Aniceto C Orbeta Jr Vicente B Paqueo Bilal Siddiqi

Impacts of judicial reform in criminal case procedures on court congestion in the Philippines

February 2021





About 3ie

The International Initiative for Impact Evaluation (3ie) promotes evidence-informed, equitable, inclusive and sustainable development. We support the generation and effective use of high-quality evidence to inform decision-making and improve the lives of people living in poverty in low- and middle-income countries. We provide guidance and support to produce, synthesize and quality-assure evidence of what works, for whom, how, why and at what cost.

3ie impact evaluations

3ie-supported impact evaluations assess the difference a development intervention has made to social and economic outcomes. 3ie is committed to funding rigorous evaluations that include a theory-based design and that use the most appropriate mix of methods to capture outcomes and are useful in complex development contexts.

About this report

3ie accepted the final version of the report, *Impacts of judicial reform in criminal case procedures on court congestion in the Philippines*, as partial fulfilment of requirements under grant PWP.03.SC.IE awarded through Country Policy Window – Philippines. The content has been copy-edited and formatted for publication by 3ie.

The 3ie technical quality assurance team for this report comprises Stuti Tripathi, Rosaine Yegbemey, Tara Kaul, Kirthi V Rao, Sayak Khatua, an anonymous external impact evaluation design expert reviewer and an anonymous external sector expert reviewer, with overall technical supervision by Marie Gaarder and Emmanuel Jimenez. The statistical analysis code used in generating the results in this study is available on 3ie's Harvard Dataverse. We are unable to make the datasets publicly available due to confidentiality requirements agreed between the Supreme Court of the Philippines, 3ie and the Innovations for Poverty Action (IPA). However, 3ie has reviewed and quality assured replication for datasets used in this evaluation. The 3ie editorial production team for this report comprises Anushruti Ganguly and Akarsh Gupta.

All of the content is the sole responsibility of the authors and does not represent the opinions of 3ie, its donors or its board of commissioners. Any errors and omissions are also the sole responsibility of the authors. All affiliations of the authors listed in the title page are those that were in effect at the time the report was accepted. Please direct any comments or queries to the corresponding author, Aniceto C Orbeta, Jr, at: aorbeta@gmail.com.

Funding for this impact evaluation was provided by the Australian government through the Department of Foreign Affairs and Trade. A complete listing of 3ie's donors is available on the 3ie website.

Suggested citation: Orbeta, AC, Jr, Paqueo, VB and Siddiqi, B, 2021. *Impacts of judicial reform in criminal case procedures on court congestion in the Philippines,* 3ie Impact Evaluation Report 131. New Delhi: International Initiative for Impact Evaluation (3ie). Available at: https://doi.org/10.23846/PWPIE131

Cover photo: SOPA Images Limited / Alamy Stock Photo

© International Initiative for Impact Evaluation (3ie), 2021

Impacts of judicial reform in criminal case procedures on court congestion in the Philippines

Aniceto C Orbeta Jr Philippine Institute for Development Studies (PIDS), Philippines

Vicente B Paqueo PIDS

Bilal Siddiqi University of California, Berkeley

Impact Evaluation Report 131 February 2021



Acknowledgments

We would like to thank a number of people whose efforts, either directly or indirectly, culminated in the completion of this report. We deeply appreciate all of the support we have received from the Justices, Judges and Officials of the Supreme Court of the Philippines (SC). Specifically, we would like to thank Supreme Court Chief Justice Diosdado Peralta and former Chief Justices of the Supreme Court, Associate Justice Alexander Gesmundo, Associate Justice Antonio Carpio (ret), Court Administrator Jose Midas Marquez, Deputy Clerk of Court and Judicial Reform Program Administrator Attorney Laura del Rosario, Former Supreme Court Attorney Renelie Mayuga, and members of the various units of the Office of the Court Administrator, the Program Management Office, and the Management Information Systems Office. We are grateful to the First and Second level Court Judges, Clerks of Courts, the prosecutors, public attorneys, private attorneys, and the Philippine Judges Association for accommodating our field visits, data requests, and qualitative interviews. Their support and interest in the impact evaluation and assistance throughout, have been critical to its success.

This report would not have been possible without the hard work of colleagues from Innovation for Poverty Action Philippines: Country Director Nassreena Sampaco-Baddiri, Research Coordinator Heather Richmond and IPA Research Associates Rene Marlon Panti, Ma. Isabel Fernandez, Jed Dimaisip-Nabuab, Tatum Ramos, Reinier de Guzman and Elisa Anne Cascardi. We also very much appreciate Senior Field Manager Jose Marie Gonzalez and Data Management Associates Dean Arcega and Marieliz Christine Maines for overseeing the digitization work for the project.

The project was commissioned by the International Initiative for Impact Evaluation under the Philippines Evidence Programme implemented in partnership with the National Economic and Development Authority and supported by the Australian government's Department of Foreign Affairs and Trade. In particular, we would like to thank Emmanuel Jimenez, Tara Kaul, Fides Borja and Stuti Tripathi for their invaluable support. We sincerely thank the peer reviewers for their valuable comments and suggestions that helped us to improve the quality of the report.

The Human Subjects Committee for IPA provided oversight for this project, 'Impact evaluation of three supreme court reforms in the Philippines: eCourts, continuous trial guidelines, and small claims procedures', protocol #14339.

Summary

The Philippine judiciary has long faced the challenge of court congestion, with a high volume of pending cases and severe delays in case disposition denying citizens the ability to access swift and fair justice. In response, the Supreme Court of the Philippines recently introduced several judicial reforms aimed at reducing court congestion and improving judicial efficiency. It partnered with the International Initiative for Impact Evaluation and Innovations for Poverty Action to understand how a key procedural reform – the Revised Guidelines for Continuous Trial of Criminal Cases (CT) – affects court efficiency, as measured by each court's case clearance and disposition rates, as well as the duration of each case and whether it was disposed of in a timely manner.

The CT reform aims to expedite trials and resolutions by imposing mandatory observance of existing rules for court action and introducing best practices for speedy disposition of criminal cases. The guidelines set out strict observance of timeframes on arraignment and pre-trial, trial proper, and promulgation. The CT reform went into effect nationwide on September 1, 2017 following a 16-month pilot in 52 court branches from three cities in the National Capital Region.

We gathered administrative records from three databases: the electronic courts case management system, the continuous trial monitoring system, and the database of monthly caseflow reports submitted by all courts to the supreme court. These sources record data on each case brought to court within 24 months before and after the CT nationwide implementation on 1 September 2017 across both first- and second-level courts.

We estimate the impacts of the CT reform through an 'event study' approach, analyzing the difference in our four measures of court efficiency before and after the date the reform was implemented in each court. We triangulate the quantitative results from our findings from qualitative interviews and online surveys with judges, clerks of court and public and private attorneys.

For this study, we analyzed administrative data from first- and second-level courts in the Philippines over the period January 2014—December 2019. The case-level data includes over 370,000 cases across 336 courts from the electronic courts case management system and over 690,000 cases across 1,635 courts from the continuous trial monitoring system. The court-level data includes 2,281 courts from the monthly caseflow report database. Our online survey data includes 1,579 respondents and our in-depth qualitative interview data covers 58 participants. Though we analyzed these datasets separately because of the differences in sample and types of data, they provide a rich and consistent overall picture of the reform and its impacts.

We find that at the court level, the CT reform increased clearance rates by between 35–36 percentage points. In contrast, we find no movement in disposition rates, suggesting that the main impact of the reform was tackling new (incoming) cases and not pending cases; in other words, while it made courts efficient, it has had limited success in reducing pendency. At the case level, our data suggest that the CT reform effectively reduces case duration by 55 days (14%) in cases recorded in the electronic courts case management system and 61 days (10%) in cases recorded in the continuous trial

monitoring system. It increased the proportion of cases disposed in 180 days by eight percentage points (54%), and the proportion of cases disposed in 330 days by nine percentage points (41%).

The reform has affected most phases of trials until submission of the decision; specifically, it reduces the duration from receipt of case in court to pre-trial by 50 days, pre-trial to initial trial by 22 days, and trial duration by 57 days. We find no impact in the duration from submission of decision to promulgation.

We also find that the surge of drugs-related cases has attenuated the CT reform's effects, underscoring the constraints courts face in fully implementing the reform and reaping its benefits. Finally, we find no effect on clearance rates and disposition rates of civil cases, suggesting that the CT reform has not created spillover benefits for civil cases.

From a policy perspective, we conclude that the CT reform has been an effective means of improving court efficiency for criminal cases. However, a surge in the inflow of cases can affect the impact of the reform measure. It is important to consider complementary interventions such as relieving personnel constraints, addressing physical infrastructure needs, and creating new court branches to enable the judicial system to fully realize the benefits of this reform.

Contents

Acknowledgments	i
Summary	ii
List of figures and tables	v
Abbreviations and acronyms	vi
1. Introduction	1
1.1 Context	1
1.2 The Philippine judiciary	2
1.3 Literature	4
1.4 This study	5
2. Intervention	5
2.1 Revised guidelines for continuous trial of criminal cases	5
2.2 Theory of change	8
3. Evaluation	11
3.1 Research questions and outcomes	11
3.2 Design and methods	12
3.3 Ethics	
3.4 Sampling and data collection	15
4. Findings	
4.1 Court-level analysis	
4.2 Case-level analysis	
4.3 Intervention implementation fidelity	
5. Discussion	
5.1 Findings	
5.2 Challenges and lessons	
6. Conclusions and recommendations	
6.1 Conclusions	35
6.2 Recommendations	
Online appendixes	
References	38

List of figures and tables

Figure 1: Total number of newly filed cases per month (2014–2018)	1
Figure 2: Total number of pending cases per month (2014–2018)	2
Figure 3: Organogram of the Philippine judiciary	3
Figure 4: CT case process by case type	6
Figure 5: Theory of change of continuous trial	10
Figure 6: Study timeline	14
Figure 7: Drug cases filed 2014–2017	20
Figure 8: Impact of time to clearance rate	22
Figure 9: Impact of time to disposition rate	23
Figure 10: Impact of time to clearance and disposition rates: civil cases	24
Figure 11: Impact of time to case duration (-24, +24)	
Figure 12: Impact estimate of time to cases disposed	27
Figure 13: Mean phase duration	27
Figure 14: Impact of time to case duration by phase	29
Figure 15: Self-reported compliance with CT	30
Figure 16: Reported problems in implementation	30
Figure 17: Suggestions to improve implementation	32
Table 1: Criminal procedures before and after the CT reform	7
Table 2: Sample courts and criminal cases by database	15
Table 3: Qualitative participants by region, position and sex	18
Table 4: Court-level impacts	21
Table 5: Case-level impacts	
Table 6: Impact on case duration by phase	
Table 7: Impact of staff and court characteristics on time to adjust to CT	31
Table 8: Average marginal effects of caseload on time to adjust to CT	31

Abbreviations and acronyms

BJMP Bureau of Jail Management and Penology

CT Revised Guidelines for Continuous Trial of Criminal Cases

CTMS Continuous trial monitoring system

eCourts Electronic courts case management system

FGD Focus group discussions

IPA Innovations for Poverty Action

KII Key informant interview

SC Supreme Court of the Philippines

1. Introduction

1.1 Context1

An effective legal system is a litmus test for state capacity and a key condition for a functioning market economy. Better justice is both an end in itself and a means to achieve broader development objectives (World Bank 2012). In a bid to provide their citizens with better justice in line with the United Nation's Sustainable Development Goal 16 on 'peace, justice and strong institutions', governments around the world have introduced wide-ranging judicial reforms, including revisions to procedures, changes in case management practices, and use of technology. However, little is known about how successful low- and middle-income countries have been in implementing such reforms, and to what effect.

The Philippine judiciary has long faced the challenge of court congestion, leading to severe delays in case resolution and high levels of backlog. The total numbers of newly filed cases and pending cases in the courts have continued to rise steadily over time. While the average number of newly filed cases per month in the lower trial courts was 35,000 in 2014–2016, it had escalated to an average of around 43,000 per month in 2016–2018 (Figure 1). This upward trend of newly filed cases has contributed to a steady upward trend in the total number of pending cases across all lower courts. Before the end of 2017, the total number of unresolved cases had reached nearly 900,000 (Figure 2).

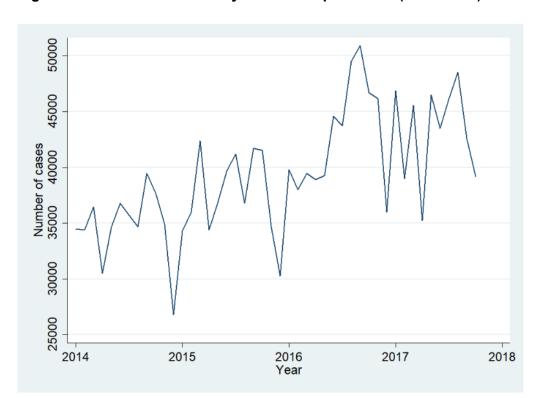


Figure 1: Total number of newly filed cases per month (2014–2018)

Source: Monthly caseflow report data, Supreme Court of the Philippines.

1

¹ This section is common across the three reports in this study series.



Figure 2: Total number of pending cases per month (2014–2018)

Source: Monthly caseflow report data, SC.

Since the initial World Justice Project Rule of Law Index rankings in 2015, the Philippines has seen a steady decline in rank, scoring below the global and regional average in the overall rule of law index, particularly on criminal justice and fundamental rights (World Justice Project 2020). In response, the judiciary has implemented several reforms in recent years, in line with the current government's goal of providing 'swift and fair administration of justice' to gain the trust of its citizens and the confidence of the international community (as outlined in the Philippine Development Plan 2017–2022) (NEDA 2017). A central goal of these reforms is to improve court efficiency, thereby speeding up cases and reducing court congestion.

The International Initiative for Impact Evaluation (3ie) and Innovations for Poverty Action (IPA) have partnered with the Supreme Court of the Philippines (SC) to conduct a research study to understand the impacts of three justice reforms on court efficiency. The study series assesses the implementation and impacts of three notable reforms, namely: the electronic courts case management system (eCourts) to improve operational efficiency and transparency; the Rules of Procedure for Small Claims Cases to reduce court burden and ensure access to justice; and the Revised Guidelines for Continuous Trial of Criminal Cases to increase disposition of criminal cases. Assessment of these three reforms is intended to help the judiciary compare the merits of each program and make informed decisions on how to allocate available resources across the judicial system to achieve its stated goals.

1.2 The Philippine judiciary

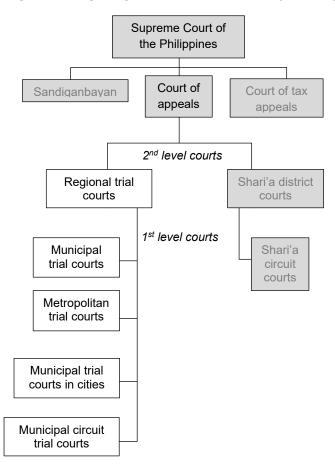
The judiciary has four levels with the SC at the top of the hierarchy, as illustrated in Figure 3. At the second level are the Court of Appeals, the Sandiganbayan,² and the

² The Sandiganbayan is a special appellate collegial court that has jurisdiction over criminal and civil cases involving graft and corrupt practices and other offenses committed by public officers and employees, including those in government-owned or government-controlled corporations.

Court of Tax Appeals. The courts covered in the study are the first- and/or second-level trial courts (excluding Shari'a courts). Courts at the first level have jurisdiction at the municipality level and are the lowest level of trial courts. The four types are distinguished by geographic areas covered:

- 1. Municipal trial courts (MTCs), which cover one municipality;
- 2. Municipal circuit trial courts (MCTCs), which cover two or more municipalities;
- 3. Metropolitan trial courts (MeTCs), which are MTCs in Metropolitan Manila; and
- 4. Municipal trial courts in cities (MTCCs), which are MTCs in cities outside Metropolitan Manila.

Figure 3: Organogram of the Philippine judiciary



Some first-level courts may have more than one branch. The second-level courts – regional trial courts – are the highest level of trial courts. Second-level courts are established in each of the 13 judicial regions with each region covering several provinces, except for the National Capital Judicial Region which covers cities and municipalities. Second-level courts have multiple branches throughout its region. According to SC data, there are 1,090 second-level court branches and 1,191 first-level court branches in the country.³

3

³ Data source: Monthly Caseflow Reports database, extracted February 2020.

1.3 Literature⁴

Strong institutions encourage investment and growth (Pande and Udry 2005; Rodrik 2000, 2005). Courts play a central role in strengthening institutions, and judicial efficiency is a key measure of the costs of doing business (World Bank 2017) and a country's institutional quality (Botero et al. 2003; Djankov et al. 2003; Lichand and Soares 2014; Ponticelli and Alencar 2016; Visaria 2009). Both private and public sectors rely on the judicial system to enforce contracts and realize benefits from regulatory change (Ahsan 2013). Slow justice can impede market development (Powell et al. 2001; Jappelli et al. 2005; Laeven and Majnoni 2005; Laeven and Woodruff 2007; Visaria 2009; Chemin 2009a), reduce firm growth (Amirapu 2017; Chakraborty 2016), weaken public sector performance (Coviello et al. 2016), and enable higher crime rates and more industrial riots (Köhling 2002).

Yet the empirical literature on improving judicial productivity in developing countries is scant. Court-level studies prevail in more developed countries (Chang and Schoar 2006) but lack detailed case-level data (Coviello et al. 2016). Rigorous evidence on policy options to reduce judicial delays is rare (Chemin 2009b). In most studies, the evidence linking improved justice to investment fails to establish causality (Aboal et al. 2014). Furthermore, the potential spill overs (positive and negative) and trade-offs of speeding up adjudication are rarely documented (Kondylis and Stein 2018).

The evidence that does exist provides some indication of what works: successful reforms include training judges on better caseflow management in Pakistan (Chemin 2009b); adopting first-in, first-out procedures in Italy (Bray et al. 2016); placing time limits on decisions in Senegal (Kondylis and Stein 2018); establishing specialized courts and simplifying procedures in Brazil (Lichand and Soares 2014); providing better information to litigants in Mexico (Sadka et al. 2018); and implementing a bundle of reforms including court-appointed mediation, limits on trial duration and adjournments, required affidavit furnishment, and mobile justice in India (Chemin 2009a).

Informative as these studies are, by and large they offer a relatively haphazard selection of possible options, with little claim to external validity, political considerations, or the overall choice set of policy levers available to government. This is particularly significant given the central importance of the political economy of policy reform. For example, Dakolias and Said (1999) find in four countries (Colombia, Peru, Argentina, and Ukraine) that judicial reforms work best when implemented in lower courts, with support from both the top and different stakeholders (e.g. lawyers, businesses, NGOs, communities).

In addition, such reforms work best when accompanied by a change in culture and management practices that complement administrative and procedural reforms. This suggests not only that the external validity of other studies is limited, but that there is much to be learned by understanding the implementation successes and failures of multiple reforms within the context of a single judicial system, to get at the deeper questions of what worked, and why.

-

⁴ This section is common across the three reports in this study series.

As noted earlier, the Philippine judiciary has invested heavily in several justice innovations, three of which (electronic case tracking, simplified procedures for small claims, and better case management practices) we study here. These reforms are intended to make the judicial system more efficient, transparent and accessible, and to improve the performance of judicial staff. This study contributes to the literature by applying a common research approach that enables comparisons across these three reforms, and by using a combination of qualitative and quantitative data to understand not just narrow impacts, but the mechanisms behind the impacts.

1.4 This study

This report focuses on the impacts of the Revised Guidelines for Continuous Trial for Criminal Cases (CT), while two companion reports cover the eCourt system and the Rules of Procedure for Small Claims Cases.

Although the CT pilot underwent an end of project assessment and the monitoring data from each court is regularly submitted to the SC, impacts of the three reforms had not been rigorously evaluated. In this study, we use high-frequency case data captured in electronic administrative records across first- and second-level trial courts to measure average impacts of the CT reform through an 'event study' design.

We divide the report into six parts. Section 2 describes the CT reform, while Section 3 provides an overview of the event study approach, primary research questions and outcomes of interest, and data collection methodology. Section 4 presents the findings, including descriptive statistics, empirical specifications, and estimated impacts. The final two sections discuss challenges and lessons learned and conclude the analysis.

2. Intervention

2.1 Revised guidelines for continuous trial of criminal cases

The CT reform aims to expedite trials and resolutions by imposing strict timelines on existing rules for court action and introducing best practices for speedy disposition of criminal cases. The guidelines set out prohibited pleadings, prescheduling of hearings, specific timeframes for trial periods and submission of decisions, among other reforms.

The CT reform stems from two previous SC resolutions that aimed to speed up case resolution. The first only covered trial courts in one city of Metropolitan Manila (Quezon City), while the second added 52 pilot trial courts across cities in Metropolitan Manila, as well as in the Sandiganbayan and the Court of Tax Appeals.

Following this pilot period, the reform went into effect nationwide on 1 September 2017 with the national official release of the CT guidelines through a memo and publication by the SC (Supreme Court of the Philippines, 2016). The SC organized orientation seminars with judges, selected court staff and the Department of Justice attorneys. Changes in court operations on calendaring of cases were initiated.

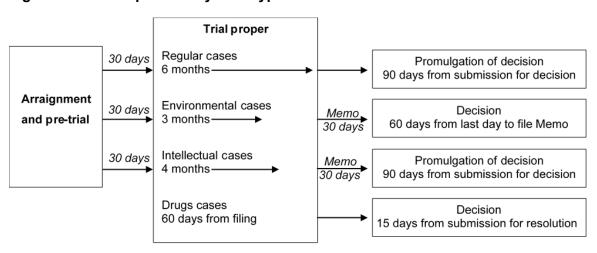
2.1.1 Guidelines laid out under the resolution

According to the resolution, the CT guidelines have the following three objectives:

- 1. To protect and advance the constitutional right of persons to a speedy disposition of their criminal cases;
- 2. To reinforce and give teeth to the existing rules on criminal procedure and other special rules prescribing periods for court action and those which promote speedy disposition of criminal cases; and
- 3. To introduce innovations and best practices for the benefit of the parties.

The revised guidelines specify: the prescribed hearing schedules per week; the prohibited motions; and the rules on consolidation, archiving, and revival of provisionally dismissed cases. They also outline the prescribed time allowances permitted in each phase of a case's life, which includes arraignment, pre-trial, trial, and decision. The phases and time allowances for regular, environmental, intellectual, and drug cases are shown in Figure 4. The reform applied to all new cases filed as of September 1, 2017,⁵ as well as all pending cases as of that date.

Figure 4: CT case process by case type



It is worth noting that the CT reform simply provided explicit case management guidelines that judges were familiar with but did not regularly implement. Based on consultations with the SC and qualitative findings, Table 1 presents a qualitative comparison of the rules and reported practices before implementation of the CT reform.

6

⁵ At this time, the SC had also introduced other judicial reforms, including the nationwide adoption of small claims procedures at first-level courts and select-court adoption of the eCourts system.

Table 1: Criminal procedures before and after the CT reform

Before the CT	After the CT
Lawyers often deliberately used motions to delay proceedings in order to buy time for their clients. Despite these motions not being allowed under the rules of court, judges ended up spending time deciding on and commenting on these motions, causing delay.	Revised guidelines specify several motions, whenever not allowed under the rules of court, that should be outright rejected without a need for comment or opposition. These include: motion for judicial determination of probable cause, motion for preliminary investigation, motion for reinvestigation once the information has been filed before the court, motion to quash information, motion for bill of particulars, motion to suspend arraignment, and petition to suspend the criminal action on the ground of prejudicial question.
No definite period existed for filing motion for reconsideration of meritorious motions in criminal cases.	A non-extendable period of five (5) days to file for motion for reconsideration, and a non-extendable period of five (5) days for the other party to respond.
Arraignment and pre-trial were not held on the same day. Cases were referred for mediation before pre-trial, but most mediated cases did not reach settlement, causing delays.	Arraignment and pre-trial are to be held on the same day. Cases are assigned to mediation after pre-trial, as appropriate.
Courts were not required to preschedule trials, and often the next hearing date was set during the hearing.	Trial dates are to be set during pre-trial wherein one day is allotted per witness.
Flexibility existed in allowable postponements on a case by case basis.	Postponements are not allowed, except on extraordinary grounds and upon payment of a postponement fee. The postponing party must present evidence within the remaining trial dates previously set for their party.

2.1.2 Compliance monitoring technology: CTMS and eCourts

In 2009, the SC established a judiciary-wide information technology framework that identified a range of essential infrastructure and software investments in order to address court delays, congestion, bureaucracy and caseload management. By 2017, the judiciary had set up a centralized data facility, provided internet connectivity to all major court locations, and introduced electronic case-management systems in specialized courts. These investments in technology are the backbone of compliance monitoring and are used specifically through two systems: the continuous trial monitoring system (CTMS) and the electronic courts case management system (eCourt).

The eCourt system is a digital case management system that records case details from filing to resolution. It contains all types of cases with information on the case number, case title, nature of the case, the parties involved, the branch where the case was raffled, and relevant dates such as the date of filing and the date of resolution. It also records where the case is assigned and whether the branch is a first- or second-level court.

In addition to capturing case-level details, the eCourt system assigns cases by electronic raffle, displays dashboards for case management, records actions taken in each hearing, prints and serves bench orders, and determines fee payments, among other functions. The SC rolled out the eCourt system in 2013–2018 and it is currently implemented in 327 courts in ten major cities.

The CTMS was developed in-house by the SC's information technology staff with support from The Asia Foundation. It comprises a simple dashboard with offline capability that requires users to enter only the essential fields from each case required to track compliance with the CT, including basic case information and the dates for each stage of the proceedings. The system gathers real-time information with the aim of allowing the SC to quickly identify non-compliant courts, which is in stark contrast to the previous system of hand-written reports sent by regular post. At the time of this study, its scope was limited to criminal cases, though future versions are intended to include civil and commercial cases.

Notably, the eCourt system collects data on all key fields captured by the CTMS, making the latter redundant. To ensure that judicial staff do not waste time recording the same data twice, the two systems continue to be maintained separately for eCourts and non-eCourts; in other words, the CTMS is implemented in all regular courts that hold criminal proceedings and have not yet adopted the eCourt system.

Two limitations should be mentioned. First, both systems rely on data entry by judicial staff, raising the question of the quality and reliability of the data collected. Second, although the CT guidelines are mandated by the SC, there is no explicit penalty if lower courts deviate from the guidelines, raising the question of imperfect compliance. To address the issue of data quality, our study considers three sources of data: case-level data from eCourts and the CTMS, as well as court-level data from the monthly caseflow report database maintained by the management information systems office.

Regarding compliance, the primary purpose of this study is to understand the impact of the reform as implemented by the judiciary; therefore, our impact analysis focuses on the intent-to-treat effect rather than behavioral questions around adoption. Nonetheless, our qualitative findings and conclusions discuss issues around implementation, including compliance, at some length.

2.2 Theory of change

As noted in Section 1.1, the Philippine judicial system suffers from court congestion, long trial durations and non-streamlined case management. The Philippine Development Plan 2017–2022 specially notes that 'backlogs in resolving cases and delays in case development procedures continue to increase, and penal facilities are occupied way beyond capacity' are key issues to be addressed (NEDA 2017). The CT is designed to address these problems.

The theory of change for the CT (Figure 5) has been formulated by the research team based on the CT guidelines, consultations with the SC office of the court administrator, as well as the chief justice, and verified through qualitative interviews with executive judges, presiding judges, branch clerks of court, prosecutors and lawyers, as described in Section 3.2 of this paper.

CT provisions are expected to lead to the following outputs: (1) adjustment of court calendars for old and new cases; (2) prompt on-time hearings to start as mandated under the CT guidelines; (3) an increase in the number of trials held per day in order to ensure that cases comply within the allotted period; (4) a decrease in delays in calendaring or resetting trial dates due to prohibited motions; (5) same-day scheduling of arraignment and pre-trial; (6) one witness heard on preset trial dates; (7) the appearance of police at court as witnesses whenever needed; (8) timely transport of detainees by the Bureau of Jail Management and Penology (BJMP) for on-time hearings; and (9) the release of court orders on the same day or as soon as possible.

There are several underlying assumptions in the implementation of the CT: (1) courts have the capacity to implement it (each court branch must have adequate personnel to implement the provisions of the measure, as well as have the necessary infrastructure in place, including courtroom availability and functional information technology equipment); (2) other pillars of justice such as the National Prosecution Service, Public Attorneys' Office and Philippine National Police are aligned and onboard with the new timeframe set out by the CT, and have the capacity to adhere to CT guidelines; and (3) witnesses make themselves available and cooperative in order for the case to proceed in a timely manner.

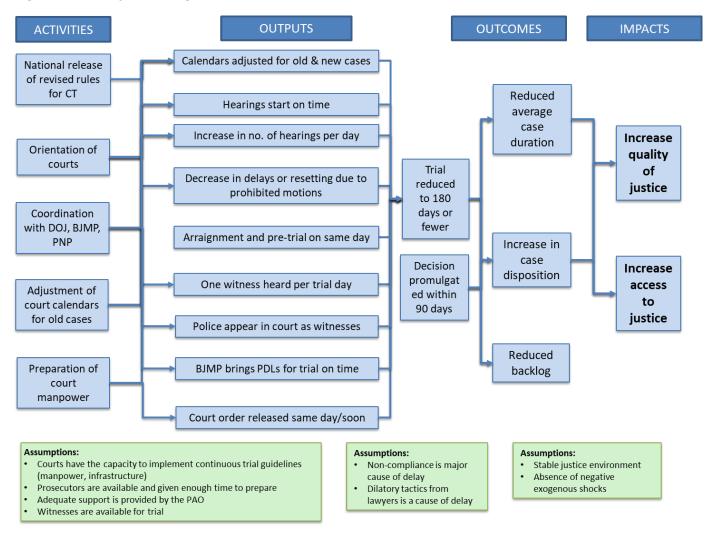
It should be noted that many of the activities and outputs necessary for case resolution are highly dependent on functions outside of the SC. In particular, the Department of Justice supervises the National Prosecution Service and the BJMP; the Department of the Interior and Local Government oversees the Philippine National Police; and the Department of Budget and Management oversees allocation of infrastructure and personnel.

These outputs ultimately lead to intermediate outcomes with a reduction in trial days to 180 days or fewer, in compliance with the CT timeframe, as well as timely promulgation of a decision within 90 days. With CT implementation, the output of shorter case duration will lead to a reduced average trial duration and a reduced backlog of cases. It is assumed that there is a stable justice environment and absence of negative exogenous shocks (i.e. the COVID-19 pandemic causing closure of courts). Ultimately, the outcomes of a reduced average case duration, an increase in case disposition, and reduced backlogs will lead to improved quality of and access to justice.

9

⁶ Periods described apply to regular cases. Refer to Figure 1 for prescribed periods for special types of cases.

Figure 5: Theory of change of continuous trial



Notes: DOJ = Department of Justice; PDL = persons deprived of liberty; PAO = Public Attorney's Office.

3. Evaluation

3.1 Research questions and outcomes⁷

Our overarching research question is whether improvements in technology and case management practices improve court efficiency and reduce congestion.⁸

We measure court efficiency through four main outcomes, each of which are essential to understanding impact. The first two, both measured at the court level, are:

- 1. Clearance rate: This is defined as the court's case outflow (cases disposed) divided by case inflow (new cases) and provides the simplest measure of court efficiency as a 'flow' of cases. In other words, is the court resolving at least as many cases as are coming in?
- 2. Disposition rate: In contrast, this measures the 'stock' of cases (i.e. pending and backlogged cases) and is defined as cases disposed divided by the sum of both new and pending cases. For this reason, it is a more comprehensive measure of court performance, but can be less responsive to reforms that do not directly address pendency.

Both these rates are calculated from the monthly caseflow report database, which comprises aggregated monthly caseflow data submitted to the SC by first- and second-level courts.

The third and fourth outcomes are measured at the case level:

- 3. Case duration: This is defined as the number of days from the date of filing to the date of the court's decision. While this is the most direct way to measure judicial speed, it is only defined for resolved cases meaning that all cases pending in court would be excluded from the analysis.
- 4. Case disposed in a given number of days: To ensure that results are meaningful and not driven by data censoring, we also include a second case-level outcome that is a dummy variable measuring whether a case was disposed within a given number of days of filing. This outcome is defined for all cases and has the additional benefit of being duration flexible. In other words, it can be used to draw out the impact trajectory of any reform by measuring impacts, for example, at three, six, nine or twelve months. This is especially useful in the context of this study, where different reforms have different expected timelines of impact.

_

⁷ This section is common across the three reports in this study series.

⁸ In our pre-analysis plan, the research question for our overarching study of all three reforms includes an aspect of quality: Can improvements in technology and case management practices reduce court congestion and improve court efficiency *without compromising the quality of judicial decisions*? Due to limitations in the availability and consistency of case appeal and appeal decision data in the administrative databases, as well as restrictions imposed by COVID-19 on collecting further data from the courts, we are unable to pursue the second half of the question regarding quality.

3.2 Design and methods

3.2.1 Quantitative design and methods

We pursued a research strategy that measures the average impacts of the guidelines at the court and case level through an event study design, comparing court efficiency immediately before and after the CT guidelines were implemented in a given court. We exploit the fact that the CT was implemented earlier in August 2015 in 52 pilot courts in the National Capital Region, and then rolled out nationwide in September 2017. Our core regressions analyze court-level data for the entire population of first- and second-level courts to determine whether the case-specific reform has an impact on the performance of the court in terms of overall caseload disposition. We capture historical trends using month-level dummy variables.

We supplement this analysis with case-level data captured in administrative records. For this study, our primary measures of case disposition are the proportion of cases disposed within the 330-day cutoff period from filing. This cutoff is calculated from the total maximum period allotted for regular criminal cases of non-detained accused (30 days from filing to pre-trial, 30 days from pre-trial to initial trial, 180 days for trial proper, and 90 days from submission to promulgation of decision). Cases resolved within this period meet a minimum compliance with CT procedures. As a secondary measure, we use the proportion of cases disposed within 180 days, which is the maximum trial duration for regular criminal cases.

In our calculations of minimal detectable effect size conducted ex-post, we used an eCourt data sample of 31,941 cases across 140 second level courts, clustering at the court level in line with individual courts being the unit of treatment. We assume a cluster sample size of 50, and in line with the common best practice in the literature we set power at 80 per cent and the significance level at 5 per cent.

With 242 courts for the CT, the study is powered to detect a standardized effect size of 0.2 standard deviations for a one-sided t-test, since we expected a one-sided change (i.e. a reduction in case duration and increase in case disposal rate). The sample data shows an intra-cluster correlation of 0.3 for case duration and 0.1 for percentage of cases disposed within 330 days.

3.2.2 Qualitative design and methods9

We conducted qualitative research to further investigate our quantitative findings and explore reasons for weak links in the chain of causation laid out in the theory of change. We gathered the perceptions, experiences and levels of satisfaction of judges and clerks of court in relation to the justice reform programs. In coordination with SC offices, we selected and invited judges and clerks of court to participate in either focus group discussions (FGDs) or key informant interviews (KIIs).

In March 2020, we shifted the FGDs to remote KIIs using video conferencing platforms due to the COVID-19 pandemic and the guidelines and restrictions imposed by the Philippine government. To complement the interviews with judges and clerks of court and to gain further perspective on the impact of the reform by other key players, the team also conducted interviews with prosecutors, public attorneys and private attorneys.

12

⁹ This section is common across the three reports in this study series.

In addition to qualitative interviews, we launched an online survey for judges and clerks of court to increase the sample of responses on experience and perception of the judicial reforms. The qualitative questionnaire and initial FGD findings guided the design of the online survey, which was subsequently administered to judges and clerks of court at all first- and second-level trial courts through the offices of the SC and the Philippine Judges Association.

We use rapid thematic analysis of the interviews to identify emerging themes and refine the online survey. At the end of each day of data collection, the research team debriefed and recorded their impressions. At the end of data collection, the team conducted a second round of content analysis on the transcribed interviews using a shared coding tool.

3.2.3 Timeline

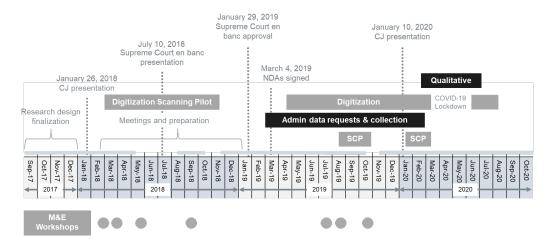
Figure 6 illustrates the overall project timeline and includes key milestones and all data collection activities that the team undertook during its engagement with the SC. The timeline also shows the series of monitoring and evaluation capacity-building workshops we conducted in 2018 and 2019 with SC offices.

At the start of the project, the team faced a long unanticipated delay due to a series of leadership transitions within the SC. On January 29, 2019, the SC approved the final research design and on March 4, 2019 the team signed a series of non-disclosure and confidentiality agreements with the SC.

The two quantitative data collection activities relevant to conducting the CT study included: (1) collection of administrative data; and (2) collection of qualitative data (marked by black boxes in the timeline figure). The team spent the second quarter of 2019 coordinating with the various offices to formally request and collect the administrative data. Over the following months, the team made occasional requests for updated datasets, with the last set received in January 2020.

For the qualitative component, we piloted the qualitative instruments in February 2020 and conducted the first set of FGDs in March 2020. Due to the COVID-19 pandemic and the guidelines and restrictions imposed by the Philippine government, the team shifted the FGDs to remote interviews. We conducted the remote interviews and launched the online survey in June and July 2020.

Figure 6: Study timeline



Notes: CJ = chief justice; NDA = non-disclosure agreement; SCP = Small claims procedure; M&E = monitoring and evaluation.

3.3 Ethics¹⁰

The Human Subjects Committee for IPA provided oversight for this project, 'Impact evaluation of three supreme court reforms in the Philippines: eCourt, continuous trial guidelines, and small claims procedures', protocol # 14339. On 28 February 2018, the board found the study to be of minimal risk and approved the administrative data collection component.¹¹

In accordance with the requirements of the IPA Institutional Review Board, we put in place procedures to ensure data security including encryption of data files and assignment of unique codes to cases, court branches and judges. All research team members obtained certificates in human subject research, and all research team members and project personnel signed non-disclosure and confidentiality agreements with the SC. Data collection activities were conducted in coordination with and under the guidance of the SC Program Management Office and the Office of the Court Administrator.

In July 2019, an institutional review board amendment to the protocol was approved for the inclusion of FGDs with judges and clerks of court for eCourts and the focus on quasi-experimental designs using administrative data for the three reforms. In September 2019, another amendment was approved to include a data collection activity for the collection of limited case information on money claims case values above the small claims threshold (control) from the lower courts.¹²

In February 2020, another institutional review board amendment was approved with a revised FGD questionnaire, protocol guide, and consent that covered all three reforms. Following COVID-19 and approval from the chief justice, two subsequent amendments

¹⁰ This section is common across the three reports in this study series.

¹¹ At the time of submission, the research design also included two randomized experiments with survey data collection.

¹² This amendment is relevant to the study on Rules of Procedures for Small Claims Cases reform.

were approved (in April and June 2020) to shift from FGDs to remote KIIs using a secure video call platform and the inclusion of an anonymous online survey using a secure digital data collection platform. Upon completion of the project, all data, information and materials shared by the SC will be returned or destroyed.

3.4 Sampling and data collection

3.4.1 Sample selection

In this study, we included all criminal cases available at the time of the study¹³ from first-and second-level trial courts in the eCourt and CTMS databases. The number of courts with data available in the eCourt system totals 336 courts (92 first-level courts and 244 second-level courts), spanning 11 cities across five judicial regions. The number of courts with data available in the CTMS database totals 1,635 courts (988 first-level courts and 647 second-level courts), spanning all 13 judicial regions. Combined, the total sample of courts is 1,971.

The total number of criminal cases in the eCourt system is 544,226; in the CTMS it is 890,609. However, we limit the cases in the study and analysis to criminal cases both filed and resolved 24 months *before* implementation of the CT, and criminal cases both filed and resolved 24 months *after* implementation of the CT. We use data from both the eCourt and CTMS databases, since courts under the eCourt reform use the eCourt system to encode case details relevant to the CT, and non-eCourts use the CTMS (i.e these two datasets include different courts). Table 2 below shows the total court and case sample by court level and database.

Table 2: Sample courts and criminal cases by database

Court level	eCourts dataset		CTMS dataset		Sample total	
	No. of courts	No. of criminal cases	No. of courts	No. of courts	No. of criminal cases	No of criminal cases within ± 24 mo. bound
1st level (municipal)	92	268,214	988	366,240	1,056	634,454
2nd level (regional)	244	276,012	647	524,369	891	800,381
Total	336	544,226	1,635	890,609	1,971	1,434,835

3.4.2 Data description

Our quantitative data sources include three administrative databases of the SC: CTMS, eCourt, and monthly caseflow reports. We coordinated with offices within the SC to extract the requested data from the information systems.

The eCourt digital management system records case-level details from filing to resolution. It contains all types of cases with information on the case number, case title, nature of the case, the parties involved, the branch where the case was raffled, and relevant dates such as the date of filing and resolution. It also informs where the case is assigned and whether the branch is a first- or a second-level court. The database contains a total of 544,226 criminal cases. We limit the number of cases examined to

-

¹³ Data extracted from administrative databases in January 2020.

those within the period of analysis: 24 months before and 24 months¹⁴ (-24, +24) after the launch of the revised guidelines based on the date received (or filed) by the court. This results in 373,149 criminal cases in the eCourts database.

In order to monitor compliance with the CT, each court that is not using the eCourts case management system is required to encode case information in the CTMS and submit system-generated quarterly reports to the SC. The CTMS records details at the case level, including the court where each case is assigned, case number, nature of the case, and dates of filing, pre-trial, arraignment, trial and submission for decision. At the time of the study, the CTMS database was only used by courts to record criminal cases and contained 890,629 criminal cases. We applied to it the same time bounds, which results in 690,566 criminal cases.

The main limitation of the case-level dataset is the recording of cases filed prior to the reform. When the reform was implemented, the courts prioritized back-encoding of pending cases only. Migrating the resolved cases prior to the reform was secondary, which limits our data of cases filed prior to the reform. Since most eCourts were rolled out in 2015, the eCourt database has more complete records of cases two years prior to implementation of CT guidelines. However, this becomes an issue for our analysis using CTMS, which was launched at the same time as the CT reform.

The monthly caseflow report system details the number of pending, incoming and outgoing cases per month per court branch from 2013–2019. It also gives a breakdown of the records by case type. In addition, there was a change in the monthly reporting template in 2018, causing several fields previously required to no longer be recorded; we control for this change in our court-level specifications.

3.4.3 Quality control

We first filtered out non-criminal cases from the eCourt dataset, as only criminal cases are within the scope of the CT reform. We then generated case duration by subtracting the date the case was received by the assigned court from the date it was resolved. ¹⁵ We generated the proportion of cases resolved by dividing the number of cases resolved in 330 days by the total number of cases filed.

We also generated case duration using the CTMS dataset. However, because of the imbalance in the distribution of cases resolved before and after the CT guidelines implementation, we randomly selected resolved cases filed after the reform to match the number of resolved cases filed before the reform.

The CTMS allowed us to break down the case duration into case processing phases. Phase 1 captures the period from the receipt of the case to pre-trial. Under the regular

_

¹⁴ Initially we considered 12 months before and 12 months after the introduction of the CT. During an initial meeting with Chief Justice Peralta, he recommended widening the window so that the implication of the surge in drug cases can be considered in the analysis.

¹⁵ CT guidelines specify that the number of days begins on the date the assigned court receives the case, rather than the date it was filed. For courts with a single *sala* (court branch), the date of filing and date of case receipt are the same. However, for courts with multiple *salas*, a case is filed in the Office of the Clerk of Court and is subsequently distributed to the courts, which means that the date of filing is not always the same as the date the assigned court receives the case.

rules, pre-trial should be completed within 10 days for detained accused or within 30 days for non-detained accused. Phase 2 is the duration from pre-trial to the initial trial which is to be calendared within 30 days. Under the CT guidelines, the pre-trial and arraignment should be completed within the same day, so the date of the first trial is marked as the next milestone in the case.

Phase 3 is the duration of the trial proper, which we calculate from the date of the initial trial to the date of submission for decision. For regular criminal cases, the trial should be completed within 180 days and is usually broken down as 90 days for the prosecution and 90 days for the defense. Finally, Phase 4 marks the decision stage and is calculated from the date the case is submitted for a decision to the date of promulgation of a decision.

- Phase 1: Receipt of case to pre-trial (30 days)
- Phase 2: Pre-trial to initial trial (30 days)
- Phase 3: Initial trial to submission for decision (180 days)
- Phase 4: Submission for decision to promulgation (90 days)

For both case-level datasets, we dropped observations without case numbers and case titles. We also dropped cases with negative case duration, as these are attributable to wrong encoding and are not reliable data points.

At the court level, we generated the clearance rate and the disposition rate per month. As explained earlier, the clearance rate is the total case outflow divided by the total case inflow, where inflow is the number of cases that are filed, reopened, and received from another branch and outflow is the number of cases decided, archived, or transferred to another branch. The disposition rate is the total case outflow divided by the sum of the total case inflow and pending cases.

For each dataset, we assign unique identification codes to court branches, case numbers and judges. We maintain only the fields necessary (mostly date fields) to conduct the analysis.

3.4.4 Qualitative data and online survey¹⁶

For the collection of qualitative data, we focused on the three geographic areas of National Capital Region, Cebu City and Davao City when selecting participants, since these are areas wherein all three judicial reforms under evaluation by the research team had been implemented. We initially based participant selection on a range of criteria to allow for diverse perspectives and experiences, including length of service of the judge, duration of the implementation of eCourts, court level and preliminary results of the quantitative outcomes measured.

To an extent, the initial selection also considered the proximity of a court to the proposed FGD locations in consideration of participant time allocation outside of court. In coordination with SC offices, we selected and initially invited 58 judges and clerks of court to participate in either: (1) one of six FGDs; or (2) key informant interviews with the judge and/or clerk of court.

¹⁶ This section is common across the three reports in this study series.

Following the first set of FGDs conducted in March 2020, we shifted the remaining FGDs to remote KIIs using video conferencing platforms due to the COVID-19 pandemic and the guidelines imposed by the Philippine government. During the shift, we coordinated again with the SC to identify participants for remote interviews (out of the initial selection) based on participants' access to internet, knowledge on the use of technology platforms and availability. Based on these additional factors, we did not invite five judges and six clerks of court and did not find replacements, since the rapid analysis showed that we were approaching saturation. However, we did determine from the rapid analysis the need to complement the interviews with judges and clerks of courts with prosecutors, public attorneys and private attorneys.

We find that the in-person interviews were better in establishing rapport and capturing interview setting, tone and non-verbal cues. However, remote online video interviewing was an efficient and effective method to collect qualitative data when done with additional preparations – such as pre-coordination with each participant to adequately explain the purpose of the study and finding an appropriate time and schedule for the remote interviews. Table 3 shows the qualitative study participants by region, position and sex.

Table 3: Qualitative participants by region, position and sex¹⁷

Position	Cebu		NCR		Davad)	Tota	% I Female
(Sex)	Total	% female	Total	% female	Total	% female		
Judges	9	44%	7	71%	8	50%	24	54%
Clerks of court	9	78%	5	100%	9	89%	23	87%
Prosecutors/PAO/ private lawyer	1	100%	7	29%	3	67%	11	45%
Total	19	63%	19	63%	20	70%	58	66%

Notes: NCR = National Capital Region; PAO = Public Attorney's Office. Judges and clerks of courts in Cebu participated in FGDs based on position, while the other participants participated in remote KIIs.

Overall, we collected qualitative data from a total of 58 participants (68% female) in either FGDs or remote KIIs, including 24 judges, 23 clerks of court and 11 prosecutors/lawyers. Personnel data from the SC indicates that in 2018, 50 per cent of the judges were female, showing that we have a gender-balanced sample of judges. Participation across the three regions was fairly distributed with 33% in Cebu, 33% in National Capital Region and 34% in Davao. We conducted two in-person FGDs in Cebu (31% of participants); 18 12 individual and two paired remote KIIs with judges; three individual and four paired KIIs with clerks of court; two paired KIIs with both the judge and the clerk of court; and individual KIIs with three public attorneys, two private lawyers and five prosecutors.

_

¹⁷ Judges and clerks of courts in Cebu participated in FGDs based on position, while the other participants participated in remote KIIs.

¹⁸ We were supposed to do the same for the Davao and National Capital Region courts, but the government imposed a lockdown due to COVID-19. Hence, we shifted to remote one-on-one/paired interviews for the remaining judges, clerks of court and other judicial stakeholders through Zoom® or Microsoft Teams®.

The FGDs and remote KIIs used the same questionnaire guide (Appendix A: FGD guide) to gather perceptions, experiences and levels of satisfaction among the judges and clerks of courts in relation to the justice reform programs. In most cases, each interview (including FGDs) had one main facilitator, one co-facilitator, one documenter, and one or two principal investigators. Each interview (including FGDs) was audio recorded with consent and transcribed.

To gather a wider sample of perceptions among judges and clerks of court on the judicial reforms, we launched an online survey developed with guidance from the qualitative questionnaire guide and initial findings from the FGDs (Appendix B: Online survey). ¹⁹ We used a digital data collection platform that offers a web-based option. We coordinated with the SC offices under the Office of the Court Administrator as well as the Philippine Judges Association to administer the online survey to judges and clerks of courts in all first- and second-level courts.

The online survey was available for three weeks in July 2020. In order to encourage participation, we regularly sent updates to the offices on the number of participants per judicial region. There were 1,579 judges and clerks of court who participated in the online survey, with 644 judges, 882 branch clerks of court and 53 clerks from the Office of the Clerks of Court. Participation by first- and second-level courts was roughly evenly split.

3.4.5 Specifications

Estimating equation and hypotheses

Following Kondylis and Stein (2018), we consider both the impact of time to outcome and the average impact of the event. We explore these impacts during two period bandwidths: (1) 12 months before and after CT went into effect in a given court; and (2) 24 months before and after the reform went into effect. In all specifications, we assign time = 0 to represent the month when the reform went into effect, which is September 2017 for all courts.

For impact to time to outcome, shown in Equation 2, we regress each outcome on individual dummies for each month (-12 to +12, -24 to +24), while controlling for the calendar month. For Equation 2, we regress each outcome on a dummy indicating introduction of CT, interacted with the time trend, and summarize the results in Table 4 (court-level effects), Table 5 (case-level effects) and Table 6 (phase-duration effects).

All specifications include calendar month fixed effects (January–December) and court fixed effects, and all regressions are clustered at the court level. We also rerun all regressions with a control for the 'drug war' in the Philippines that led to a massive influx of drug cases in the courts. Court-level regressions include a fixed effect for a change in the monthly reports reporting system in December 2018.

Equation 1: Impact of time to outcome

 $y_i = \beta_0 + \sum_{t=-d}^{t=d} \beta_t T_{ti} + M\gamma + C\delta + W\lambda + S\psi + \epsilon_i$

¹⁹ While a survey of the public is beyond the scope of this study, this would be a natural next step.

Equation 2: Average impact of the event

$$y_i = \beta_0 + \beta_1 T_{ti} + \beta_2 trend_i + \beta_3 T_{ti} \times trend_i + M\gamma + C\delta + W\lambda + S\psi + \epsilon_i$$

where: y = outcome of interest; trend = time trend; T = number of months before (negative) or after (positive) the introduction of CT for a given court within a 12-month or 24-month window; d = number of months to or after introduction of CT; A = 1 if after introduction of CT, 0 otherwise; M = month fixed effects (January to December); C = court fixed effects; W = drug war dummy (= 1 after June 2016); and S = system dummy to account for the change in monthly reports reporting system (= 1 after December 2018) (court-level analysis only)

4. Findings

In this section we present the impact of CT on court-level outcomes (clearance rate and disposition rate), followed by its impact on case-level outcomes (case duration and proportion of cases resolved within a given number of days). We examine the effects of the Philippine government's 'drug war', which led to a surge of drug-related cases, by adding a control marked by the start of the drug war (July 1, 2016). This date coincides with the first full day of the 2016–2022 Philippine government administration.

We included this aspect of the analysis since the SC chief justice and other SC officials expressed interest in understanding how the drug war may have affected CT implementation. Figure 7 marks 1 July 2016 as a point in time and uses monthly caseflow report data to graph the inflow of drug-related cases over time. The figure shows that while the rise in such cases started just before 1 July 2016, their number has since remained high.

Figure 7: Drug cases filed 2014-2017

Source: Monthly caseflow reports database, SC.

4.1 Court-level analysis

We use the monthly caseflow report dataset to examine the impact of the CT reform on the clearance rate and disposition rates of criminal cases. Rows 1–2 of Table 4 show that the clearance rate increased by between 35–36 percentage points (0.354, 0.358) after CT implementation across both period bandwidths (12 and 24 months, respectively).

The clearance rate is simply the ratio of resolved cases to incoming cases, measuring the 'flow' or throughput of the court. The pre-intervention mean clearance rate was 2.07, implying that twice as many cases were being resolved per month relative to incoming cases; the CT reform increased this to nearly two-and-a-half times. In row 3, we include the drug war dummy, and the coefficient drops slightly to 0.303, suggesting that the increase came in part from the rapid processing of drug cases.

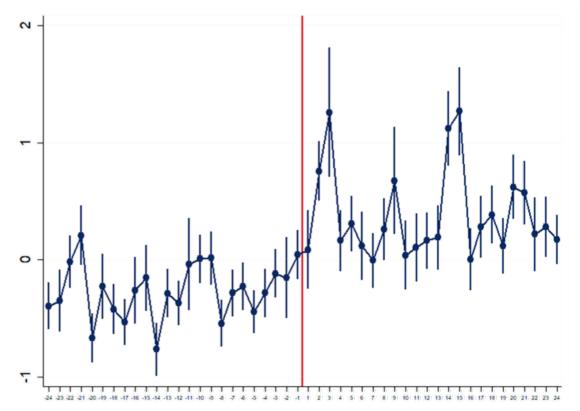
Table 4: Court-level impacts

Outcome	Impact	Std. err.	Mean	Std. dev.	N
Criminal cases					
(1) Clearance rate [-12, 12]	0.354**	0.152	2.07	5.35	48,061
(2) Clearance rate [-24, 24]	0.358***	0.092	2.13	4.94	91,731
(3) Clearance rate [-24, 24], drug war	0.303***	0.099	2.13	4.94	91,731
(4) Disposition rate [-12, 12]	-0.001	0.004	0.12	0.14	53,902
(5) Disposition rate [-24, 24]	0.000	0.002	0.13	0.15	102,105
(6) Disposition rate [-24, 24], drug war	-0.006***	0.002	0.13	0.15	102,105
Civil cases					
(7) Clearance rate [-12, 12]	0.046	0.115	1.43	1.88	25,499
(8) Clearance rate [-24, 24]	-0.044	0.042	1.47	2.04	48,159
(9) Clearance rate [-24, 24], drug war	-0.001	0.044	1.47	2.04	48,159
(10) Disposition rate [-12, 12]	-0.007	0.006	0.14	0.19	32,215
(11) Disposition rate [-24, 24]	-0.006**	0.003	0.14	0.19	61,586
(12) Disposition rate [-24, 24], drug war	-0.009***	0.003	0.14	0.19	61,586

Notes: std. err. = standard error; std. dev. = standard deviation. Each row corresponds to an individual regression. Column 1 describes the dependent variable and specification. Columns 2 and 3 provide the estimate of impact (change in outcome with and without CT at average value of trend) and standard error, respectively, while Columns 4 and 5 provide the pre-intervention mean and standard deviation. Column 6 provides the total number of observations in the regression. All specifications include court and calendar-month fixed-effects and a dummy for the change in the monthly caseflow reporting system. Robust standard errors (in parentheses) are adjusted for clustering at the court level. [-12, 12] and [-24, 24] refer to the date range of court data before and after the reform. 'Drug war' refers to a dummy for the period of the drug war. *** p < 0.01, ** p < 0.05, * p < 0.1

Source: Monthly caseflow report dataset.

Figure 8 shows the impact of time to clearance rate, with the baseline normalized to the level of the clearance rate at t=0 (the month the reform was introduced). The figure shows the impact trajectory: the months immediately after the implementation of the reform saw the largest jump in clearance rate as courts reacted to the new reform. This fell in subsequent months but remained consistently above the pre-intervention mean.



igure 8: Impact of time to clearance rate

Source: Monthly caseflow reports dataset (-24, +24 months from date of reform).

In stark contrast, rows 4–5 in Table 4 show no statistically or numerically significant change in the disposition rate across either period bandwidth. This provides an insight into the mechanism of impact of the CT reform: the disposition rate is simply the ratio of resolved cases to the sum of incoming and pending cases.

The lack of impact suggests that despite speeding up case resolution, the impact of the CT reform pales in comparison to the high volume of pending cases in each court. The pre-intervention mean disposition rate was 0.14-0.15 (in 12- and 24-month periods), implying that each court was only able to resolve 14–15% of its total cases each month. When we include the drug war dummy in ow 6, the disposition rate actually falls slightly, by 0.6%.

Figure 9 shows the impact of time to disposition rate, again with the baseline normalized to the level of the disposition rate at t = 0. While the disposition rate shows an overall increase over time, it is clear that this is almost entirely the result of a pre-existing trend.

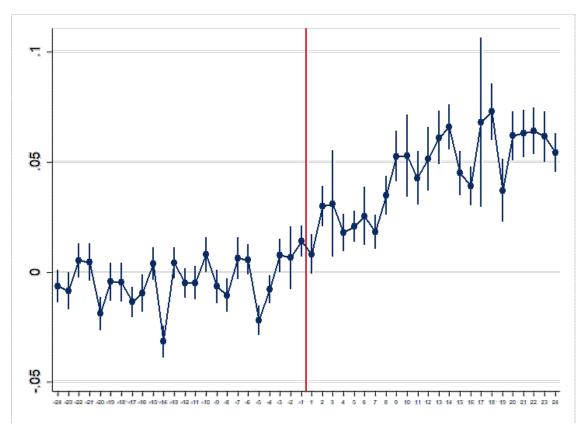


Figure 9: Impact of time to disposition rate

Source: Monthly caseflow reports dataset (-24, +24 months from date of reform).

Rows 7–12 of Table 4 look at the effect of the CT reform on the clearance rate and disposition rate of civil cases, which is the case type with the second-highest number of cases filed. This is to test whether the efficiency gains in the throughput of cases (i.e. the positive impact on the clearance rate) spill over to the processing of other types of cases. The answer is clearly no: rows 7–9 show that clearance rates for civil cases do not budge from their pre-intervention means of 1.43 and 1.47 (12- and 24-month periods, respectively).

This also provides further evidence that CT had localized effects specific to the reform – impacts were seen only in the type of cases where the rules changed (i.e. criminal cases), and not in overall case processing. Rows 10–12 show some evidence of a decline in disposition rates, similar in magnitude to the decline in disposition rates of criminal cases in the specification with the drug war dummy.

Figure 10 shows the results for the impact of time to the clearance rate and disposition rate of civil cases. Consistent with above, the coefficients remain in the same range of values before and after the implementation of the CT reform. While the disposition rate shows a slight trend increase after the reform, the values of these coefficients are small and disappear after controlling for the trend.

Clearance rate

Disposition rate

Figure 10: Impact of time to clearance and disposition rates: civil cases

Source: Monthly reports dataset (-24, +24 months from date of reform).

4.2 Case-level analysis

For the case-level analysis we use two datasets: the eCourts dataset and the CTMS dataset. Since the two datasets do not cover the same cases and offer different case event details, we analyze each dataset separately. The CTMS dataset provides details of case events at each stage of case processing, enabling us in principle to understand what part of the case is impacted by CT reforms. This level of detail is not available in the eCourts dataset. The CTMS dataset was only identified and provided by the SC in March 2019, which is why it was not included in the pre-analysis plan.

Table 5 shows our estimates of the average impact of the CT guidelines on case duration and proportion of cases disposed in less than 180 and 330 days. We consider both 12- and 24-month bandwidths before and after implementation of the CT reform.

In estimating the impact of CT on case duration using the CTMS dataset, we take into consideration that the number of resolved cases in the CTMS database prior to the CT reform is significantly lower than those after. This can be attributed to the nature of encoding done by the courts during system migration. Pending cases were prioritized, with a few resolved cases prior to CT included in the system. While we exclude all pending cases from our analysis (which would otherwise bias our treatment estimates), we are aware that back-entered cases may differ in other ways from live cases. To address this concern, we sample the same number of resolved observations after CT.

Rows 1–3 of Table 5 shows the estimated impact of the CT reform on case duration using the eCourts dataset. We find no statistically significant change in disposition within a 12-month range before and after CT implementation. However, we see significant changes within a 24-month range before and after its implementation: the introduction of the CT reduces the average case duration by 54.9 days (a 14% decline from a mean of 400 days), which is statistically significant. When we add a control for the surge in drug cases, the reduction is limited to 28.4 days.

Table 5: Case-level impacts

Outcome	Impact	Std. err.	Mean	Std. dev.	N
eCourts					
(1) Case duration [12, -12]	-7.24	14.47	356.4	281.3	82,759
(2) Case duration [24, -24]	-54.9***	14.13	400.1	335.3	142,296
(3) Case duration [24, -24], drug war	-28.4**	12.97	400.1	335.3	142,296
(4) Disposed in 330 days [12, -12]	0.023	0.019	0.221	0.415	210,937
(5) Disposed in 330 days [24, -24]	0.090***	0.018	0.222	0.415	387,659
(6) Disposed in 330 days [24, -24], drug war	0.096***	0.019	0.222	0.415	387,659
(7) Disposed in 180 days [12, -12]	0.019	0.017	0.148	0.355	210,937
(8) Disposed in 180 days [24, -24]	0.080***	0.015	0.149	0.357	387,659
(9) Disposed in 180 days [24, -24], drug war	0.093***	0.016	0.149	0.357	387,659
CTMS					
(10) Case duration [12, -12]	-37.6***	6.78	308.0	241.4	131,373
(11) Case duration [24, -24]	-60.5***	5.96	611.1	478.9	201,401
(12) Case duration [24, -24], drug war	-64.5***	5.97	611.1	478.9	201,401
(13) Disposed in 330 days [12, -12]	0.15***	0.017	0.298	0.457	131,373
(14) Disposed in 330 days [24, -24]	0.34***	0.013	0.207	0.405	201,401
(15) Disposed in 330 days [24, -24], drug war	0.26***	0.014	0.207	0.405	201,401
(16) Disposed in 180 days [12, -12]	0.27***	0.015	0.122	0.328	131373
(17) Disposed in 180 days [24, -24]	0.34***	0.014	0.086	0.28	201,401
(18) Disposed in 180 days [24, -24], drug war	0.32***	0.015	0.086	0.28	201,401

Notes: Std. err. = standard error; std. dev. = standard deviation. Each row corresponds to an individual regression. Column 1 describes the dependent variable and specification. Columns 2 and 3 provide the estimate of impact (change in outcome with and without CT at average value of trend) and standard error, respectively, while Columns 4 and 5 provide the pre-intervention mean and standard deviation. Column 6 provides the total number of observations in the regression. All specifications include court and calendar-month fixed-effects. Robust standard errors (in parentheses) are adjusted for clustering at court level. [-12, 12] and [-24, 24] refer to date range of court data before and after the reform. 'Drug war' refers to a dummy for the period of the drug war. *** p < 0.01, ** p < 0.05, * p < 0.1

Source: eCourt and CTMS datasets.

Using the CTMS dataset shows that CT reduced the average case duration by 37.6 and 60.5 days within the 12-month and 24-month period, respectively, when using the original specification, and by 64.5 days when accounting for drug cases. The CTMS sample analysis shows that cases in eCourts are resolved faster than cases in non-eCourts

Figure 11 graphs the impact estimate of time to the total case duration for the eCourts and CTMS datasets. Both present a downward trend in the coefficients associated with the elapsed time before and after the enactment of the reform. The effect of time to case duration becomes negative in the fourth month post implementation. Note that the spikes that recur every 12 months are more noticeable when using the CTMS dataset. These upticks in the value of the coefficients happen during the months of November and December of each year. They may be associated with the court judges being required to report to work for only 11 months and the substantial number of holidays in December.

CTMS

Figure 11: Impact of time to case duration (-24, +24)

Full estimations appended.

eCourts

Source: eCourts and CTMS dataset (-24, +24 months from date of reform).

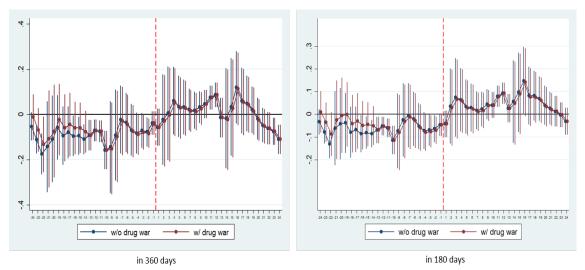
We estimate the impact of CT on the proportion of cases disposed within 330 days (the set maximum number of days to resolve a regular criminal case as prescribed by the guidelines) and within 180 days (the maximum trial duration for regular criminal cases). We evaluate the differential impact of time to event and the average impact of the event. Like in earlier analyses, we consider 12 months and 24 months before and after implementation of the CT reform.

Table 5 shows no statistically significant impact on the proportion of cases disposed after 330 days (row 4) and 180 days (row 7) within the 12-month period. Rows 5–6 show that the marginal effect of the CT reform within the 24-month period increased the proportion of cases disposed in 330 days by 9 percentage points (41%), and by 9.6 percentage points when controlling for the surge in drug cases. The same positive impact is shown when evaluating cases resolved in 180 days (rows 8–9), which was increased by 8 percentage points (54%) and 9.3 percentage points when controlling for the surge in drug cases.

Using CTMS data, we find higher statistically significant increases in the proportion of cases disposed in all parameters as shown in rows 13–18 of Table 5. The proportion of cases disposed in 330 days increased by 15 percentage points within the 12-month period, by 9 percentage points within the 24-month period, and by 9.6 percentage points when controlling for the surge in drug cases. The same positive impact is shown when evaluating cases resolved in 180 days (rows 8–9), which was increased by 27 percentage points within the 12-month period, 34 percentage points within the 24-month period, and 32 percentage points when controlling for the surge in drug cases.

Figure 12 shows the impact estimate of time to the proportion of cases resolved. The graph shows that the trends within the 48-month range between resolution in 360 days and 180 days are similar.

Figure 12: Impact estimate of time to cases disposed



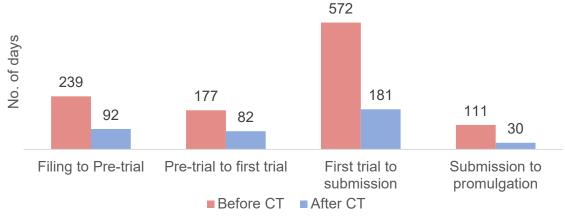
Source: eCourts dataset (-24, +24 months from date of reform).

We further examine the impact of the revised guidelines on case duration using the CTMS sample by looking at the duration of each phase in case processing. This will shed light on how the different phases of case processing are affected by the CT. Unlike the eCourt system, the CTMS captures the intermediate dates necessary for observing the individual phase durations. We use the time periods as prescribed in the guidelines for regular cases in calculating the impact estimation.

Figure 13 illustrates the changes in the duration of each phase before and after CT implementation. Phase 1 (filing to pre-trial) took nearly eight months (239 days) before CT; after the reform, this duration declined to just over three months (92 days). Similarly, Phase 2 (filing to first trial) took nearly six months (177 days) before the CT reform, and under three months (82 days) afterward. Phase 3 (trial) saw the largest absolute reduction: from over 18 months (572 days) to six months (181 days).

We also see that there were minor delays from submission to decision (111 days), which were reduced (to 30 days) after the CT. It is worth noting that while there are reductions across the board, courts are still far from the CT targets; for example, the post-CT Phase 1 duration of 92 days is well above the target of 30 days.

Figure 13: Mean phase duration



Source: CTMS database.

Table 6 shows the marginal effects of the revised guidelines on case duration by phase within the 24-month period. Similar to the earlier estimations, we control for court and month fixed effects and adjust for the clustering of errors at the court level. We find that the first three phases in case processing have reductions in average case phase duration and all are statistically significant. Phase 3 (trial) has the largest reduction in average case phase duration, with an average reduction of 57.12 days. This is followed by Phase 1 (filing to pre-trial) with a 49.8-day reduction in average case phase duration, and Phase 2 (pre-trial) with a 22.45-day reduction. Phase 4 (decision) is not significantly affected by CT.

When looking at the 12-month period, only Phase 1 has a statistically significant reduction by 45.25 days. Phases 2 and 3 do not have statistically significant changes in duration.

Table 6: Impact on case duration by phase

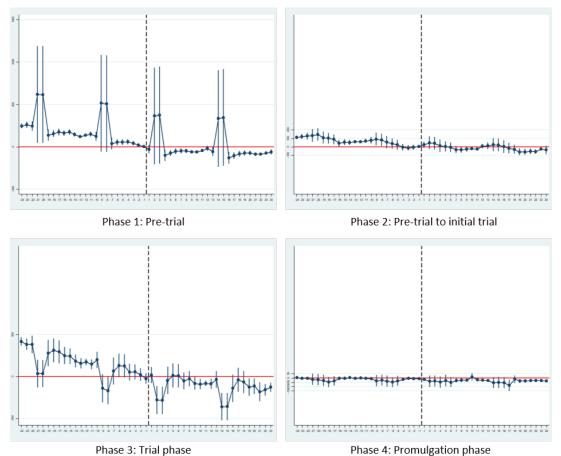
Outcome	Impact	Std. err.	Mean	Std. dev.	N
Case duration [24, -24]					
Phase 1	-49.81***	(4.10)	634.4	302.6	153,992
Phase 2	-22.45***	(5.60)	703.3	277.0	55,521
Phase 3	-57.12***	(12.1)	705.5	282.0	26,815
Phase 4	-0.523	(1.53)	657.5	299.7	49,921
Case duration [12, -12]					
Phase 1	-45.25***	(4.683)	499.6	238.1	100,414
Phase 2	-7.397	(5.121)	562.9	214.9	35,712
Phase 3	-6.253	(12.83)	555.6	216.1	17,042
Phase 4	-2.148	(1.996)	514.6	233.5	31,685

Notes: Std. err. = standard error; std. dev. = standard deviation. Each row corresponds to an individual regression. Column 1 describes the dependent variable and specification. Columns 2 and 3 provide the estimate of impact (change in outcome with and without CT at average value of trend) and standard error, respectively, while Columns 4 and 5 provide the pre-intervention mean and standard deviation. Column 6 provides the total number of observations in the regression. All specifications include court and calendar-month fixed effects. All specifications include court and calendar-month fixed effects. *** p < 0.01, ** p < 0.05, * p < 0.1.

Source: CTMS dataset.

Figure 14 shows the impact of time to the duration of each phase twenty-four months before and after implementation of the CT reform. The most noticeable declines are in Phases 1 and 3. Phases 2 and 4 remain almost constant over time.

Figure 14: Impact of time to case duration by phase



Full estimations appended.

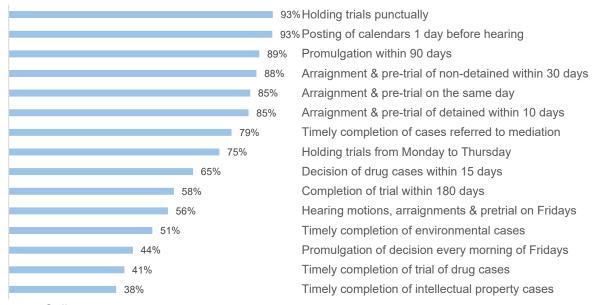
Source: CTMS dataset (-24, +24 months from date of reform).

4.3 Intervention implementation fidelity

While the majority of the online survey respondents (79%) are satisfied with having the CT guidelines in place, we find several challenges in implementation and compliance. Figure 15 shows that there are aspects of the CT reform with which the majority of courts comply most of the time or all the time: holding trials punctually (93%), posting calendars one day before a hearing (93%), promulgating a decision within 90 days (89%), conducting arraignment and pre-trial within the given period (88% for non-detained accused and 85% for detained accused), conducting arraignment and pre-trial within the same day (85%), ensuring timely completion of mediated cases (79%), and holding trials from Monday to Thursday (75%).

A lower proportion of respondents reported regular compliance with timely promulgation of decisions of drug cases (65%), completion of trial within 180 days (58%), hearing motions, arraignments and pre-trial on Fridays (56%) and timely completion of environmental cases (51%). Only a few respondents reported that they can comply with promulgation of a decision every Friday morning (44%), ensure timely completion of drug cases (41%) and intellectual property cases (38%).

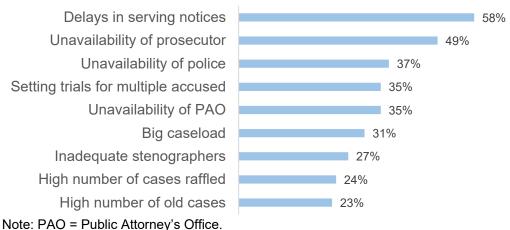
Figure 15: Self-reported compliance with CT



Source: Online survey.

Figure 16 presents common implementation problems reported by the respondents: delays in serving notices (58%), unavailability of prosecutor (49%), unavailability of police (37%), setting trials for multiple accused (35%), unavailability of Public Attorney's Office (35%), large caseload (31%), inadequate stenographers (27%), high number of cases raffled (24%), and high number of old cases (23%).

Figure 16: Reported problems in implementation



Note. FAO - Fublic Attorney 5 (

Source: Online survey.

Delays in serving notices occur due to unreliable postal services. Unavailability of prosecutors and the Public Attorney's Office occur because they are also assigned to handle cases in other branches, or even jurisdictions. Courts prioritize trials of detained prisoners, but find it hard to comply with the 10-day period for arraignment and pre-trial because of issues in timeliness of paperwork and coordination with BJMP. Respondents also cited delayed arrival of detainees from the BJMP. On few occasions, tardiness of the judge led to an inability to hold trials on time.

While the CT guidelines aim to address court congestion, compliance is challenging for courts with large caseloads. This has been aggravated by the surge in drug cases starting in 2016. Drug cases are to be completed within a shorter time than regular cases (60 days from filing and 15 days for decision). Respondents said that the adoption of the plea-bargaining framework for drug cases was appreciated by the courts, as it has helped in the disposition of drug cases based on our findings from both the interviews and online survey responses.

Only 44% of respondents said that they fully adjusted all cases to comply with CT within six months of implementation; 26% said it took six months to less than one year, 8% took one to two years, and 22% reported that they are still adjusting their cases to CT guidelines.

We applied ordered logistic regression to the online survey data in order to analyze the association of court and respondent characteristics with the time needed to adjust to CT (Table 7). We find that only caseload is a significant determinant, while duration in service as a judge or clerk of court, assignment in multiple courts, and standardized number of additional staff needed are not significant.

Analysis of the marginal effects shows that having a higher caseload leads to a longer time required to adjust all cases to CT guidelines. Having a higher caseload lowers the odds of being able to adjust to CT guidelines in under six months, and raises the odds of being able to adjust in more than six months. This supports our finding from the interviews that it is not always feasible to accommodate new cases or reset cases within the month due to an overwhelming caseload.

Table 7: Impact of staff and court characteristics on time to adjust to CT

Outcome	Coefficient	Standard error	p-value
Estimated monthly caseload	0.00118***	0.000	< 0.001
Assignment in multiple court branches	0.00610	0.167	0.971
Duration in service	0.01246	0.011	0.267
Additional court staff needed	0.47647	0.315	0.130

Note: Each row provides a logistic regression of characteristics of courts and staff.

Source: Online survey.

Table 8: Average marginal effects of caseload on time to adjust to CT

Category	Coefficient	Standard error	p-value
Fewer than six months	-0.00028***	0.000	< 0.001
Six months to under one year	0.00003***	0.000	0.011
One to two years	0.00005***	0.000	< 0.001
Still adjusting to CT	0.00020***	0.000	< 0.001

Notes: Each row provides an ordered logistic regression of caseload on time to adjust.

Source: Online survey.

In order to improve CT implementation, several suggestions were given by respondents in the online survey (Figure 17). The top suggestion from 69 per cent of respondents was to improve court facilities and infrastructure including the creation of new courtrooms,

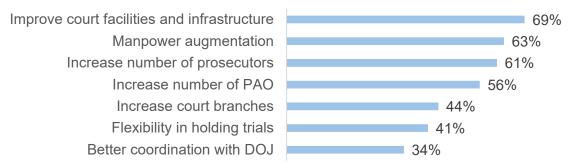
provision of computers and a stable internet connection. During our qualitative interviews, we spoke with judges and clerks of court who use courtrooms shared by multiple court branches. They highlighted that these circumstances make it impossible to conduct trials every day as mandated under CT.

The second priority issue – a lack of staff in the courts – was cited by 63 per cent of respondents. The need for at least one additional court staff member (e.g. a branch clerk of court, clerk, stenographer or sheriff) was reported by 89 per cent of respondents. In the last quarter of 2019, the SC Office of Administrative Services under the Office of the Court Administrator reported that 50 per cent of court positions (judges, clerks of court, and other court staff) were vacant.

The latter report on vacancies excludes those positions with successful selections but pending formal date of appointments. Aside from the unfilled positions, several respondents also pointed out that the number of positions lawfully permitted in the court is also insufficient. The estimated ratio of judges-to-population in the Philippines is 1:35,000, which is far from the ideal ratio of 1:20,000 (Pamintuan 2019).

As part of the judicial system, this problem is compounded by the inadequate number of prosecutors and public attorneys in the Department of Justice, with some positions yet to be filled. Prosecutors are responsible for multiple courts in addition to conducting preliminary investigations and administrative duties. Public attorneys estimate that their offices handle about 85 per cent of the cases in courts, which is particularly difficult in overloaded jurisdictions.

Figure 17: Suggestions to improve implementation



Source: Online survey.

5. Discussion

5.1 Findings

The study analysis indicates that CT is effective in increasing clearance rates of criminal cases, and to a lesser extent, the disposition rate. At the case level, CT has effectively reduced case duration and increased the proportion of cases disposed for criminal cases. The findings are consistent using two separate databases: eCourt and CTMS.

The clearance rate of criminal cases significantly increased by 35.4% and 35.8% over a 12-month period and 24-month period, respectively. However, there is no impact on the disposition rate of criminal cases, which suggests that the effect of CT is muted by the high volume of pending cases. CT had no effect on the clearance rate and disposition

rate of civil cases, showing that the effect is localized to criminal cases, and that there is no overall impact on case processing.

The average case duration was reduced by 54.9 days and 60.5 days based on eCourts and CTMS, respectively. Our findings support that of Kondylis and Stein (2018), wherein a simple procedural reform was found to reduce case duration by 46 days. We also found that CT has significantly increased the proportion of disposed cases within 330 days from receipt of case by 9 percentage points. This finding complements the decrease in case duration making courts resolve more cases over time.

Literature on measuring the effects of similar reforms on judicial performance align with these results. In a paper reviewing evidence of judicial reforms across countries, Botero and colleagues (2003) pointed out that incentive-oriented reforms, simplifying procedures, and creating more flexible procedures yield better results compared to reforms focused on either increasing resources or reducing access.

Chemin (2009b) estimated that judges who were trained in case management techniques were able to dispose more cases on average (ranging from 182 to 581 additional cases depending on the estimation technique used). In studying the effect of a reform in Senegal, Kondylis and Stein (2018) estimated that it reduced case duration by 46 days.

Using case duration instead of aggregated court- or judge-level indexes could provide more accurate information. However, this analysis yields to estimates biased towards cases that are resolved faster, as Kondylis and Stein (2018) cautioned. In order to minimize this, we expanded the time bounds in our study to 24 months (instead of the initial 12 months) before and after implementation.

In our discussions with the judges, branch clerks of courts, and lawyers, it seems that the rollout of CT has obliged all parties to comply with the prescribed periods set by the SC. In the early phase of CT implementation, there was confusion and skepticism about the guidelines; however, resistance dissipated over time as stakeholders began to understand the CT reform better.

The CT has also eased coordination of courts with other pillars of justice (e.g. prosecutors, the Public Attorney's Office and private lawyers), as they provide a unified set of guidelines that are easy to refer to and with which they all must comply. Respondents said that they needed to work harder because of the CT, and those in congested courts found it difficult to adjust. Courts with a high number of pending cases and high influx of cases have fuller court calendars, which means they have less room to accommodate the schedule changes that are required by the CT.

Some respondents reported that prior to implementation of the CT, their courts already adhered to existing provisions cited in the rules of court and other SC guidelines aligned with CT. However, respondents said that some courts had already started strict implementation of these provisions even while CT was being piloted in select courts. This may explain why two years prior to the CT taking effect in September 2017, some improvements could be seen, but they were much more pronounced with the CT in place. Despite these limitations that potentially dilute the effects of CT, we still found significant results.

The CT guidelines were effective in reducing durations at Phases 1, 2 and 3. A reduction of 50 days was seen in Phase 1, or the period between receipt of case in branch to pretrial. This may be due to the provision that pre-trial should be completed on the same day as the arraignment. The cooperation of other pillars of the justice system, such as public attorneys under the CT, allowed for better implementation of the provisions.

Phase 2 (pre-trial to trial) had the least reduction (although still significant), wherein the period from pre-trial to the calendar setting of the first trial was reduced by 22 days. Phase 3 (trial) had the highest duration of 57.1 days. This is consistent with qualitative findings, wherein respondents said CT had the most impact in reducing the duration of trial proper because trial dates are preset and cannot be moved.

We note that the mean duration of the first two phases is far from the prescribed timeframe. Factors beyond the direct control of the court may contribute to delays, including: (1) unavailability of expert witnesses such as the Philippine National Police, doctors or forensic examiners due to duties and work locations; (2) slow and unreliable issuance of hearing notices through parties done by mail post; (3) unavailability of prosecutors; (4) staffing constraints within the court such as overburdened stenographers, clerks or criminals-in-charge, and legal researchers whose work may affect the calendaring of cases; and (5) a lack of court rooms to conduct pre-trials and trials.

We find that the marginal effects of the CT on case duration, proportion of disposed cases, and clearance rates have been reduced by the surge in drug cases. This highlights that while the reform was effective in ensuring compliance, the courts struggled in keeping up performance with a larger caseload. This further highlights the primary need to address inadequacies in court staffing and infrastructure. However, the effect of the disposition rate was made insignificant by the surge in drug cases. One possible explanation may be that the inflow of cases is matched by the outflow, and that drug cases have shorter processing periods according to the CT.

Interestingly, the magnitude of the estimated impact appears to have narrowed over time (one year after versus two years after). This decline may be due to greater uniformity in the understanding, acceptance and ability of stakeholders to implement the CT reform guidelines through improved SC communication, transfer of learning from more advanced peers, and learning by doing among implementers. On the other hand, this may also be due to the courts reaching their saturation point in terms of caseload and influx of cases that they can feasibly accommodate given the unchanging staffing levels.

The study did not quantify the specific impact of mentioned factors and the extent to which they account for impact heterogeneity. Similarly, it did not estimate which features of the CT guidelines contributed to CT impact due to data and time constraints. It is important to note, though, that examining the abovementioned factors and quantifying their separate effects on the speed of case disposition would be valuable in understanding its drivers and impediments.

This understanding in turn can be helpful in prioritizing and formulating ideas on how to further speed up disposition of cases. The study also did not consider the other reforms implemented that could have possibly overlapped with CT; however, both quantitative

administrative data and qualitative data point to the relevance of the CT as a measure in improving court efficiency.

Finally, the study did not attempt to evaluate impacts of the CT on judicial quality for a number of reasons related to sensitivity of the issue and availability of data. This is a fruitful avenue for future research, where (following the literature) quality could be assessed in a number of ways, such as: (1) conducting surveys of litigants and the general public asking them to report their subjective perceptions of the judicial system; (2) linking case-level data to appeals court data to measure the proportions of appeals overturned (as in Kondylis and Stein [2018]); and (3) conducting lexical analysis of court judgments using natural language processing.

5.2 Challenges and lessons

Given the sensitive nature of the evaluation, it is important to consider the timeframe for approval processes in the research design and timeline. First, IPA initially encountered delays in obtaining the necessary court en banc approval to proceed with the research study due to changes in leadership within the SC. The resolution for IPA's evaluation research was proposed in 2018; it was issued by the court en banc on January 8, 2019, and approved by Chief Justice Lucas P Bersamin on January 29, (A.M. No. 16-03-05-SC). It was critical to stay engaged with many levels of the SC over the course of the project to maintain and sustain support and interest in the research.

Second, due to the shortened timeline of the project, we pursed research designs using SC administrative data. The collection, processing and cleaning of these data had unanticipated challenges. The data collected were sourced from several offices and databases within the SC, and often only one or two staff had the technical capability to assist with extraction requests.

In some offices, the data extraction was complex and required significant staff time to meet our requests. The data from each system was set up differently and not designed to be compatible, so the team had to find solutions for data cleaning and merging of the large datasets. Considerable time was spent cleaning and reconciling the collected data, creating consistent identifiers for each court branch and case, matching them with their respective geographic codes and socio-economic indicators, and merging separate datasets together for the analysis.

6. Conclusions and recommendations

6.1 Conclusions

We find that the CT can be an effective procedural reform that improves court performance by mandating the strict observance of existing provisions on trial implementation, streamlining of procedures, and integrating a roadmap towards case resolution.

Our quantitative analysis of administrative data revealed that 24 months after implementation, the CT effectively increases clearance rates of criminal cases by 35.8 per cent; increases the proportion of disposed cases within 330 days from receipt by 9.12 percentage points; and reduces mean case duration by 54.9 days in eCourt cases

and 60.5 days in CTMS cases. The CT significantly reduces phase duration from receipt of case in court to pre-trial by 49.8 days, from pre-trial to initial trial by 22.5 days, and trial duration by 57.1 days. There was no impact on the duration from submission of decision to promulgation.

The CT has no statistically or numerically significant effect on disposition rate, and the surge of drug cases decreases the magnitude of effects, underscoring the fact that the courts are constrained in fully implementing CT and reaping its benefits (due to a high caseload and influx of cases). The CT does not have an effect on disposition rates and clearance rates of civil cases, thereby indicating that CT did not cause any spillover benefits.

We conclude the CT is an effective measure in increasing the clearance rate for criminal cases. However, procedural reform can only do so much. Its benefits can be attenuated by the high volume of pending cases as well as other external factors, such as a surge in inflow of cases and, ultimately, by existing court capacity. It is important to consider and address various elements in court management such as personnel constraints, physical infrastructure and the creation of new court branches by law in order to optimize the impact of the CT on court performance. These fundamental constraints should be the subject of future studies to better understand the heterogeneity of the CT's effects.

6.2 Recommendations

The CTMS has been key in monitoring compliance of courts against the CT guidelines. Continuous monitoring of the courts, as well as improvements in the data system, are important to guide decision-making at the level of the courts and the Office of the Court Administrator. Further improvements in the CTMS can contribute to collecting and using high-quality data for monitoring and evaluation, leveraging on existing studies such as the CT event study. A learning agenda, facilitated by a monitoring and evaluation plan, can be integrated into the CTMS, enabling broader and sustained data use to guide implementation of the CT and other reform measures. The benefits of data generation can be only fully realized if it is consistently used to inform policy, implementation and learning.

While the CT has positive effects on case duration, there are factors beyond the direct control of the courts that may result in non-compliance with the CT timeframe. It is vital to enhance coordination with other pillars of the justice system (such as the Philippine National Police, the Department of Justice, the National Prosecution Service and the Public Attorney's Office) to further increase the CT's effects on criminal case duration. We note that the SC's orientation seminars at the onset of the CT's implementation, led by Chief Justice Peralta, contributed to a shared understanding of the CT roadmap across the justice system.

The SC began implementation of the CT guidelines for civil cases on 1 May 2020. To determine whether results hold for civil cases, we recommend a similar study to understand the effects on court efficiency outcome measures.

Online appendixes

Online appendix A: FGD guide

https://www.3ieimpact.org/sites/default/files/2020-12/PWP.03.SC_.IE_CTG-Online-appendix-A-FGD-Guide.pdf

Online appendix B: Online survey

https://www.3ieimpact.org/sites/default/files/2020-12/PWP.03.SC_.IE_CTG-Online-appendix-B-Online-Survey.pdf

Online appendix C: Pre-analysis plan

https://www.3ieimpact.org/sites/default/files/2020-12/PWP.03.SC_.IE_CTG-Online-appendix-C-Pre-Analysis-Plan.pdf

Online appendix D: Estimation models [-24, 24]

https://www.3ieimpact.org/sites/default/files/2020-12/PWP.03.SC_.IE_CTG-Online-appendix-D-Estimation-models-%5B-24%2C24%5D.pdf

Online appendix E: Estimation models [-12, 12]

https://www.3ieimpact.org/sites/default/files/2020-12/PWP.03.SC_.IE_CTG-Online-appendix-E-Estimation-models-%5B-12%2C12%5D.pdf

References

Aboal, D, Noya, N and Rius, A, 2014. Contract enforcement and investment: a systematic review of the evidence. *World Development,* 64, pp.322–38. Available at: doi: https://doi.org/10.1016/j.worlddev.2014.06.002.

Ahsan, R, 2013. Input tariffs, speed of contract enforcement, and the productivity of firms in India. *Journal of International Economics*, 90(1), pp.181–192.

Amirapu, A, 2017. Justice delayed is growth denied: the effect of slow courts on relationship-specific industries in India. School of Economics Discussion Papers, University of Kent. Available at: https://www.econstor.eu/handle/10419/175517.

Botero, JC, La Porta, R, López-de-Silanes, F, Shleifer, A and Volokh, A, 2003. Judicial reform. *The World Bank Research Observer*, 18(1), pp.61–88. Available at: doi: https://doi.org/10.1093/wbro/lkg005.

Bray, RL, Coviello, D, Ichino, A and Persico, N, 2016. Multitasking, multiarmed bandits, and the Italian judiciary. *Manufacturing & Service Operations Management*, *18*(4), pp.545–558.

Chakraborty, P, 2016. Judicial quality and regional firm performance: the case of Indian states. *Journal of Comparative Economics*, 44(4), pp.902–918. Available at: doi: https://doi.org/10.1016/j.jce.2016.07.001.

Chang, T and Schoar, A, 2006. Judge specific differences in chapter 11 and firm outcomes. AFA 2007 Chicago Meetings Paper. Available at: doi: http://dx.doi.org/10.2139/ssrn.890699

Chemin, M, 2009a. Do judiciaries matter for development? Evidence from India. *Journal of Comparative Economics*, 37(2), pp.230–250.

Chemin, M, 2009b. The impact of the judiciary on entrepreneurship: evaluation of Pakistan's 'access to justice programme'. *Journal of Public Economics*, 93(1–2), pp.114–125. Available at: doi: https://doi.org/10.1016/j.jpubeco.2008.05.005

Coviello, D, Moretti, L Spagnolo, G and Valbonesi, P, 2016. *Court efficiency and procurement performance*. CEPR Discussion Papers 11426.

Djankov, S, La Porta, R, Lopez-de-Silanes, F and Shleifer, A, 2003. Courts. *The Quarterly Journal of Economics*, 118(2), pp.453–517.

Jappelli, T, Pagano, M and Bianco, M, 2005. Courts and banks: effects of judicial enforcement on credit markets. *Journal of Money, Credit and Banking, 37*(2), pp.223–244.

Köhling, W, 2002. *The economic consequences of a weak judiciary: insights from India* (Tech. Rep.). University Library of Munich, Germany.

Kondylis, F and Stein, M, 2018. The Speed of Justice. WPS 8372. *Policy Research Working Paper*. Washington, DC. Available at: http://documents.worldbank.org/curated/en/455021521720861143/The-speed-of-justice.

Laeven, L and Majnoni, G, 2005. Does judicial efficiency lower the cost of credit? *Journal of Banking & Finance, Elsevier, 29*(7), pp.1791–1812.

Laeven, L and Woodruff, C, 2007. The quality of the legal system, firm ownership, and firm size. *The Review of Economics and Statistics*, 89(4), pp.601–614.

Lichand G, Soares R, 2014. Access to Justice and entrepreneurship: evidence from Brazil's special civil tribunals. *Journal of Law and Economics*, 57(2).

National Economic and Development Authority (NEDA), 2017. *Philippine Development Plan 2017-2022*. Government of the Philippines. Available at: http://pdp.neda.gov.ph/wp-content/uploads/2017/01/PDP-2017-2022.pdf.

Pamintuan, A, 2019. 'Judicial excellence'. Philstar, [online] (Last updated 12:00 a.m. on 11 November 2019). Available at: https://www.philstar.com/opinion/2019/11/11/1967682/judicial-excellence.

Pande, R and Udry, C, 2005, Institutions and development: a view from below. Yale University Economic Growth Center Discussion Paper No. 928.

Ponticelli, J and Alencar, L, 2016. Court enforcement, bank loans and firm investment: evidence from a bankruptcy reform in Brazil. *Quarterly Journal of Economics*, 131(3), pp.1365–1413.

Powell, A, Cristini, M and Moya, R, 2001. The importance of an effective legal system for credit markets: the case of Argentina. IDB Working Paper No. 142.

Rodrik, D, 2000. Institutions for high-quality growth: what they are and how to acquire them. *Studies in Comparative International Development*, *35*(3), pp.3–31.

Rodrik, D, 2005. Growth Strategies. In: Aghio, P and Durlauf, S, eds., 2005. *Handbook of Economic Growth*. 1st ed. North Holland: Elsevier, pp.967–1014.

Sadka, J, Seira, E and Woodruff, C, 2018. Information and bargaining through agents: experimental evidence from Mexico's labor courts. NBER Working Paper No. 25137.

Supreme Court of the Philippines, 2016. *Revised Guidelines for Continuous Trial of Criminal Cases: A.M. No. 15-06-10-SC*. The Supreme Court of the Philippines. Available at: http://sc.judiciary.gov.ph/1480.

Visaria, S, 2009. Legal reform and loan repayment: the microeconomic impact of debt recovery tribunals in India. *American Economic Journal: Applied Economics*, 1(3): pp.59–81.

World Bank, 2012. *Initiatives in justice reform 1992–2012*. Washington, DC: World Bank. Available at:

http://documents.worldbank.org/curated/en/575811468175154113/initiatives-in-justice-reform-1992-2012.

World Bank, 2017. Doing business 2017: equal opportunity for all. Washington, DC: World Bank. Available at: doi: https://doi.org/10.1596/978-1-4648-0948-4.

World Justice Project, 2020. The world justice project rule of law index® 2020. Available at: https://worldjusticeproject.org/sites/default/files/documents/WJP-ROLI-2020-Online_0.pdf.

Other publications in the 3ie Impact Evaluation Report Series

The following reports are available from http://3ieimpact.org/evidence-hub/publications/impact-evaluations

Impacts of the Stimulate, Appreciate, Learn and Transfer community engagement approach to increase immunization coverage in Assam, India, 3ie Impact Evaluation Report 130. Pramanik, S, Ghosh, A, Goswami, A, Das, T, Albert, S, Forth, P and Nanda, R, 2020.

Impacts of a novel mHealth platform to track maternal and child health in Udaipur, India, 3ie Impact Evaluation Report 129. Nagar, R, Ambiya, MS, Singh, P, Abdullah, H, Banshiwal, V, Stone, L, Manjanatha, D, Venkat, P, Purawat, D, Supatkar, V, Singh, A, Dalal, S and Shahnawaz, M, 2020.

Kochar, A, Barooah, B, Jain, C, Singh, G, Closepet, N, Narayanan, R, Sarkar, R and Shah, R, 2020. *Impact evaluation of the National Rural Livelihoods Project*, 3ie Impact Evaluation Report 128.

Impacts of engaging communities through traditional and religious leaders on vaccination coverage in Cross River State, Nigeria, 3ie Impact Evaluation Report 127. Oyo-Ita, A, Bosch-Capblanch, X, Ross, A, Hanlon, P, Oku, A, Esu, E, Ameh, S, Oduwole, B, Arikpo, D and Meremikwu, M, 2020.

Evaluating the impact of interventions to improve full immunisation rates in Haryana, *India,* 3ie Impact Evaluation Report 126. Banerjee, A, Chandrasekhar, A, Duflo, E, Dalpath, S, Floretta, J, Jackson, M, Kannan, H, Schrimpf, A and Shrestha, M, 2020.

Impacts of community-led video education to increase vaccination coverage in Uttar Pradesh, India, 3ie Impact Evaluation Report 125. Gurley, N, Shearer, J, Srivastava, Y, Mahapatra, S and Desmond, M, 2020.

Impact of creative capacity building of local innovators and communities on income, welfare and attitudes in Uganda, 3ie Impact Evaluation Report 124. Nkonya, E, Bashaasha, B, Kato, E, Bagamba, F and Danet, M, 2020.

Impact evaluation of the integrated soil fertility management dissemination programme in Burkina Faso, 3ie Impact Evaluation Report 123. A, Frölich, M, Koussoubé, E, Maïga, E and Varejkova, T, 2020.

The effect of demonstration plots and the warehouse receipt system on integrated soil fertility management adoption, yield and income of smallholder farmers: a study from Malawi's Anchor Farms, 3ie Impact Evaluation Report 122. Michelson, H, Barrett, C, Palm, C, Maertens, A, Mhango, W and Chirwa, E, 2020.

Impacts of linking savings group to formal financial service providers and strengthening their internal group insurance mechanism in Zambia, 3ie Impact Evaluation Report 121. Frölich, M and Nguyen, PL, 2020.

Promoting latrine use in rural Karnataka using the risks, attitudes, norms, abilities and self-regulation (RANAS) approach, 3ie Impact Evaluation Report 120. Friedrich, M, Balasundaram, T, Muralidharan, A, Raman, VR and Mosler, H-J, 2020.

Impacts of low-cost interventions to improve latrine use and safe disposal of child faeces in rural Odisha, India, 3ie Impact Evaluation Report 119. Caruso, BA, Sclar, GD, Routray, P, Nagel C, Majorin, F, Sola, S, Koehne, W, DeShay, R, Udaipuria, S, Williams, R and Clasen, T, 2020.

Improving households' attitudes and behaviours to increase toilet use (HABIT) in Bihar, India, 3ie Impact Evaluation Report 118. Viswanathan, S, Saith, R, Chakraborty, A, Purty, N, Malhotra, N, Singh, P, Mitra, P, Padmanabhan, V, Datta, S, Harris, J, Gidwani, S, Williams, R, Florence, E and Daniel, S, 2020.

Rebuilding the social compact: urban service delivery and property taxes in Pakistan, 3ie Impact Evaluation Report 117. Khwaja, AI, Haq, O, Khan, AQ, Olken, B and Shaukat, M, 2020.

Rural institutional innovation: can village courts in Bangladesh accelerate access to justice and improve socio-economic outcomes? 3ie Impact Evaluation Report 116. Mattsson, M and Mobarak, AM, 2020.

Using big data to evaluate the impacts of transportation infrastructure investment: the case of subway systems in Beijing, 3ie Impact Evaluation Report 115. Li, S and Liu, Y, 2020.

Community toilet use in Indian slums: willingness-to-pay and the role of informational and supply side constraints, 3ie Impact Evaluation Report 113. Armand, A, Augsburg, B, Bancalari A and Trivedi B, 2020.

Impacts, maintenance and sustainability of irrigation in Rwanda, 3ie Impact Evaluation Report 112. Byiringo, E, Jones M, Kondylis F, Loeser J, Magruder, J and Ndahimana, C, 2020.

Continuous Emissions Monitoring Systems (CEMS) in India, 3ie Impact Evaluation Report 111. Greenstone, M, Pande, R, Ryan, N and Sudarshan A, 2020.

Evaluating the impacts of the Dar es Salaam Bus Rapid Transit System, 3ie Impact Evaluation Report 110. Morten, M, Bryan, G, Siddiqi, B, Balboni, C, 2020.

Access to safe drinking water: experimental evidence from new water sources in Bangladesh, 3ie Impact Evaluation Report 109. Cocciolo, S, Ghisolfi, S, Habib, A, Rashid, SMA and Tompsett, A, 2020.

Impact of alternate wetting and drying on farm incomes and water savings in Bangladesh, 3ie Impact Evaluation Report 108. Chakravorty, U, Dar, MH, Emerick, K, 2020.

The effects of vouchers for essential household items on child health, mental health, resilience and social cohesion among internally displaced persons in the Democratic Republic of Congo, 3ie Impact Evaluation Report 107. Quattrochi, J, Bisimwa, G, Thompson, T, van der Windt, P and Voors, M, 2020.

Measuring impacts of conservation interventions on human well-being and the environment in Northern Cambodia, 3ie Impact Evaluation Report 106. Clements, T, Neang, M, Milner-Gulland, EJ and Travers, H, 2020.

The 5 Star Toilet Campaign: improving toilet use in rural Gujarat, 3ie Impact Evaluation Report 105. Chauhan, K, Schmidt, WP, Aunger, R, Gopalan, B, Saxena, D, Yashobant, S, Patwardhan, V, Bhavsar, P, Mavalankar, D and Curtis, V, 2020.

How education about maternal health risk can change the gender gap in the demand for family planning in Zambia, 3ie Impact Evaluation Report 104. Ashraf, N, Field, E, Voena, A and Ziparo, R, 2019.

In search of the holy grail: can unconditional cash transfers graduate households out of poverty in Zambia?, Impact Evaluation Report 103. Handa, S, Tembo, G, Natali, L, Angeles, G and Spektor, G, 2019.

Increasing HIV self-testing and linkage to care for partners of women in antenatal care in Uganda, Impact Evaluation Report 102. Wanyenze, R, Buregyeya, E, Matovu, J, Kisa, R, Kagaayi, J, Vrana-Diaz, C, Malek, A, Musoke, W, Chemusto, H, Mukama, S and Korte, J, 2019.

Improving the quality of care for children with acute malnutrition in Uganda, 3ie Impact Evaluation Report 101. Marzia, L, Wanzira, H, Lochoro, P and Putoto, G, 2019.

Impacts of increasing community resilience through humanitarian aid in Pakistan, 3ie Impact Evaluation Report 100. Avdeenko, A and Frölich, M, 2019.

Impacts of community monitoring of socio-environmental liabilities in the Ecuadorian and Peruvian Amazon, 3ie Impact Evaluation Report 99. Pellegrini, L, 2019.

Increasing HIV testing demand among Kenyan truck drivers and female sex workers, 3ie Impact Evaluation Report 98. Kelvin, E, George, G, Mwai, E, Kinyanjui, S, Inoti, S, Chetty, T, Strauss, M, Romo, M, Oruko, F, Odhiambo J, Nyaga, E, Mantell, J and Govender, K, 2019.

Impacts of community stakeholder engagement interventions in Ugandan oil extractives, 3ie Impact Evaluation Report 97. Parker, R, Coleman, E, Manyindo, J, Schultz, B and Mukuru, E, 2019.

The impacts of formal registration of businesses in Malawi, 3ie Impact Evaluation Report 96. Campos, F, Goldstein, M and McKenzie, D, 2019.

Unpacking the determinants of entrepreneurship development and economic empowerment for women in Kenya, 3ie Impact Evaluation Report 95. McKenzie, D, Puerto, S and Odhiambo, F, 2019.

Impacts of key provisions in Ghana's Petroleum Revenue Management Act, 3ie Impact Evaluation Report 94. Edjekumhene, I, Voors, M, Lujala, P, Brunnschweiler, C, Owusu, CK and Nyamekye, A, 2019.

Using information to break the political resource curse in natural gas management in Mozambique, 3ie Impact Evaluation Report 93. Armand, A, Costa, AI, Coutts, A, Vicente, P and Vilela, I, 2019.

Harnessing transparency initiatives to improve India's environmental clearance process for the mineral mining sector, 3ie Impact Evaluation Report 92. Pande, R and Sudarshan, A, 2019.

Impacts of removing user fees for maternal health services on universal health coverage in Kenya, 3ie Impact Evaluation Report 91. Abuya, T, Dennis, M, Matanda, D, Obare, F and Bellows, B, 2018.

Impact of voice reminders to reinforce harvest aggregation services training for farmers in Mali, 3ie Impact Evaluation Report 90. Osei, RD, Dzanku, FM, Osei-Akoto, I, Asante, F, Hodey, LS, Adu, PN, Adu-Ababio, K and Coulibaly, M, 2018.

Impacts of Breakthrough's school-based gender attitude change programme in Haryana, India, 3ie Impact Evaluation Report 89. Jayachandran, S, Jain, T and Dhar, D, 2018.

Hotspot interventions at scale: the effects of policing and city services on crime in Bogotá, Colombia, 3ie Impact Evaluation Report 88. Blattman, C, Green, D, Ortega, D and Tobón, S, 2018.

Impact evaluation of the Philippine Special Program for Employment of Students, 3ie Impact Evaluation Report 87. Beam, E, Linden, L, Quimbo, S and Richmond, H, 2018.

Community-based distribution of oral HIV self-testing kits: experimental evidence from Zambia, 3ie Impact Evaluation Report 86. Hensen, B, Ayles, H, Mulubwa, C, Floyd, S, Schaap, A, Chiti, B, Phiri, M, Mwenge, L, Simwinga, M, Fidler S, Hayes, R, Bond, V and Mwinga, A, 2018.

Evaluating the economic impacts of rural banking: experimental evidence from southern India, 3ie Impact Evaluation Report 85. Field, E and Pande, R, 2018.

Direct provision versus facility collection of HIV tests: impacts of self-testing among female sex workers in Uganda. 3ie Impact Evaluation Report 84. Ortblad, K, Musoke, DK, Ngabirano, T, Oldenburg, C and Bärnighausen, T, 2018.

Increasing female sex worker HIV testing: effects of peer educators and HIV self-tests in Zambia, 3ie Impact Evaluation Report 83. Chanda, MM, Ortblad, KF, Mwale, M, Chongo, S, Kanchele, C, Kamungoma, N, Fullem, A, Bärnighausen, T and Oldenburg, CE, 2018.

Community delivery of antiretroviral drugs: a non-inferiority matched-pair pragmatic cluster-randomized trial in Dar es Salaam, Tanzania, 3ie Impact Evaluation Report 82. Francis, JM, Geldsetzer, P, Asmus, G, Ulenga, N, Ambikapathi, R, Sando, D, Fawzi, W and Bärnighausen, T, 2018.

Nourishing the future: targeting infants and their caregivers to reduce undernutrition in rural China, 3ie Impact Evaluation Report 81. Cai, J, Luo, R, Li, H, Lien, J, Medina, A, Zhou, H and Zhang, L, 2018.

Impacts of the World Food Programme's interventions to treat malnutrition in Niger. 3ie Impact Evaluation Report 80. Brück, T, Ferguson, NTN, Ouédraogo, J and Ziegelhöfer, Z, 2018.

Impact evaluation of the World Food Programme's moderate acute malnutrition treatment and prevention programmes in Sudan. 3ie Impact Evaluation Report 79. Guevarra, E, Mandalazi, E, Balegamire, S, Albrektsen, K, Sadler, K, Abdelsalam, K, Urrea, G and Alawad, S, 2018.

Impact evaluation of WFP's programs targeting moderate acute malnutrition in humanitarian situations in Chad. 3ie Impact Evaluation Report 78. Saboya, M, Rudiger, J, Frize, J, Ruegenberg, D, Rodríguez Seco, A and McMillon, C, 2018.

Improving midday meal delivery and encouraging micronutrient fortification among children in India, 3ie Impact Evaluation Report 77. Shastry, GK, Berry, J, Mukherjee, P, Mehta, S and Ruebeck, H, 2018.

Evaluation of infant development centres: an early years intervention in Colombia, 3ie Impact Evaluation Report 76. Andrew, A, Attanasio, O, Bernal, R, Cordona, L, Krutikova, S, Heredia, DM, Medina, C, Peña, X, Rubio-Codina, M and Vera-Hernandez, M, 2018.

Can the wounds of war be healed? Experimental evidence on reconciliation in Sierra Leone. 3ie Impact Evaluation Report 75. Cilliers, J, Dube, O and Siddiqi, B, 2018.

Impact evaluation of the Menabe and Melaky development programme in Madagascar, 3ie Impact Evaluation Report 74. Ring, H, Morey, M, Kavanagh, E, Kamto, K, McCarthy, N, Brubaker, J and Rakotondrafara, C, 2018.

Impact evaluation of the Smallholder Dairy Commercialization Programme in Kenya, 3ie Impact Evaluation Report 73. Bonilla, J, McCarthy, N, Mugatha, S, Rai, N, Coombes, A and Brubaker, J, 2018.

Impact and adoption of risk-reducing drought-tolerant rice in India, 3ie Impact Evaluation Report 72. Yamano, T, Dar, MH, Panda, A, Gupta, I, Malabayabas, ML and Kelly, E, 2018.

Poverty and empowerment impacts of the Bihar Rural Livelihoods Project in India, 3ie Impact Evaluation Report 71. Hoffmann, V, Rao, V, Datta, U, Sanyal, P, Surendra, V and Majumdar, S 2018.

How should Tanzania use its natural gas? Citizens' views from a nationwide Deliberative Poll, 3ie Impact Evaluation Report 70. Birdsall, N, Fishkin, J, Haqqi, F, Kinyondo, A, Moyo, M, Richmond, J and Sandefur, J, 2018.

Impact evaluation of the conditional cash transfer program for secondary school attendance in Macedonia, 3ie Impact Evaluation Report 69. Armand, A and Carneiro, P, 2018.

Age at marriage, women's education, and mother and child outcomes in Bangladesh, 3ie Impact Evaluation Report 68. Field, E, Glennerster, R, Nazneen, S, Pimkina, S, Sen, I and Buchmann, N, 2018.

Evaluating agricultural information dissemination in western Kenya, 3ie Impact Evaluation Report 67. Fabregas, R, Kremer, M, Robinson, J and Schilbach, F, 2017.

General equilibrium impact assessment of the Productive Safety Net Program in Ethiopia, 3ie Impact Evaluation Report 66. Filipski, M, Taylor, JE, Abegaz, GA, Ferede, T, Taffesse, AS and Diao, X, 2017.

Impact of the Uddeepan programme on child health and nutrition in India, 3ie Impact Evaluation Report 65. Kochar, A, Sharma, A and Sharma, A, 2017.

Evaluating oral HIV self-testing to increase HIV testing uptake among truck drivers in Kenya, 3ie Impact Evaluation Report 64. Kelvin, EA, Mwai, E, Romo, ML, George, G, Govender, K, Mantell, JE, Strauss, M, Nyaga, EN and Odhiambo, JO, 2017.

Integration of EPI and paediatric HIV services for improved ART initiation in Zimbabwe, 3ie Impact Evaluation Report 63. Prescott, M, Boeke, C, Gotora, T, Mafaune, HW, Motsi, W, Graves, J, Mangwiro, A and McCarthy, E, 2017.

Increasing male partner HIV testing using self-test kits in Kenya, 3ie Impact Evaluation Report 62. Gichangi, A, Korte, JE, Wambua, J, Vrana, C and Stevens, D, 2017.

Evaluating the impact of community health worker integration into prevention of mother-to-child transmission of HIV services in Tanzania, 3ie Impact Evaluation Report 61. Nance, N, McCoy, S, Ngilangwa, D, Masanja, J, Njau, P and Noronha, R, 2017.

Using HIV self-testing to promote male partner and couples testing in Kenya, 3ie Impact Evaluation Report 60. Thirumurthy, H, Omanga, E, Obonyo, B, Masters, S and Agot, K, 2017.

Increasing male partner HIV self-testing at antenatal care clinics in Kenya, 3ie Impact Evaluation Report 59. Gichangi, A, Korte, JE, Wambua, J, Vrana, C and Stevens, D, 2017.

Impact of free availability of public childcare on labour supply and child development in Brazil, 3ie Impact Evaluation Report 58. Attanasio, O, Paes de Barros, R, Carneiro, P, Evans, D, Lima, L, Olinto, P and Schady, N, 2017.

Estimating the effects of a low-cost early stimulation and parenting education programme in Mexico, 3ie Impact Evaluation Report 57. Cardenas, S, Evans, D and Holland, P, 2017.

The Better Obstetrics in Rural Nigeria study: an impact evaluation of the Nigerian Midwives Service Scheme, 3ie Impact Evaluation Report 56. Okeke, E, Glick, P, Abubakar, IS, Chari, AV, Pitchforth, E, Exley, J, Bashir, U, Setodji, C, Gu, K and Onwujekwe, O, 2017.

The Productive Safety Net Programme in Ethiopia: impacts on children's schooling, labour and nutritional status, 3ie Impact Evaluation Report 55. Berhane, G, Hoddinott, J, Kumar, N and Margolies, A, 2016.

The impact of youth skills training on the financial behaviour, employability and educational choice in Morocco, 3ie Impact Evaluation Report 54. Bausch, J, Dyer, P, Gardiner, D, Kluve, J and Mizrokhi, E, 2016.

Using advertisements to create demand for voluntary medical male circumcision in South Africa, 3ie Impact Evaluation Report 53. Frade, S, Friedman, W, Rech, D and Wilson, N, 2016.

The use of peer referral incentives to increase demand for voluntary medical male circumcision in Zambia, 3ie Impact Evaluation Report 52. Zanolini, A, Bolton, C, Lyabola, LL, Phiri, G, Samona, A, Kaonga, A and Harsha Thirumurthy, H, 2016.

Using smartphone raffles to increase demand for voluntary medical male circumcision in *Tanzania*, 3ie Impact Evaluation Report 51. Mahler, H and Bazant, E, 2016.

Voluntary medical male circumcision uptake through soccer in Zimbabwe, 3ie Impact Evaluation Report 50. DeCelles, J, Kaufman, Z, Bhauti, K, Hershow, R, Weiss, H, Chaibva, C, Moyo, N, Braunschweig, E, Mantula, F, Hatzold, K and Ross, D, 2016.

Measuring the impact of SMS-based interventions on uptake of voluntary medical male circumcision in Zambia, 3ie Impact Evaluation Report 49. Leiby, K, Connor, A, Tsague, L, Sapele, C, Koanga, A, Kakaire, J and Wang, P, 2016.

Assessing the impact of delivering messages through intimate partners to create demand for voluntary medical male circumcision in Uganda, 3ie Impact Evaluation Report 48. Semeere, AS, Bbaale, DS, Castelnuovo, B, Kiragga, A, Kigozi, J, Muganzi, A, Kambugu, A and Coutinho, AG, 2016.

Optimising the use of economic interventions to increase demand for voluntary medical male circumcision in Kenya, 3ie Impact Evaluation Report 47. Thirumurthy, H, Omanga, E, Rao, SO, Murray, K, Masters, S and Agot, K, 2016.

The impact of earned and windfall cash transfers on livelihoods and conservation in Sierra Leone, 3ie Impact Evaluation Report 46. Bulte, E, Conteh, B, Kontoleon, A, List, J, Mokuwa, E, Richards, P, Turley, T and Voors, M, 2016.

Property tax experiment in Pakistan: Incentivising tax collection and improving performance, 3ie Impact Evaluation Report 45. Khan, A, Khwaja, A and Olken, B, 2016.

Impact of mobile message reminders on tuberculosis treatment outcomes in Pakistan, 3ie Impact Evaluation Report 44. Mohammed, S, Glennerster, R and Khan, A, 2016.

Making networks work for policy: Evidence from agricultural technology adoption in Malawi, 3ie Impact Evaluation Report 43. Beaman, L, BenYishay, A, Fatch, P, Magruder, J and Mobarak, AM, 2016.

Estimating the impact and cost-effectiveness of expanding access to secondary education in Ghana, 3ie Impact Evaluation Report 42. Dupas, P, Duflo, E and Kremer, M, 2016.

Evaluating the effectiveness of computers as tutors in China, 3ie Impact Evaluation Report 41. Mo, D, Bai, Y, Boswell, M and Rozelle, S, 2016.

Micro entrepreneurship support programme in Chile, 3ie Impact Evaluation Report 40. Martínez, CA, Puentes, EE and Ruiz-Tagle, JV, 2016.

Thirty-five years later: evaluating the impacts of a child health and family planning programme in Bangladesh, 3ie Impact Evaluation Report 39. Barham, T, Kuhn, R, Menken, J and Razzaque, A, 2016.

Effectiveness of a rural sanitation programme on diarrhoea, soil-transmitted helminth infection and malnutrition in India, 3ie Impact Evaluation Report 38. Clasen, T, Boisson, S, Routray, P, Torondel, B, Bell, M, Cumming, O, Ensink, J, Freeman, M and Jenkins, M, 2016.

Evaluating the impact of vocational education vouchers on out-of-school youth in Kenya, 3ie Impact Evaluation Report 37. Hicks, JH, Kremer, M, Mbiti, I and Miguel, E, 2016.

Removing barriers to higher education in Chile: evaluation of peer effects and scholarships for test preparation, 3ie Impact Evaluation Report 36. Banerjee, A, Duflo E and Gallego, F, 2016.

Sustainability of impact: dimensions of decline and persistence in adopting a biofortified crop in Uganda, 3ie Impact Evaluation Report 35. McNiven, S, Gilligan, DO and Hotz, C 2016.

A triple win? The impact of Tanzania's Joint Forest Management programme on livelihoods, governance and forests, 3ie Impact Evaluation Report 34. Persha, L and Meshack, C, 2016.

The effect of conditional transfers on intimate partner violence: evidence from Northern Ecuador, 3ie Impact Evaluation Report 33. Hidrobo, M, Peterman, A and Heise, L, 2016.

The effect of transfers and preschool on children's cognitive development in Uganda, 3ie Impact Evaluation Report 32. Gillian, DO and Roy, S, 2016.

Can egovernance reduce capture of public programmes? Experimental evidence from *India's employment guarantee,* 3ie Impact Evaluation Report 31. Banerjee, A, Duflo, E, Imbert, C, Mathew, S and Pande, R, 2015.

Improving maternal and child health in India: evaluating demand and supply strategies, 3ie Impact Evaluation Report 30. Mohanan, M, Miller, G, Forgia, GL, Shekhar, S and Singh, K, 2016.

Smallholder access to weather securities in India: demand and impact on production decisions, 3ie Impact Evaluation Report 28. Ceballos, F, Manuel, I, Robles, M and Butler, A, 2015.

What happens once the intervention ends? The medium-term impacts of a cash transfer programme in Malawi, 3ie Impact Evaluation Report 27. Baird, S, Chirwa, E, McIntosh, C and Özler, B, 2015.

Validation of hearing screening procedures in Ecuadorian schools, 3ie Impact Evaluation Report 26. Muñoz, K, White, K, Callow-Heusser, C and Ortiz, E, 2015.

Assessing the impact of farmer field schools on fertilizer use in China, 3ie Impact Evaluation Report 25. Burger, N, Fu, M, Gu, K, Jia, X, Kumar, KB and Mingliang, G, 2015.

The SASA! study: a cluster randomised trial to assess the impact of a violence and HIV prevention programme in Kampala, Uganda, 3ie Impact Evaluation Report 24. Watts, C, Devries, K, Kiss, L, Abramsky, T, Kyegombe, N and Michau, L, 2014.

Enhancing food production and food security through improved inputs: an evaluation of Tanzania's National Agricultural Input Voucher Scheme with a focus on gender impacts, 3ie Impact Evaluation Report 23. Gine, X, Patel, S, Cuellar-Martinez, C, McCoy, S and Lauren, R, 2015.

A wide angle view of learning: evaluation of the CCE and LEP programmes in Haryana, 3ie Impact Evaluation Report 22. Duflo, E, Berry, J, Mukerji, S and Shotland, M, 2015.

Shelter from the storm: upgrading housing infrastructure in Latin American slums, 3ie Impact Evaluation Report 21. Galiani, S, Gertler, P, Cooper, R, Martinez, S, Ross, A and Undurraga, R, 2015.

Environmental and socioeconomic impacts of Mexico's payments for ecosystem services programme, 3ie Impact Evaluation Report 20. Alix-Garcia, J, Aronson, G, Radeloff, V, Ramirez-Reyes, C, Shapiro, E, Sims, K and Yañez-Pagans, P, 2015.

A randomised evaluation of the effects of an agricultural insurance programme on rural households' behaviour: evidence from China, 3ie Impact Evaluation Report 19. Cai, J, de Janvry, A and Sadoulet, E, 2014.

Impact of malaria control and enhanced literacy instruction on educational outcomes among school children in Kenya: a multi-sectoral, prospective, randomised evaluation, 3ie Impact Evaluation Report 18. Brooker, S and Halliday, K, 2015.

Assessing long-term impacts of conditional cash transfers on children and young adults in rural Nicaragua, 3ie Impact Evaluation Report 17. Barham, T, Macours, K, Maluccio, JA, Regalia, F, Aguilera, V and Moncada, ME, 2014.

The impact of mother literacy and participation programmes on child learning: evidence from a randomised evaluation in India, 3ie Impact Evaluation Report 16. Banerji, R, Berry, J and Shortland, M, 2014.

A youth wage subsidy experiment for South Africa, 3ie Impact Evaluation Report 15. Levinsohn, J, Rankin, N, Roberts, G and Schöer, V, 2014.

Providing collateral and improving product market access for smallholder farmers: a randomised evaluation of inventory credit in Sierra Leone, 3ie Impact Evaluation Report 14. Casaburi, L, Glennerster, R, Suri, T and Kamara, S, 2014.

Scaling up male circumcision service provision: results from a randomised evaluation in *Malawi*, 3ie Impact Evaluation Report 13. Thornton, R, Chinkhumba, J, Godlonton, S and Pierotti, R, 2014.

Targeting the poor: evidence from a field experiment in Indonesia, 3ie Impact Evaluation Report 12. Atlas, V, Banerjee, A, Hanna, R, Olken, B, Wai-poi, M and Purnamasari, R, 2014.

An impact evaluation of information disclosure on elected representatives' performance: evidence from rural and urban India, 3ie Impact Evaluation Report 11. Banerjee, A, Duflo, E, Imbert, C, Pande, R, Walton, M and Mahapatra, B, 2014.

Truth-telling by third-party audits and the response of polluting firms: Experimental evidence from India, 3ie Impact Evaluation Report 10. Duflo, E, Greenstone, M, Pande, R and Ryan, N, 2013.

No margin, no mission? Evaluating the role of incentives in the distribution of public goods in Zambia, 3ie Impact Evaluation Report 9. Ashraf, N, Bandiera, O and Jack, K, 2013.

Paying for performance in China's battle against anaemia, 3ie Impact Evaluation Report 8. Zhang, L, Rozelle, S and Shi, Y, 2013.

Social and economic impacts of Tuungane: final report on the effects of a community-driven reconstruction programme in the Democratic Republic of Congo, 3ie Impact Evaluation Report 7. Humphreys, M, Sanchez de la Sierra, R and van der Windt, P, 2013.

The impact of daycare on maternal labour supply and child development in Mexico, 3ie Impact Evaluation Report 6. Angeles, G, Gadsden, P, Galiani, S, Gertler, P, Herrera, A, Kariger, P and Seira, E, 2014.

Impact evaluation of the non-contributory social pension programme 70 y más in Mexico, 3ie Impact Evaluation Report 5. Rodríguez, A, Espinoza, B, Tamayo, K, Pereda, P, Góngora, V, Tagliaferro, G and Solís, M, 2014.

Does marginal cost pricing of electricity affect groundwater pumping behaviour of farmers? Evidence from India, 3ie Impact Evaluation Report 4. Meenakshi, JV, Banerji, A, Mukherji, A and Gupta, A, 2013.

The GoBifo project evaluation report: Assessing the impacts of community-driven development in Sierra Leone, 3ie Impact Evaluation Report 3. Casey, K, Glennerster, R and Miguel, E, 2013.

A rapid assessment randomised-controlled trial of improved cookstoves in rural Ghana, 3ie Impact Evaluation Report 2. Burwen, J and Levine, DI, 2012.

The promise of preschool in Africa: A randomised impact evaluation of early childhood development in rural Mozambique, 3ie Impact Evaluation Report 1. Martinez, S, Naudeau, S and Pereira, V, 2012.

The Philippine judiciary has long faced the challenge of court congestion, leading to a high volume of pending cases and delays in case disposition, denying citizens the ability to access swift and fair justice. Since improvements in technology and case management practices can improve court efficiency and reduce congestion, the Supreme Court of the Philippines introduced a key reform that aims to expedite trials and resolutions by imposing timelines on existing stages of court action and introducing best practices for speedy disposition. Authors of this report assess the impact of the key procedural reform, the Revised Guidelines for Continuous Trial of Criminal Cases, on court efficiency in the Philippines.

Impact Evaluation Series

International Initiative for Impact Evaluation 215-216, Rectangle One D-4, Saket District Centre New Delhi – 110017 India

3ie@3ieimpact.org Tel: +91 11 4989 4444



