclusive but heavily reliant on charity.

Generally, PPPs are a success if affordability, accessibility, and accountability are integrated contracts and governance. Without these protections, equity objectives may be achieved only in part.

Future Work

Future studies should collect longitudinal data on learning outcomes, compare models in more states, and explore other funding instruments like blended finance and results-based contracts. Doing so would ensure PPPs deliver efficiency while also being consistent with goals for inclusiveness and sustainability.



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