Foundation for Responsive Governance

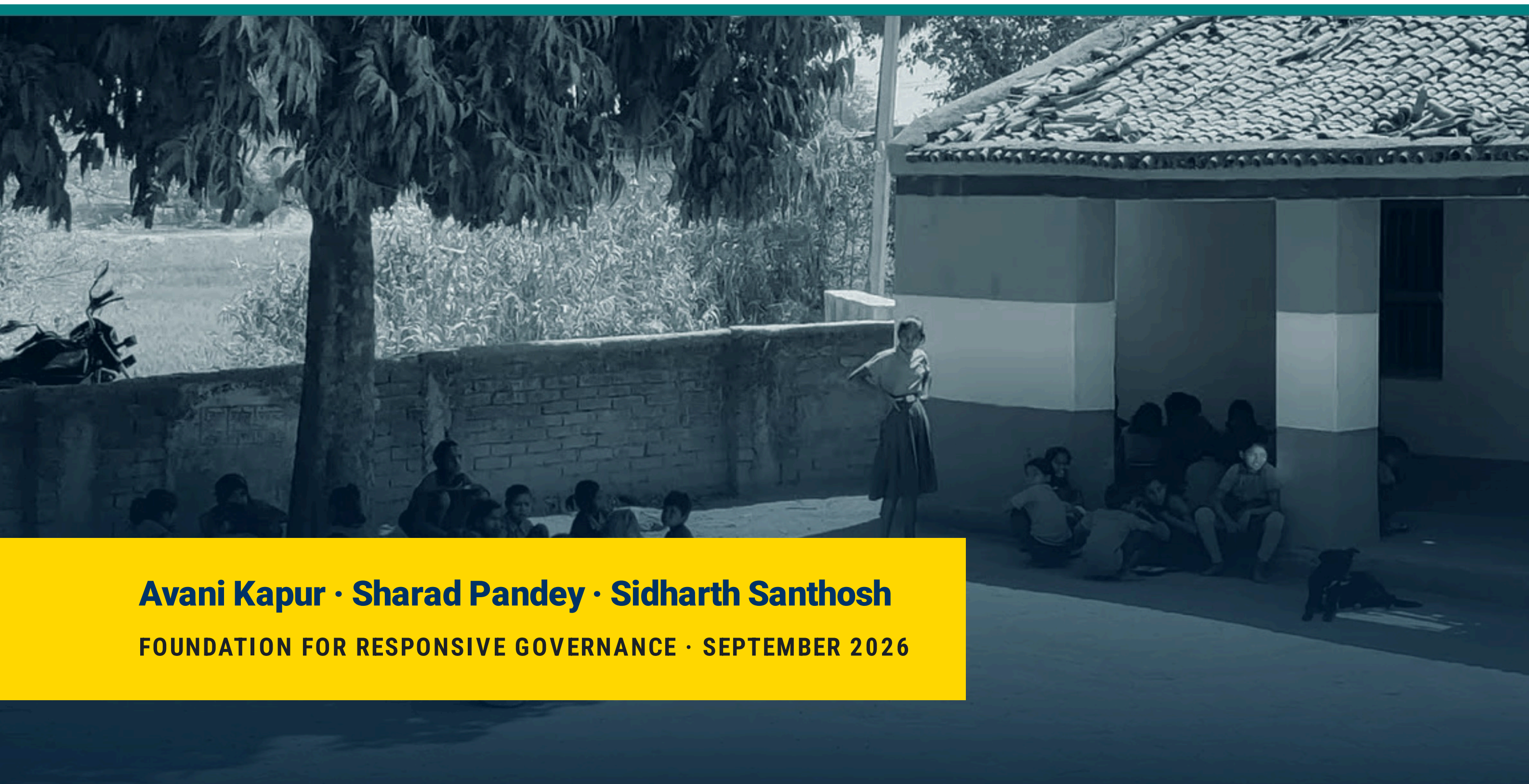
SUPPORTED BY

Vereint für eine bessere Zukunft
Nitya Bal Vikas Deutschland e.V.

WORKING PAPER · PUBLIC FINANCE AND SCHOOL EDUCATION

The Last Mile of Education Finance

Examining school-level public financial management reforms in Bihar



Avani Kapur · Sharad Pandey · Sidharth Santhosh

FOUNDATION FOR RESPONSIVE GOVERNANCE · SEPTEMBER 2026

Abstract

Public financial management (PFM) reforms in India have increasingly moved towards a digitally centralised fund-flow architecture designed to improve fiscal control, transparency, and efficiency. The Single Nodal Agency (SNA) reform, introduced in 2021 and expanded through the SNA-SPARSH in 2023, consolidates scheme-wise accounts, reduces idle balances, and enables real-time expenditure triggered fund releases. While such reforms have delivered measurable gains in aggregate cash management, their consequences for frontline service delivery remain underexamined.

This paper investigates how SNA reforms have reshaped school-level financial processes in Bihar, drawing on a mixed-methods study that combines policy review, fifteen in-depth interviews across administrative levels, and a survey of 40 schools in Gaya and Purnia- two districts selected for their contrasting administrative and socio-economic contexts. The paper develops a *control–discretion trade-off* framework to analyse how digitally centralised PFM systems redistribute financial authority, administrative work, and risks across levels of government.

The findings show that while SNA has improved grant coverage and reduced account fragmentation, it has not resolved persistent delays in fund utilisation at the school level. Headmasters report a narrowing of discretion over routine expenditures, new procedural burdens linked to digital portals and vendor-based payments, and emerging risks such as inflated billing and informal credit arrangements. These effects are more pronounced in the district with weaker digital infrastructure and thinner vendor markets.

The paper argues that the efficiency gains of digitally centralised PFM reforms depend critically on complementary investments in administrative capacity, digital literacy, and limited frontline flexibility — without which reforms risk shifting, rather than resolving, the bottlenecks they were designed to address.

Acknowledgements

This study would not have been possible without the openness of officials and school functionaries across four levels of Bihar's education administration, who gave their time to explain how public money actually moves — and where it stalls.

We are grateful to officials at the Bihar Education Project Council and the Department of Education, Government of Bihar, for their willingness to discuss the design and day-to-day working of the Single Nodal Agency architecture. At the district and block level, we thank the District Programme Officers, district and block accountants, and Block Resource Centre staff in Gaya and Purnia, who patiently walked us through drawing limits, portal entries and release orders, and who shared district records that allowed us to triangulate our survey data.

Our deepest thanks are owed to the headmasters and teachers of the 40 schools we surveyed. They described, candidly and in detail, the workarounds that keep schools running when funds arrive in the third quarter of the financial year. Their accounts form the core of this paper.

We thank the field team that conducted the school surveys in Gaya and Purnia in March and April 2025, and colleagues at the Foundation for Responsive Governance who reviewed earlier drafts and sharpened the control–discretion framework developed here.

This work was supported by Nitya Bal Vikas Deutschland e.V. We are grateful for their support of independent research on the last mile of education finance. The views expressed, and any errors that remain, are ours alone.

SUGGESTED CITATION

Kapur, A., Pandey, S., & Santhosh, S. (2026). *The Last Mile of Education Finance: Examining School-Level Public Financial Management Reforms in Bihar*. Foundation for Responsive Governance.

AUTHORS

Avani Kapur, Sharad Pandey and Sidharth Santhosh.

PERIOD OF STUDY

January – November 2025. School surveys were conducted in March and April 2025.

DISCLAIMER

The findings, interpretations and conclusions expressed in this paper are those of the authors. The survey covers 40 schools in two districts and is not statistically representative of Bihar as a whole. All data are drawn from publicly available sources, official district records and primary fieldwork, as cited.

Contents

01	**Introduction**	**7**
02	**Methods**	**9**
2.1	Review of policy documents	**9**
2.2	In-depth interviews	**9**
2.3	School surveys	**9**
2.4	Limitations	**11**
03	**Evolution of PFM reforms in India**	**12**
3.1	Digitalisation of fund flows: from CPSMS to PFMS	**12**
3.2	Consolidation and cash management: the Single Nodal Agency reform	**13**
3.3	Toward real-time, rules-based payments: SNA-SPARSH	**13**
3.4	India's PFM reforms in global context	**14**
04	**Control, discretion, and the costs of digitally centralised fund-flow architectures**	**16**
4.1	Frontline discretion and street-level administration	**17**
4.2	The control–discretion trade-off	**18**
4.3	Applying the framework to education finance in Bihar	**19**
05	**Findings**	**21**
5.1	Fund receipts and timeliness	**21**
5.2	Utilisation and spending processes	**25**
5.3	Administrative burden and the erosion of frontline discretion	**27**
5.4	Absence of mediating conditions	**28**
06	**Discussion and conclusion**	**30**
6.1	Rethinking efficiency in PFM reforms	**30**
6.2	Implications for the design of PFM reforms in education	**31**
6.3	Recommendations	**32**
07	**References**	**35**

Abbreviations

BEPC	Bihar Education Project Council
BRC	Block Resource Centre
CPSMS	Central Plan Scheme Monitoring System
CSS	Centrally Sponsored Scheme
DBT	Direct Benefit Transfer
FY	Financial year
GST	Goods and Services Tax
HM	Headmaster
IFMIS	Integrated Financial Management Information System
JIT	Just-in-time
MPI	Multidimensional Poverty Index
PFM	Public financial management
PFMS	Public Financial Management System
PPA	Payment Processing Authority
RBI	Reserve Bank of India
SMC	School Management Committee
SNA	Single Nodal Agency
TSA	Treasury Single Account
UC	Utilisation Certificate
UDISE+	Unified District Information System for Education Plus
VSS	Vidyalaya Shiksha Samiti (Village Education Committee)
ZBSA	Zero Balance Subsidiary Account

Figures

Figure 1 Proportion of surveyed schools receiving Composite School Grants

Figure 2 Headmasters' perceptions of the timeliness of CSS fund disbursement to schools

Figure 3 Proportion of schools reporting timely communication of fund transfers

Figure 4 Utilisation of Composite School Grants

Tables

Table 1 Selected characteristics of the study districts

Table 2 Milestones in India's PFM reform architecture

Table 3 Month in which drawing limits were released to schools

SECTION 01

Introduction

Public financial management (PFM) reforms have become central to improving the efficiency, transparency, and accountability of public expenditure in low- and middle-income countries. Over the last decade, India has undertaken a series of ambitious PFM reforms, including the Public Financial Management System (PFMS), Direct Benefit Transfers (DBT), the Treasury Single Account–like Single Nodal Agency (SNA) mechanism, and more recently SNA-SPARSH, a reform that integrates financial systems to enable near real-time, expenditure-triggered fund releases.

Together, these reforms represent a shift towards digitally centralised fund-flow architectures — systems that consolidate fragmented accounts, strengthen payment processes, improve cash management and create real-time visibility over how public funds are spent. These reforms were designed to solve real problems. Chronic delays in fund releases, the accumulation of idle balances in scheme-related bank accounts, and limited visibility into actual expenditure have long undermined the effectiveness of government programmes in India. By consolidating accounts, eliminating float, and linking every payment to a digital approval trail, India's recent PFM reforms have delivered measurable gains in fiscal control and expenditure traceability.

In sectors such as school education — where financing is dispersed across millions of frontline institutions — reforms to fund-flow architecture have particularly significant implications. Schools in India annually receive small grants, known as Composite School Grants, intended to support basic teaching-learning materials, repairs, sanitation, and safety. Historically, these funds were subject to chronic delays, leakage risks, and significant differences in their receipt and utilisation at the district level (Centre for Policy Research, 2013). PFM reforms promise to address these weaknesses by strengthening the "last mile" of financial delivery.

Findings from this study in Bihar — including original fieldwork — find that from the perspective of school-level officials, these same reforms have generated new procedural workloads, reduced discretion, and complicated implementation for frontline actors who have limited digital literacy and institutional support. While SNA-SPARSH has reduced idle accounts and improved coverage, it has not resolved persistent delays in utilisation and has narrowed the discretionary space available to headmasters (HMs) to address local needs.

These frontline experiences are in line with similar findings from other Indian sectors such as health. Choudhury and Chutani (2025) found that while SNA reform had successfully delivered its core PFM objective under the National Health Mission with respect to gains in cash management, there remained persistent gaps in leveraging these gains from a scheme implementation perspective, due in part to constraints in digital infrastructure and human capacity at lower administrative levels. As a result, while transparency and oversight have increased at the top, the benefits of the reform are unevenly realised across the implementation chain.

RESEARCH QUESTIONS

1. How do reforms that improve aggregate fiscal control reshape the incentives, workload, and discretion of frontline functionaries?
2. Do centralised digital systems enhance last-mile efficiency, or do they merely shift procedural burdens downward onto actors least equipped to absorb them?
3. How do these tensions play out differently across districts with varying administrative capacity?

This paper examines these questions by analysing PFM reform experiences in Bihar's school education sector. Using a mixed-methods study combining policy review, interviews, and school surveys from two districts (Gaya and Purnia), it investigates how the SNA reforms have altered the timing, receipt, utilisation, and administrative processes of education funds at the frontline. The goal of the paper is not to measure causal impacts on service delivery or learning outcomes. Instead, the paper seeks to understand the lived experience of administrators and headmasters navigating redesigned fund-flow mechanisms.

By situating Bihar's experience within the broader global and Indian PFM literature, this paper offers two main contributions. First, it adds to the empirical understanding of how digitally centralised fund-flow architectures reshape frontline discretion and administrative experience in education. Second, it develops a conceptual framework — the "control–discretion trade-off" — for analysing why reforms designed to strengthen top-down oversight and standardise fund flows through digitalisation may generate friction at the last mile unless matched with investments in administrative capacity, human support systems, and local flexibility.

These findings do not suggest that the SNA architecture is intrinsically flawed. The gains in fiscal control and expenditure traceability are critical, real and significant. What they do suggest is that these gains are not sufficient on their own. The effectiveness of digitally centralised reforms depends critically on complementary investments in conditions that determine whether frontline actors can actually use the systems.

The paper is structured as follows. Section 2 provides a short description of the methods used. Section 3 reviews the broader objectives and assumptions behind PFM reforms and situates India's recent innovations — particularly in the education sector — within this global context. Section 4 develops a theoretical framework that guides our analysis of how these reforms reshape the frontline administrative perspective. Section 5 presents the findings from Bihar. Finally, Section 6 discusses the implications of these findings for the design of PFM reforms in education and offers concluding reflections.

SECTION 02

Methods

We use three methods to understand how PFM reforms are implemented at the frontline: a review of policy documents, in-depth interviews, and school surveys. Together, these approaches provided insights into the functioning of fund-flow mechanisms before and after the introduction of the SNA system.

2.1 Review of policy documents

Policy documents that discuss design, implementation, monitoring, and evaluation provide a detailed characterisation of different elements of the reform introduced. We conducted a review of documents that introduced PFM reforms in India, sourced from secondary sources such as government websites. The review allowed us to construct a timeline and background on how reforms were implemented in Bihar and the changes that came with them.

2.2 In-depth interviews

A total of fifteen in-depth interviews were conducted across four administrative levels — state, district, block, and school — between January and November 2025. Respondents included key officials involved in fund management at various levels of the education system:

STATE	DISTRICT AND BLOCK	SCHOOL
Head Accountant, MIS Officer, Joint Secretary, Finance Advisor and Budget Secretary	Accountants and officers responsible for fund disbursal and monitoring	Head teachers overseeing fund utilisation at the school level

The interviews were conducted in Hindi, transcribed verbatim and then translated into English. The interviews were coded and analysed to gain insights into the practical aspects of fund flow, revealing the constraints and administrative adjustments introduced under the SNA framework.

2.3 School surveys

Two districts of Bihar — Gaya and Purnia — were selected to capture contrasts in resource availability and administrative capacity. As per a recent report by NITI Aayog, Purnia is the second poorest district in the state with a headcount poverty ratio of 50.70 per cent compared to Gaya at 35.43 per cent (NITI Aayog, 2023). In terms of the Multidimensional Poverty Index (MPI), Gaya stood at 0.169 while Purnia stood at 0.262 (Ibid). With respect to education indicators, Gaya has a pupil–teacher ratio of 1:18 at the middle level, while Purnia is much higher at 1:27 (UDISE+ Dashboard, 2024). While in theory most reforms with respect to public finance and fund flows are centralised in nature and thus should not show inter-district variations, the inclusion of two differing contexts allowed us to assess how variations in local capacity can affect efficiency gains in financial management.

Table 1: Selected characteristics of the study districts

Indicator	Gaya	Purnia
Headcount poverty ratio	35.43%	50.70%
Multidimensional Poverty Index	0.169	0.262
Pupil–teacher ratio, middle level	1:18	1:27
Blocks randomly sampled	4	4
Schools surveyed	20	20

Source: NITI Aayog (2023); UDISE+ Dashboard (2024); authors' school survey.

A total of 40 schools were surveyed across the two districts, with 20 schools each in Gaya and Purnia, between March and April 2025. The sampling followed a randomised design. Four blocks were randomly selected from each district. From each selected block, five schools were randomly chosen, covering both primary and middle schools (Grades 1–8).

The school survey focused on understanding fund-flow processes over the period 2019–2024, reflecting both the period before and after the SNA system. Questions were asked with respect to fund receipts, spending patterns, and the extent of support received from district and block officials in addressing financial or administrative grievances. Further questions were asked of HMs with respect to their perceptions of the new SNA system specifically. Data collection was carried out using the KoBo Toolbox, with offline data capture employed in areas with poor internet connectivity.

Data on fund receipt and timing was triangulated using multiple sources. School-level information from surveys was cross-verified during in-depth interviews with headmasters, and further validated using district-level release orders where available. In later years (FY 23–24 and FY 24–25), where school cashbooks were not consistently available due to the shift to vendor-based payments under SNA, receipt timing was verified using official district release letters and confirmation from headmasters on the quarter in which funds became available for spending.

Photo 1. An in-depth interview with a block-level official on the release and notification of drawing limits. Bihar, 2025.

2.4 Limitations

Given the small sample size, our survey is not statistically representative of Bihar as a whole and does not attempt to establish a causal relationship between the SNA reform and education outputs and delivery. The focus instead is to highlight frontline perspectives of the new SNA arrangements across two contrasting district contexts, to illustrate how common processes such as fund releases, expenditure management, and grievance redressal can be experienced and perceived differently in varied administrative and socio-economic settings.

The purposive selection of two contrasting districts — one better resourced and one among the poorest in the state — is able to capture these differences. Moreover, the randomised selection of schools within blocks further provides internal validity for within-district comparisons.

SECTION 03

Evolution of PFM reforms in India

Over the last two decades in India, PFM reforms have been a set of gradual, systematic attempts to address long-term structural challenges in the execution of public expenditure. These challenges have been particularly prominent for Centrally Sponsored Schemes (CSSs), which constitute a significant portion of development financing and require timely fund flows for effective implementation.

Historically, fund-flow and accounting systems were characterised by fragmentation across numerous implementing agencies, reliance on manual Utilisation Certificates (UCs), and limited visibility into the actual use of funds. This led to two problems: delays and poor visibility into finances, including unspent balances, which made sub-national planning difficult. It also meant large idle balances built up in scheme-related bank accounts outside the Consolidated Fund of India. Since government spending is largely debt-financed, funds sitting idle in commercial bank accounts meant the Union government continued paying interest on borrowed money while the banks, not the exchequer, earned the returns (Kapur, 2022).

3.1 Digitalisation of fund flows: from CPSMS to PFMS

The Central Plan Scheme Monitoring System (CPSMS), launched in 2009, marked India's first big step towards improving transparency in fund flows. CPSMS was designed as an online platform capable of tracking releases and expenditures in real time. By linking implementing agencies and banks to a common monitoring interface, it tried to make financial information visible for plan schemes.

In 2014, CPSMS was made available across the country with better payment and reporting features and restructured under the name Public Financial Management System (PFMS) (Choudhury & Chutani, 2025). PFMS introduced standardised agency registration, integration with the core banking network, and electronic booking of expenditures. This made up the first layer of India's digital public finance architecture.

Following these reforms, PFMS became the backbone for Direct Benefit Transfer (DBT) payments, enabling verification and monitoring of transactions linked to beneficiaries (Choudhury & Chutani, 2025). In 2017, the Government of India mandated the use of PFMS to keep track of all Central Sector schemes and CSSs, marking a significant step towards centralised and standardised monitoring of public expenditure (Kapur, 2022). As per the Finance Minister, the country saved ₹26,000 crore in interest costs since FY 17–18 due to recent PFM reforms (Financial Express, 2025).

However, even with these improvements, PFMS did not resolve the core issue of fragmented fund-flow arrangements. Implementing agencies continued to maintain several bank accounts, and fund releases were still linked to advance sanctions and manual UCs, leaving substantial idle balances outside state treasuries.

3.2 Consolidation and cash management: the Single Nodal Agency reform

The Single Nodal Agency (SNA) reform, which came into effect in 2021, was a substantial change to the CSS fund-flow system meant to fix these issues. Under it, each state is required to designate a single nodal agency for every CSS, and all scheme funds must be routed through a single SNA bank account at the state level.

Bank accounts maintained by lower-tier implementing agencies were either closed or converted into Zero Balance Subsidiary Accounts (ZBSAs), from which expenditures draw directly on the SNA account. This structural change substantially reduced the fragmentation of scheme-related bank accounts and enabled closer alignment between fund releases and actual utilisation through the introduction of a 75 per cent utilisation threshold (Choudhury & Chutani, 2025).

12.6 lakh → 3,092

Scheme-related bank accounts in Bihar, before and after the SNA reform, as reported by state officials in interviews.

₹11,000 crore

Savings to the Union government from removing floats and consolidating accounts under SNA since FY 21–22 (Bhardwaj, 2025).

In Bihar, for instance, our interviews with state officials revealed that the number of scheme-related accounts reduced from 12.6 lakh under PFMS to just 3,092 under SNA. Similar consolidation occurred nationally, resulting in previously idle balances being recovered.

3.3 Toward real-time, rules-based payments: SNA-SPARSH

While the SNA reform addressed fragmentation and idle balances, operational challenges remained. Variations in digital and human resource capacity across states, limited scope for state-level customisation within PFMS, and continued reliance on parallel monitoring systems constrained the effectiveness of the reform. These limitations highlighted the need for further reform towards real-time, expenditure-triggered fund-flow systems.

In response, the Government of India introduced the SNA-SPARSH reform in 2023. SNA-SPARSH integrates PFMS, state Integrated Financial Management Information Systems (IFMIS), and the Reserve Bank of India's e-Kuber platform to create a unified digital pipeline for CSS fund flows.

Under this system, CSS funds do not physically move into state treasuries. Instead, Union ministries issue a "mother sanction" that establishes drawing limits for each state. When implementing agencies initiate payments through the state IFMIS, transactions are verified through PFMS and settled in real time via the RBI's e-Kuber system. Expenditures are recorded instantly, enabling continuous visibility across the fund-flow chain.

By removing multiple approval processes — which at times could take days — and preventing the accumulation of idle balances, SNA-SPARSH represents a shift towards a single, automated, and fully traceable transaction chain based on rules-based financial flows. These features align with global trends towards "just-in-time" funding and digital treasury systems that emphasise real-time verification, traceability, and conditional release of funds (Thapliyal & Natu, 2025).

Table 2: Milestones in India's PFM reform architecture

Year	Reform	What changed
2009	Central Plan Scheme Monitoring System (CPSMS)	Online tracking of releases and expenditure for plan schemes.
2014	Public Financial Management System (PFMS)	Standardised agency registration, core banking integration and electronic booking of expenditure.
2017	PFMS mandated for all Central Sector schemes and CSSs	Centralised, standardised monitoring of public expenditure.
2021	Single Nodal Agency (SNA)	One nodal agency and one SNA account per scheme per state; lower-tier accounts closed or converted to ZBSAs; 75 per cent utilisation threshold.
2023	SNA-SPARSH	PFMS, state IFMIS and RBI e-Kuber integrated; "mother sanction" drawing limits; real-time, expenditure-triggered settlement.

Source: Authors' compilation from Department of Expenditure office memoranda and secondary literature.

3.4 India's PFM reforms in global context

India's PFM reforms mirror larger global literature that has consistently highlighted three core objectives: aggregate fiscal discipline, strategic and transparent allocation of resources, and operational efficiency in service delivery (International Monetary Fund, 2007; Kristensen et al., 2019).

By ensuring timely, predictable, and well-monitored fund flows, PFM directly shapes the quality and equity of public services ranging from healthcare and education to infrastructure (PEFA Secretariat, 2016; Fritz et al., 2014; Miller et al., 2021). Simply put, better payment and cash management systems increase the likelihood of timely payments, including for wages, salaries and operating expenses (Fritz et al., 2012).

Recent years have seen several countries moving towards Treasury Single Accounts (TSA), cash-management consolidation, digitalisation of payments, and electronic financial management information systems. Assessments show that TSAs reduce idle balances, strengthen oversight, and streamline payment cycles (Pattanayak & Fainboim, 2011). Coupled with digitalisation of payments, the creation of "just-in-time" funding can minimise float, improve predictability of fund flows and reduce treasury workload.

Yet, within these reforms, several studies have also highlighted that while digitalised and centralised systems enhance fiscal control, their implementation can be constrained by uneven digital capacity, limited training, and weak support structures at lower administrative levels. For instance, reviews of digital PFM systems in Bangladesh and Guatemala found that establishing "bottom-up" support for reforms was critical to their progress (Pretorius & Pretorius, 2009). Similarly, studies have shown that the absence of comprehensive training and digitally savvy personnel can hamper implementation of digital government policies (OECD, 2020). Payment reforms in the health sector similarly highlight tensions between centralisation and flexibility: digital processes reduce leakage but can constrain providers' ability to respond to emergencies or local needs (Wishnia & Goudge, 2020). Even with respect to procurement, research shows that individual bureaucrats and managing organisations account for over 40 per cent of the variation in prices paid in procurement (Best et al., 2023), even within the context of the same procurement system.

Thus, while these reforms have strengthened fiscal control, transparency, and cash management at aggregate levels, they also reshape how financial authority, responsibility, and administrative work are distributed across levels of government. Understanding how such reforms affect frontline actors — particularly in service delivery sectors like education — requires an explicit analytical framework. The next section develops such a framework to examine the trade-offs between control and discretion inherent in contemporary PFM reforms.

SECTION 04

Control, discretion, and the costs of digitally centralised fund-flow architectures

Contemporary PFM reforms are typically justified on grounds of increased efficiency. Yet "efficiency" in PFM discourse encompasses several distinct and not always compatible objectives. The first is fiscal control efficiency — the reduction of idle balances, float and leakage. The second is procedural or timeliness efficiency — ensuring that funds reach implementing units quickly and predictably. The third is traceability — the ability to monitor expenses in real time across administrative levels.

EFFICIENCY I	EFFICIENCY II	EFFICIENCY III
Fiscal control	**Timeliness**	**Traceability**
Reducing idle balances, float and leakage.	Funds reaching implementing units quickly and predictably.	Monitoring expenditure in real time across administrative levels.

India's recent reforms were designed with all three objectives in mind, though their emphasis has shifted across reform generations. PFMS and the initial SNA reform (2021) were primarily oriented towards fiscal control and traceability: consolidating fragmented accounts, reducing idle balances, and enabling real-time expenditure monitoring. SNA-SPARSH (2023), by contrast, explicitly claims to also address timeliness. Its core design principle is "just-in-time" (JIT) fund release — a shift from a push model, in which funds are released in advance to implementing agencies, to a pull model, in which funds are drawn from a central pool only at the moment of actual payment (Department of Expenditure, 2021, 2023; Natu & Thapliyal, 2024). The stated aim is to eliminate the gap between the physical event — the work or service for which payment is due — and the fiscal event, the release of funds, thereby improving both timeliness and fiscal control simultaneously.

These reforms also share a common architectural feature: they are built around digitally centralised fund-flow systems that route expenditures through standardised digital platforms, rules-based approval workflows, and vendor-based payment mechanisms. This architectural shift has consequences that extend beyond fiscal control. By consolidating accounts, standardising procedures, and linking every payment to a digital approval chain, these systems fundamentally reshape how financial authority, responsibility, and discretionary space are distributed across levels of government.

This section develops a conceptual framework for analysing these consequences. We argue that digitally centralised fund-flow architectures generate a control–discretion trade-off: reforms that strengthen top-down fiscal oversight can simultaneously constrain the operational flexibility of frontline actors. The severity of this trade-off depends on how reforms are designed and implemented, and on the mediating conditions — digital literacy, infrastructure, vendor availability — that determine whether frontline actors can navigate new systems effectively. Crucially, the trade-off is not inevitable. It is a product of design choices, and therefore amenable to design solutions.

4.1 Frontline discretion and street-level administration

Alongside the fiscal control agenda described above, PFM reform discourse has shifted away from evaluating systems solely on procedural compliance or inputs, towards assessing how financial systems support service delivery and outcomes. This shift places renewed attention on the role of frontline actors — school headmasters, block officials, and local administrators — who are responsible for translating budgets and financial rules into actual services. Understanding how PFM reforms reshape the incentives, workload, and authority of frontline functionaries is therefore critical to understanding why financial systems perform the way they do in practice. There is an emerging scholarship within public administration literature suggesting that effective service delivery depends on the ability of frontline actors to exercise discretion and adapt centrally defined procedures to local contexts (Tummers & Bekkers, 2014; Maynard-Moody & Musheno, 2000; Hupe & Hill, 2007).

Public administration scholarship has long established that discretion at the street level is unavoidable (Lipsky, 1980). Frontline work is characterised by heterogeneity in citizen demands, uncertainty, and conflicting goals, making it difficult to fully automate decision-making through rules alone. As procedures generalise processes, street-level work moves in the opposite direction, requiring greater exercise of discretion suited to specific contexts (Hupe & Hill, 2007). Scholarly debates have therefore shifted from questioning whether discretion is required to examining how it can be designed fairly and effectively within broader accountability frameworks.

In service delivery sectors such as education, discretion enables frontline actors to prioritise expenditures, respond to urgent needs, and adapt centrally defined norms to local conditions. However, as financial systems become more centralised, digitalised and rules-based, this discretionary space can shrink. Dependence on digital approvals for even minor expenditures shifts decision-making vertically upwards. In a pre-reform context, schools might draw on small, flexible cash accounts to address urgent local needs; but under a digitally centralised system, every expenditure must travel through a chain of approvals before funds become usable.

This shift changes the nature of delays that frontline actors experience. Under earlier fund-flow arrangements, schools waited because funds had not yet arrived — a fund-flow bottleneck stemming from slow releases and administrative hierarchies. Under digitally centralised systems, funds may technically be available at the state or district, but schools must still wait for drawing limits to be activated, vendors to be registered, and Payment Processing Authorities (PPAs) to be generated and approved before resources become usable. What was once a financial bottleneck has become a procedural one. The wait persists, but its cause has shifted from scarcity of funds to rigidity of process.

Box 1 · From a financial bottleneck to a procedural one

Vendor-based procurement models compound this shift. Where previously headmasters could spend small amounts directly to address immediate needs, the new SNA-SPARSH system routes all expenditures through GST-registered vendors and digital payment processes. For minor routine purchases — chalk, dusters, registers, small repairs — this requirement can make the system unresponsive to everyday school needs. In contexts with limited vendor availability, particularly in remote and poorer districts, the gap between formally available funds and practically usable resources is widened.

This shift also alters the nature of frontline work. While digital systems reduce opportunities for direct cash handling and associated risks of leakage and misappropriation, they introduce new administrative tasks — navigating online portals, coordinating documentation, generating PPAs, managing GST compliance, and coordinating with block-level staff. Where digital infrastructure or capacity is weak, these demands can increase the procedural workload of frontline functionaries and slow implementation rather than accelerating it.

4.2 The control–discretion trade-off

Taken together, these dynamics point to a control–discretion trade-off in contemporary PFM reforms. Reforms designed to strengthen top-down fiscal oversight can simultaneously constrain the autonomy of frontline actors and reconfigure their roles from decision-makers to procedural intermediaries. Importantly, this trade-off is not inevitable: it emerges from how reforms are designed and implemented, not from digitalisation itself. Broadly, the trade-off plays out in three ways: where financial authority sits, how administrative work is distributed, and where financial risks ultimately fall.

Financial authority moves upwards

One consequence is a shift in where financial authority sits. Account consolidation and drawing-limit structures move decision-making upwards through the administrative chain. Frontline actors who previously managed accounts and made at least some spending decisions now depend on limits and approvals set at higher levels. In practice, their role can shift from managing resources to completing one part of a longer approval process.

Administrative work is redistributed

The nature of administrative work also changes. Digitalisation may reduce cash handling and manual record-keeping, but it does not necessarily reduce the work required at the frontline. Instead, headmasters must navigate portals, coordinate with vendors, manage GST documentation and generate payment authorities. These tasks require skills and support that are unevenly available. Where these are weak, the work does not disappear; it is often passed on to block officials, accountants or other intermediaries.

Risks change rather than disappear

The risks associated with spending change as well. Digitally centralised systems can reduce some of the risks associated with cash handling and misappropriation. But greater dependence on registered vendors can create other vulnerabilities, including inflated billing, price manipulation and reduced choice. Delayed funds can also push headmasters to advance their own money or rely on vendor credit. In such cases, the financial cost and risk of delay are effectively shifted downwards to those at the frontline.

The severity of this trade-off is not uniform. It depends on local conditions — the availability of GST-registered vendors, the quality of internet connectivity, the digital literacy of staff, and the strength of support from middle-tier officials. Where these conditions are weak, centralised digital reforms can generate friction, delay, and new vulnerabilities at the point of service delivery. Where they are stronger, the same reforms can deliver on their fiscal control objectives without unduly burdening the frontline.

While frontline discretion has been extensively examined in the public administration literature, this paper extends that work by showing how digitally centralised fund-flow architectures themselves become a site where discretion is reconfigured. In the next section, we apply this framework to the Bihar context — a state with relatively weaker administrative capacity.

4.3 Applying the framework to education finance in Bihar

Education finance — particularly in Bihar — provides a revealing context in which to examine the control–discretion trade-off. The literature on education finances in India has highlighted three interlinked structural constraints shaping school-level functioning: persistent delays in fund flows, limited spending discretion at the frontline, and weak administrative capacity (Aiyar et al., 2015; Acharya & Bose, 2020).

Bihar's fiscal constraints are even more pronounced. Despite the state prioritising education, with total expenditure on school education nearly doubling between FY 17–18 and FY 22–23, actual spending averaged 20–25 per cent below allocations during the same period (Kapur et al., forthcoming). This persistent underspending reflects not a shortage of allocated funds but structural bottlenecks in translating allocations into usable resources at the frontline.

These bottlenecks operate at two levels. First, the state's own elementary education financing is overwhelmingly dominated by committed liabilities — especially teacher salaries — which absorb between 88 and 95 per cent of the state's own elementary education expenditure across years (Ibid). This leaves extremely limited fiscal space for schools to exercise discretion over operating inputs such as teacher training, monitoring, infrastructure maintenance, teaching-learning materials, or digital equipment.

Second, the state depends heavily on the Union government for financing elementary education. Around half of elementary education financing — and nearly three-quarters in some years — flows through Centrally Sponsored Schemes such as Samagra Shiksha and PM POSHAN (Ibid). While CSSs are designed to equalise resource availability across states, they also introduce layered approval processes and conditionalities, and delays in receipt of funds can impact education service delivery and in turn outcomes. PAISA studies by the Accountability Initiative (2010–2018), drawing on repeated school-level surveys across multiple states including Bihar, consistently documented significant delays and mismatches between district-level allocations, school needs and fund receipt (Aiyar et al., 2015).

The introduction of the SNA reform into this already constrained context creates a specific dynamic. As Section 5 shows, the SNA architecture has improved aggregate coverage of annual school grants and reduced the fragmentation of scheme accounts. But it has done so by introducing a new layer of procedural requirements onto a system whose frontline actors have limited digital literacy, uneven access to registered vendors, and low support from middle-tier officials. The result is that the reform has shifted, rather than solved, the problem: idle balances have been reduced at the aggregate level, but funds remain unavailable for use at the school level for much of the academic year.

The following section applies the framework developed above to evidence from school surveys and in-depth interviews conducted in Gaya and Purnia, examining how these dynamics play out in two contrasting district contexts.

Photo 2. A government school covered by the survey. Composite School Grants are the funds intended for the upkeep of buildings like this one. Bihar, 2025.

SECTION 05

Findings

This section presents findings from school surveys and in-depth interviews conducted in Gaya and Purnia. The analysis is organised around the control–discretion trade-off framework outlined in Section 4. We examine how recent PFM reforms — particularly the introduction of the SNA system — have reshaped:

1. fund receipt and timeliness, particularly of the annual Composite School Grants;
2. utilisation and spending processes; and
3. the administrative experience and discretion of frontline actors.

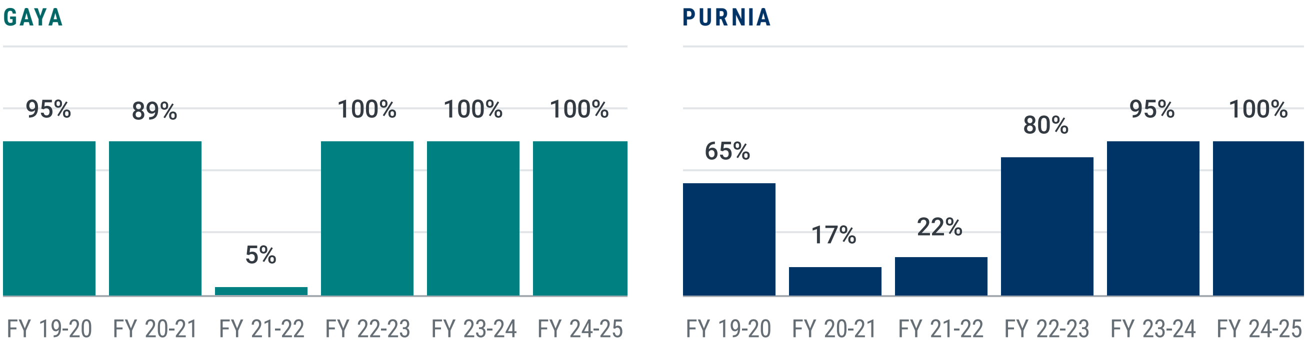
Where relevant, we highlight how these effects vary across two districts with differing administrative capacity.

5.1 Fund receipts and timeliness

A key stated objective of the SNA reform is to improve the reliability and predictability of fund flows. The analysis focuses on Composite School Grants — annual grants provided to each school under Samagra Shiksha, a Centrally Sponsored Scheme, to support basic operational needs such as minor repairs, teaching materials, and sanitation. These grants are directly governed by the SNA reform, and every school is entitled to receive them each year, making them the most tractable measure of last-mile fund delivery.

The school survey found that not all surveyed schools consistently received Composite School Grants, though the situation has improved with the introduction of the SNA. In FY 19–20, only 95 per cent of surveyed schools in Gaya and 65 per cent in Purnia reported receiving Composite School Grants. Excluding the disruptions caused by the COVID-19 pandemic in FY 20–21 and FY 21–22 and the resulting orders by the Ministry of Finance regarding expenditure reprioritisation, coverage improved significantly after the introduction of SNA. In FY 23–24, for instance — the first full year of SNA — all schools in Gaya and 95 per cent in Purnia reported receipt of Composite School Grants. By FY 24–25, the proportions had reached 100 per cent in both districts.

Figure 1: Proportion of surveyed schools receiving Composite School Grants

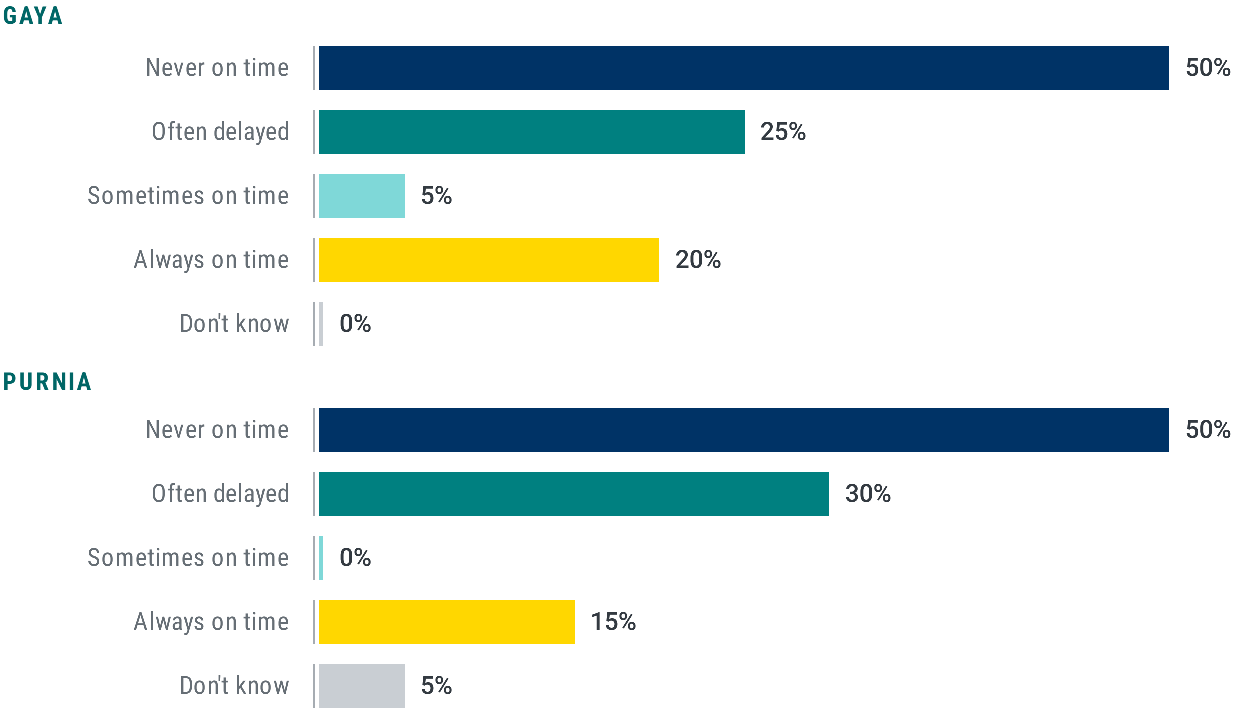


Source: Authors' calculations based on data from the school survey.

However, improvements in coverage have not translated into improvements in timeliness. Quarter-wise analysis found that even in FY 24–25, no surveyed school in either district received Composite School Grants in the first two quarters of the financial year. The majority received funds in Q3 and Q4, with 65 per cent of schools in Gaya and 55 per cent in Purnia receiving grants in Q3, and the remainder in Q4. As a result, schools routinely begin the academic year without access to funds for basic operational needs.

The quantitative data — verified through checks of the schools' records — aligns with headmasters' perceptions of funding delays. Across both districts, three-quarters or more of surveyed schools reported that funds were "never on time" or "often delayed". In Gaya, 75 per cent of HMs reported consistent delays, with only 20 per cent reporting timely receipt. In Purnia, 80 per cent of schools reported delays, and just 15 per cent received funds on time.

Figure 2: Headmasters' perceptions of the timeliness of CSS fund disbursement to schools



Source: Authors' calculations based on data from the school survey. Percentages are of 20 surveyed schools in each district.

This is consistent with data received from the districts. In Gaya, drawing limits were released by the district to schools in November for FY 24–25 and September for FY 23–24. For FY 22–23, funds were released early, in June, because there had been no releases in FY 21–22 during the transition to the SNA system. In Purnia, drawing limits were released in November for FY 24–25, October for FY 23–24, and June for FY 22–23. For FY 21–22 no allotment was made due to the shifting of accounts into the SNA/Zero Balance Subsidiary Account system, while for FY 20–21 and FY 19–20 funds were released in March and January respectively.

Table 3: Month in which drawing limits were released to schools

Financial year	Gaya	Purnia
FY 19–20	Not available	January
FY 20–21	Not available	March
FY 21–22	No allotment (SNA transition)	No allotment (SNA/ZBSA transition)
FY 22–23	June	June
FY 23–24	September	October
FY 24–25	November	November

Source: District release orders shared with the study team; authors' compilation.

Understanding why school-level timeliness is slow requires a closer look at how the fund flow actually works in Bihar. Under Samagra Shiksha, the Ministry of Education releases funds to the Bihar Education Project Council (BEPC), which holds the Single Nodal Account at the state level. Drawing limits for all implementing agencies are set at the state level. The district office's role is not to determine these limits but to enter them into the PFMS portal and notify the implementing agencies — including block-level offices and school-level bodies — under its jurisdiction. All actual payments to vendors and beneficiaries must be made through the PFMS portal via e-Payment Print Advice; no other banking instrument is permitted for routine expenditure.

THE ROUTE A RUPEE MUST TRAVEL

State BEPC holds the Single Nodal Account and sets drawing limits for all implementing agencies.

District Enters the limits into the PFMS portal and notifies agencies under its jurisdiction.

Block Communicates availability downward — in practice, often by WhatsApp message from block officials or BRC staff.

School Only then can the headmaster begin vendor selection, PPA generation and approval before payment is made.

Each step depends on the one above it being completed, and delays compound across levels.

Photo 3. Block-level records being examined during fieldwork. Drawing limits are set at the state level; the work of entering, notifying and reconciling them sits here. Bihar, 2025.

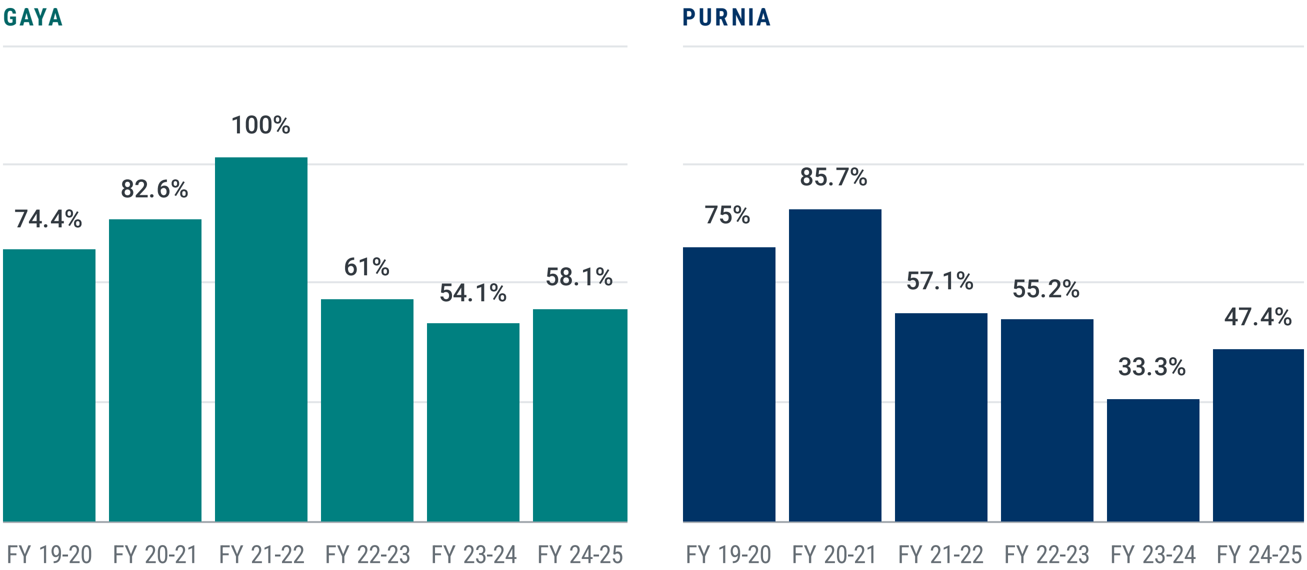
Headmasters consistently emphasised that grant information often reaches schools only after block-level notifications, typically between October and December, limiting their ability to plan expenditures proactively.

> *"School ko jab BRC se paisa aane ka suchna prapt hota hai tab hi vendor ko payment hota hai. Yah aksar October–December me suchna milta hai."*
>
> "Payment to the vendor happens only when the school receives information about funds coming from the BRC. This information is often received in October–December."
>
> — **Headmaster**, Gaya

As a result, 65 per cent of schools in Gaya and 75 per cent in Purnia reported no improvement in timeliness after the introduction of SNA. A smaller share — around 10 to 15 per cent — reported that delays had worsened. Reasons included multi-level procedural checks, the need for digital approvals, and challenges with vendors, which appear to have introduced new bottlenecks.

Furthermore, the share of schools receiving timely communication about fund transfers declined significantly. In FY 19-20 and FY 20-21, this stood at around 75-86 per cent in both districts. By FY 24-25, it had fallen to less than 60 per cent in Gaya and under 50 per cent in Purnia.

Figure 3: Proportion of schools reporting timely communication of fund transfers



Source: Authors' calculations based on data from the school survey.

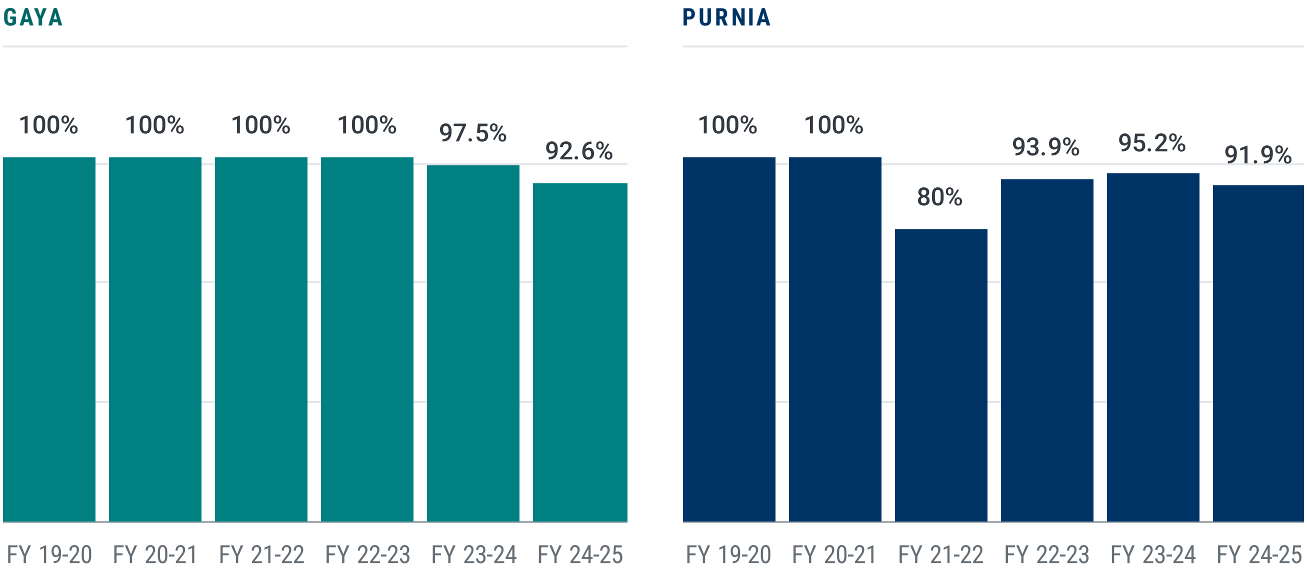
> *"Pehle bhi paisa late aata tha aur aaj bhi payment late hi hoti hai... isliye koi khaas badlaav nahi laga."*
>
> "Earlier also the money was received late, and even today the payment comes late....so no change seems to have happened."
>
> — **Headmaster**, Gaya

These findings suggest that while the introduction of SNA improved inter-governmental fund flows — releases from the Union government reach state treasuries faster, and idle balances have been reduced — timeliness as experienced at the school level remains a problem, which can significantly impair schools' ability to respond to local needs.

5.2 Utilisation and spending processes

Utilisation of Composite School Grants remains high across both districts. In Gaya, utilisation was 100 per cent from FY 19–20 to FY 22–23 and remained above 90 per cent in subsequent years. In Purnia, utilisation dipped to 80 per cent in FY 21–22 but has exceeded 90 per cent since FY 22–23.

Figure 4: Utilisation of Composite School Grants



Source: Authors' calculations based on data from the school survey.

High utilisation figures, however, mask important changes in how spending actually happens. Under the SNA system, headmasters no longer handle cash or operate school bank accounts. As previously mentioned, funds are transferred directly to vendors following the generation of PPAs.

The school surveys found two countervailing narratives. On the one hand, headmasters said the new system has eased suspicion — from School Management Committees[1] and local communities — around fund misuse, and reduced their own personal risk from handling cash.

[1] Known in Bihar as Vidyalaya Shiksha Samitis (VSS), School Management Committees are primarily composed of parents and community members and are responsible for overseeing school-level spending.

> *"Ab financial responsibility kam hua hai. Kyunki ab hamare pas paisa khate me nahi aa raha. VSS ya gaon ke log ab ye nahi kahte ki Master sahab school ka paisa bacha lete hai."*
>
> "Now financial responsibility has reduced, because money is not coming into our account anymore. The VSS or the village people no longer say that the teacher saves the school's money."
>
> — **Headmaster**, Gaya

On the other hand, headmasters reported a near-complete loss of authority over even minor expenditures, feeling that their role has shifted from decision-makers to signatories, and that spending choices were shaped by vendors and block-level accountants. In Gaya, 59 per cent of surveyed school headmasters reported this, compared to 50 per cent in Purnia.

Added to this is the emergence of new risks and inefficiencies. Multiple headmasters reported that vendors frequently inflate bills or manipulate GST amounts, and that schools have limited capacity to verify costs or enforce quality standards. In effect, while the old system carried risks of cash misappropriation by school officials, the new system has introduced risks of extraction by vendors — a different political economy of leakage that deserves explicit attention in how we evaluate these reforms.

> *"Vendor agar 20,000 ka koi saman diya hai to us par wah 5,000 extra paisa ka bill bana kar school ko deta hai. School ka vikas SNA aane ke baad ruk gaya hai."*
>
> "If the vendor gives us goods worth ₹20,000, he adds an extra ₹5,000 when making the bill for us. The school's development has stopped after SNA."
>
> — **Headmaster**, Purnia

Photo 4. School records being examined with a headmaster during fieldwork, beside the enrolment and attendance board. Bihar, 2025.

5.3 Administrative burden and the erosion of frontline discretion

The control–discretion framework described in Section 4 argues that centralised digital control does not reduce administrative work, especially at the school level, but transforms it. Evidence from Bihar supports this.

While headmasters no longer manage physical cash, their administrative responsibilities have increased significantly. The new system requires obtaining vendor quotations, generating PPAs, coordinating GST documentation, and navigating digital platforms such as e-Shiksha Kosh. These tasks require time, digital literacy and technical skills, and frequent coordination with block-level staff — resources that many headmasters do not have.

In both districts, headmasters reported having to depend on Block Resource Centre staff, block accountants and service providers to complete the digital processes. In Purnia, where local capacity is weaker, many headmasters depended on cyber cafés to access the portals and generate documentation. This dependence has introduced delay and financial risk.

> *"GST bill ko lekar dikkat hai... PPA ka kaam cyber cafe me jakar karna padta hai, BRC accountant ki madad se kar lete hai."*
>
> "GST bills have caused problems... The PPA work needs to be done at the cyber café; the BRC accountant's help is required for this."
>
> — **Headmaster**, Gaya

Beyond this, the delays in fund flows described above have created a shadow financial economy around school grants. In Gaya, headmasters reported advancing money from their own pockets to cover urgent expenditure and then having to rely on vendors for reimbursement when funds came. In Purnia, some headmasters reported that vendors supplied materials on credit and later recovered costs with interest, effectively transferring the financial burden of delayed fund flows back to school teachers.

> *"Pehle hume paisa kharch karna padta hai, phir vendor ko paisa milta hai PPA se, uske baad hume apna paisa mil jata hai. Kabhi kabhi vendor paisa vapas karne mein problem khada karta hai."*
>
> "We have to spend the money first, then the vendor gets the money through the PPA, and after that we get our money back. Sometimes the vendor creates problems in giving the money back."
>
> — **Headmaster**, Gaya

These findings suggest that while the new system has strengthened procedural compliance and transparency, it has also produced new avenues of leakage and increased the burden on the frontline. While our survey is not representative, the findings highlight mechanisms likely to be salient in other capacity-constrained settings implementing similar digital PFM architectures.

5.4 Absence of mediating conditions

The framework proposed in Section 4 emphasises that the control–discretion trade-off is not inevitable and that its severity can be mediated by local capacity and institutional conditions, including digital literacy and the availability of vendors. Findings from the school surveys in both Gaya and Purnia illustrate how these mediating factors shape frontline experiences.

First, while most headmasters reported being aware of the SNA system, functional knowledge remained limited. Many were unaware of their schools' drawing limits, did not know how to independently generate PPAs, and relied on WhatsApp messages from block officials to determine when funds were available. Few reported accessing dashboards where they could view balances or understand amounts dedicated to vendor payments.

> *"Portal par kaam karne ke liye hum BRC ki madad lete hain. Woh vendor add karne ke saath payment karne mein hamari help karte hain. Training diya gaya hai but use kar nahi paate hum."*
>
> "We take help from the BRC to work on the portal. They help us with adding vendors as well as making payments. We have been given training but we are unable to use it in practice."
>
> — **Headmaster**, Gaya

Second, the availability of GST-registered vendors varied significantly by location. The SNA system assumes the presence of GST-registered vendors capable of navigating digital payment processes. In more remote areas — particularly in Purnia — this assumption does not hold. Fewer vendors and less competition mean greater dependence on whoever is available.

Third, weak digital infrastructure combined with a lack of data protection protocols created another set of risks. Headmasters shared that they would often access the systems through a local internet café where staff knew how to log in and navigate the system better. This involved sharing login credentials with people outside the school administration, enabling unauthorised access on devices that are not secure or vetted by the department. We observed that completing tasks on time took precedence over data protection. In effect, the reform has created a new class of informal digital intermediaries: cyber café operators and block accountants who navigate the system on behalf of schools that cannot. Such practices pose major threats to data and to public finances that are consistently accessed by non-state agents.

Lastly, support from middle-tier functionaries at the cluster, block and district level was largely described by headmasters as reactive rather than proactive. Headmasters approached these officers when they faced challenges, and usually had their grievances redressed. But little effort was made to build the competencies that would allow schools to operate the system independently, and training sessions were ad hoc and rarely sufficient for their daily needs.

Discussion and conclusion

6.1 Rethinking efficiency in PFM reforms

This paper set out to examine how recent PFM reforms — particularly the introduction of the SNA-SPARSH system — reshape financial processes and frontline discretion in Bihar's school education system. The findings tell a story of partial success.

At an aggregate level, the SNA reform has largely met its stated objectives. Coverage of Composite School Grants has become near-universal, idle balances have been reduced, and financial flows are now more traceable. These outcomes reflect meaningful gains in cash management and oversight, consistent with global shifts towards digitalised, rules-based public finance systems.

But the reforms were also meant to improve efficiency with respect to the timeliness of fund flows and the reduction of leakage through the creation of a "just-in-time" system. Here the evidence is less encouraging. Bihar's experience demonstrates that system-level improvements do not automatically translate into improved conditions for service delivery. Schools continue to receive funds late in the financial year, often in the third or fourth quarter, limiting their ability to plan and respond to operational needs at the start of the academic cycle. From a frontline perspective, therefore, formal availability of funds is not enough: predictability, timing and the ability to actually use those funds are equally critical. The SNA reform, while consolidating accounts, has not addressed the downstream procedural and institutional bottlenecks that shape when resources become usable.

The spending process tells a similar story. The shift to vendor-based payments and digital approval workflows has reduced the risks associated with cash handling — headmasters are less personally exposed, communities are less suspicious, and the paper trail is cleaner. These are real improvements. But the same shift has narrowed the discretionary space available to headmasters for the routine, low-value expenditures that are central to how schools function day to day. Digitalisation has not eliminated administrative work so much as redistributed it — from cash management to portal navigation, GST compliance, and vendor coordination — and placed it on frontline actors who were not trained for it and are not adequately supported.

The findings also reveal a dimension of the reform's consequences that deserves more attention. Vendor dominance, inflated billing, reliance on credit, and informal workarounds — such as advancing personal funds or sharing login credentials — suggest that while direct cash leakage may have declined, other forms of risk and inefficiency have emerged. These dynamics are most pronounced in contexts with weaker administrative capacity. Gaya and Purnia both experienced the same reform, but headmasters in Purnia — with fewer GST-registered vendors, weaker connectivity, and less support from block officials — faced considerably more difficulty than their counterparts in Gaya. In other words, stronger controls may reduce one set of risks without eliminating risk altogether; they can instead change where risks sit and who bears them.

THE CORE ARGUMENT

The control–discretion trade-off is not merely theoretical. It is actively produced through the interaction of reform design, institutional capacity, and frontline realities — and it is not inevitable. Its severity depends on whether efficiency gains are accompanied by investments in administrative capacity, timely fund release, responsive grievance redressal, and space for limited, well-defined discretion at the frontline.

While our findings are not representative of Bihar as a whole, the mechanisms they document are not Bihar-specific. Any setting implementing digitally centralised fund-flow architectures in conditions of uneven digital capacity and thin vendor markets is likely to encounter versions of the same problems.

It is important to reiterate that these findings do not suggest that the SNA architecture is intrinsically flawed; rather, they indicate that its effectiveness depends critically on complementary investments in administrative capacity, timely release mechanisms, and frontline support systems.

6.2 Implications for the design of PFM reforms in education

This paper contributes to the literature on PFM reform by foregrounding the lived experiences of frontline actors in a large, capacity-constrained education system. By combining school-level survey data with qualitative evidence from Bihar, it demonstrates that reforms designed to strengthen fiscal control can reshape — not always positively — the conditions under which public services are delivered.

Current frameworks assess reforms largely on fiscal control outcomes: idle balance reduction, expenditure traceability, utilisation rates. Bihar's SNA implementation performs reasonably well on all three. But for a headmaster trying to get chalk and cleaning supplies before the academic year starts, none of those metrics captures what matters — whether funds are available when needed, in a form that can be spent without much effort.

This suggests that improving PFM in education requires moving beyond a narrow focus on aggregate efficiency and procedural compliance. Timeliness of fund flows, clarity of administrative roles, and the usability of digital systems are central to whether reforms ultimately strengthen frontline functioning. In systems where schools depend on small, routine expenditures to operate effectively, financial controls also need to be proportionate to the value and risk associated with different types of expenditure.

This raises a wider design question. Digitally centralised systems tend to standardise financial processes across implementing units and transactions. Yet the costs of compliance are not uniform. A requirement that may be appropriate for large procurement or civil works may impose disproportionate administrative costs when applied to small, routine school expenditure. The challenge is therefore not to choose between control and discretion, but to design systems in which the degree of control is proportionate to risk, while preserving sufficient flexibility for frontline institutions to function.

More broadly, the study reinforces the importance of treating implementation capacity as part of PFM design rather than as a condition external to it. Digital infrastructure, staff capability, middle-tier support and functioning vendor markets shape whether the same financial architecture produces efficiency or friction in practice. As governments increasingly adopt centralised digital financial systems, these last-mile conditions need to be considered alongside the architecture of fund flows itself. Otherwise, reforms risk achieving efficiency at the top without necessarily improving the availability and usability of public resources at the point of service delivery.

6.3 Recommendations

The findings do not point to a case for rolling back the gains from greater digitalisation, account consolidation or expenditure traceability. Rather, they point to the need for a second generation of reform that focuses on ensuring that improvements in fiscal transparency and control translate into timely and usable resources at the frontline. This requires attention not only to the architecture through which funds move, but also to the administrative capacity, support systems and local markets through which that architecture is ultimately made to work.

The following recommendations are therefore directed both at the Department of Education and the Bihar Education Project Council, which shape implementation within the state, and at the Union Ministries responsible for the wider design of the SNA architecture.

1. **Align the timing of financial access with the academic calendar.**

   The first priority should be to ensure that drawing limits for annual school grants such as the Composite School Grants are activated and communicated to schools early in the financial year. In FY 24–25, no surveyed school in either district had access to its Composite School Grants in the first two quarters, and district records show that drawing limits were released only in November. This means that schools begin much of the academic year without access to resources intended precisely for routine teaching materials, sanitation, repairs and other operational needs.

   A defined timeline for activating and communicating drawing limits in Q1 should therefore form part of the performance expectations of the system. Importantly, monitoring should track not only whether funds have been released at higher levels, but when they become available for use by schools.

2. **Move from one-off digital training to continuous, transaction-level support.**

   The challenge identified in the study is not simply lack of exposure to the system. Headmasters reported receiving training while still being unable to independently undertake core actions, including generating PPAs. Many continued to rely on BRC staff, block accountants or cyber cafés to navigate the system.

   Support should therefore be organised around the actual payment cycle rather than around periodic training alone. This could include readily accessible help desks, simple process guides, troubleshooting support and assistance at the point at which transactions are being undertaken. This should also be measurable, in that schools should progressively be able to complete routine financial processes without relying on informal intermediaries or sharing login credentials.

3. **Recognise and resource the middle tier.**

   Block and district officials are already functioning as the de facto support layer between a centralised digital system and schools. At present, however, much of this support is informal and reactive. Schools therefore depend heavily on the individual availability and capability of BRC staff and accountants, while in weaker-capacity settings the gap is often filled by non-state actors.

   Rather than treating this as an implementation anomaly, the role of the middle tier should be explicitly designed into the system. Responsibilities for school-level support, grievance resolution and transaction troubleshooting should be clearly assigned, with adequate staffing and defined turnaround times. Digitalisation does not eliminate the need for administrative intermediaries; it changes what that intermediary needs to do.

4. **Treat vendor availability and competition as a core design condition, not an assumption.**

   Vendor-based payments can reduce risks associated with cash handling, but they work only where schools have access to a sufficiently broad and competitive pool of registered vendors. The study finds that this condition is unevenly met, particularly in Purnia, and that limited vendor choice can create dependence, inflated billing and informal credit arrangements.

   The response should go beyond simply requiring schools to procure through registered vendors. Districts should periodically assess vendor availability and concentration, undertake registration drives where markets are thin, and develop indicative price benchmarks for commonly purchased items. Unusually high prices, repeated reliance on a small number of vendors, and complaints relating to quality or billing should also become part of routine financial monitoring. As one set of leakage risks is reduced, the system needs to be capable of identifying the new risks that emerge in its place.

5. **Introduce proportionate controls for small, routine expenditure.**

One of the clearest findings of the study is that requiring every expenditure — irrespective of its size or purpose — to pass through the same vendor and digital approval process can reduce the ability of schools to respond to basic operational needs. Headmasters reported a substantial loss of authority even over minor expenditure, despite overall utilisation remaining high.

The principle should therefore be risk-based rather than uniform financial control. Bihar could pilot a small, capped and auditable flexibility window for routine, low-value expenditure such as teaching materials, cleaning supplies and minor repairs, accompanied by clear expenditure rules, documentation and ex-post verification. The Union government has itself raised the level of flexi funds available within each Centrally Sponsored Scheme from 10 per cent to 25 per cent, precisely to allow states to meet local needs and undertake innovations (Press Information Bureau, 2019). The same principle applies here, and the precise instrument need not be cash. The broader design question is whether the same compliance architecture is warranted for a small routine purchase and for a substantially larger procurement.

Such a pilot would allow the state to test whether limited frontline discretion can improve responsiveness without sacrificing the gains in transparency and accountability achieved under SNA.

6. **Make last-mile usability an explicit measure of PFM performance.**

PFM reforms are currently assessed largely through indicators such as idle balances, expenditure traceability and utilisation. These remain important, but they do not reveal whether the system is working from the perspective of the institution expected to spend the money. Indeed, the Bihar findings show that utilisation can remain above 90 per cent even while funds arrive late, schools depend on intermediaries and headmasters report difficulty undertaking routine transactions.

Performance monitoring should therefore incorporate a small set of last-mile indicators alongside existing fiscal measures. These could include the quarter in which drawing limits become available to schools; the time between notification and successful payment; transaction failures or returns; the proportion of schools able to generate PPAs without external assistance; and differences in these measures across districts.

This would shift the question from simply "Was the money accounted for and spent?" to "Was it available, usable and predictable when the service-delivery institution needed it?" That is a more complete test of whether PFM reform is improving public expenditure.

SECTION 07

References

Acharya, N., & Bose, M. (2020). *Delay in fund flow: Consequences, causes and remedies* (Policy Brief No. 3). Centre for Budget and Governance Accountability & Tata Trusts.

Aiyar, Y., Dongre, A., Kapur, A., Mukherjee, A. N., & Raghunandan, T. R. (2015). *Rules vs. responsiveness: A diagnosis of elementary education financing in India.* Accountability Initiative, Centre for Policy Research.

Best, M. C., Hjort, J., & Szakonyi, D. (2023). Individuals and organizations as sources of state effectiveness. *American Economic Review, 113*(8), 2121–2167.

Bhardwaj, A. (2025, March 4). How Modi govt saved Rs 11,000 cr in 3 years, brought in financial transparency with this pivot. *The Print.*

Centre for Policy Research. (2013). *PAISA district studies.* Centre for Policy Research.

Choudhury, M., & Chutani, N. (2025). *Public financial management reforms in India: Understanding state-level experiences from the implementation of Single Nodal Agency reform in National Health Mission* (Working Paper No. 25/438). National Institute of Public Finance and Policy.

Department of Expenditure. (2021). *Procedure for release of funds under the Centrally Sponsored Schemes (CSS) and monitoring utilization of the funds released* (Office Memorandum F. No. 1(13)/PFMS/FCD/2020). Ministry of Finance, Government of India.

Department of Expenditure. (2023). *"Just-in-Time" release of Centrally Sponsored Schemes (CSS) funds through e-Kuber platform of Reserve Bank of India* (Office Memorandum F. No. 1(27)/PFMS/2020). Ministry of Finance, Government of India.

Financial Express. (2025). Just-in-time release of funds saved Rs 26,000 crore in interest cost: FM.

Fritz, V., Fialho Lopes, A. P., Hedger, E., Tavakoli, H., & Krause, P. (2012). *Public financial management reforms in post-conflict countries: Synthesis report.* World Bank.

Fritz, V., Sweet, S., & Verhoeven, M. (2014). *Strengthening public financial management: Exploring drivers and effects* (Policy Research Working Paper No. 7084). World Bank.

Hupe, P., & Hill, M. (2007). Street-level bureaucracy and public accountability. *Public Administration, 85*(2), 279–299.

International Monetary Fund. (2007). *Fiscal policy response to scaled-up aid: Strengthening public financial management* (IMF Policy Paper).

Kapur, A. (2022). *Unpacking public financial management (PFM) issues at the district and sub-district level in India* (Working Paper No. 2). Centre for Budget and Governance Accountability.

Kapur, A., Pandey, S., & Santhosh, S. (forthcoming). *Analysing the flow: A comprehensive study on school education financing in Bihar.*

Kristensen, J. K., Bowen, M., Long, C., Mustapha, S., & Zrinski, U. (2019). *PEFA, public financial management, and good governance.* World Bank.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services.* Russell Sage Foundation.

Maynard-Moody, S., & Musheno, M. (2000). State agent or citizen agent: Two narratives of discretion. *Journal of Public Administration Research and Theory, 10*(2), 329–358.

Miller, M., Hart, T., & Hadley, S. (2021). *Public finance and service delivery: What's new, what's missing, what's next?* (Working paper). ODI.

Natu, A. J., & Thapliyal, M. (2024). *From just-in-time to smart payments: A case for innovations in Centrally Sponsored Schemes in India*. MicroSave Consulting.

NITI Aayog. (2023). *India national multidimensional poverty index: A progress review 2023*. NITI Aayog.

OECD. (2020). *Digital Government Index: 2019 results* (OECD Public Governance Policy Papers No. 03). OECD Publishing.

Pattanayak, S., & Fainboim, I. (2011). *Treasury single account: An essential tool for government cash management* (IMF Technical Notes and Manuals No. 11/04). International Monetary Fund.

PEFA Secretariat. (2016). *PEFA 2016: Framework for assessing public financial management* (2nd ed.). Public Expenditure and Financial Accountability Program.

Press Information Bureau. (2019, July 1). *Outlays in the Expenditure Budget of the Central Government for 28 Centrally Sponsored Schemes (CSSs) for the last five years increased around 60% in 2019–20 BE (I) compared to Actual of 2015–16* [Press release]. Ministry of Finance, Government of India. https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=191049&reg=48&lang=2

Pretorius, C., & Pretorius, N. (2009). *Public financial management reform literature review* (Evaluation Report EV698). Department for International Development.

Thapliyal, M., & Natu, A. J. (2025). *The case for smart payments in India's public finance future*. MicroSave Consulting.

Tummers, L., & Bekkers, V. (2014). Policy implementation, street-level bureaucracy, and the importance of discretion. *Public Management Review, 16*(4), 527–547.

UDISE+ Dashboard. (2024). *Unified District Information System for Education Plus Dashboard*. Department of School Education and Literacy, Ministry of Education.

Wishnia, J., & Goudge, J. (2020). Impact of financial management centralisation in a health system under austerity: A qualitative study from South Africa. *BMJ Global Health, 5*(10), e003524.