

The background features a faint, light blue outline of a pair of scales of justice. Overlaid on this are two stylized lines: a yellow line that starts at the top, moves right, then down, then right, then down, and finally right; and a light blue line that starts on the left, moves right, then down, then right, and finally down. Both lines end in small circular dots.

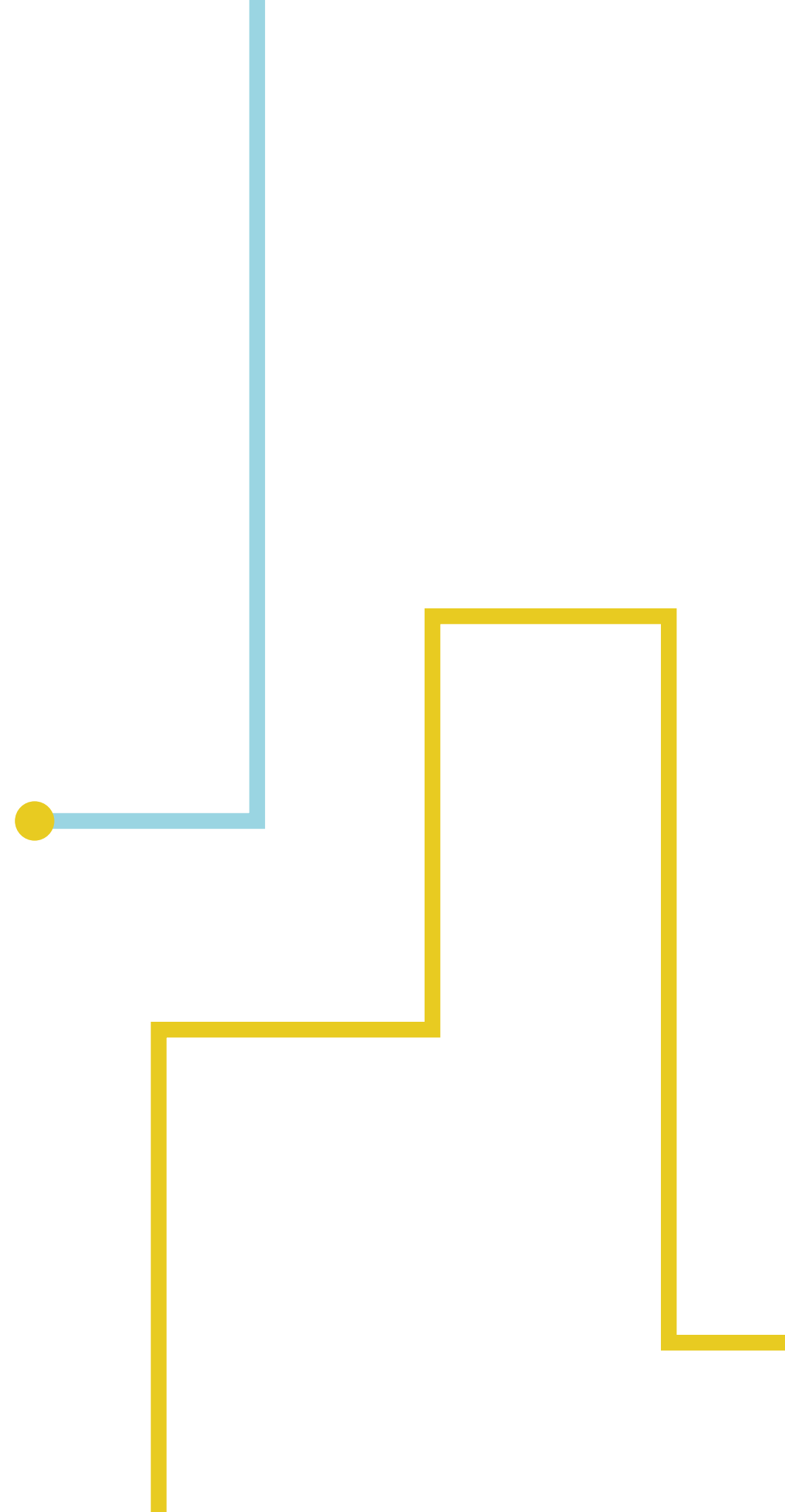
Deciphering  
Judicial Data:

# DAKSH's Database

August 2020

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# Abstract

DAKSH's Database<sup>1</sup> is a one-of-a-kind public database in India which enables large-scale analyses of judicial data. With judicial data across the country being largely non-uniform, DAKSH has undertaken significant efforts to standardise the data to enable large-scale analyses that can help in cross-comparison and improve functioning of courts. This note examines issues pertaining to data inconsistencies and shares DAKSH's efforts in harmonising the data publicly available on the e-courts website.

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<sup>1</sup> DAKSH Database, accessible online at <https://dakshindia.org/login-to-database/> (accessed on 16 April 2020).

# 1

## Introduction: Importance of judicial data

The year 2005 marked an important event for the Indian judicial system with the launch of the national policy for implementation of Information and Communication Technology (ICT) for courts. The e-courts project was implemented across India in furtherance of this policy. The first phase was launched in 2007<sup>2</sup>. Over a span of 13 years, the e-courts project has been implemented in every state and district, digitising various case related information. The data related to day-to-day proceedings that are entered onto the Case Information System (CIS) can be accessed online through the e-courts platform<sup>3</sup>. Today, the e-courts website and app are used by various lawyers, litigants, and judges to check cause lists and keep track of cases. While accessibility of court related information has been the greatest contribution of the e-courts project, another important benefit of the project has been in making available vast amount of data to the public in an unprecedented scale and manner in India. This has enabled different types of analyses of this data that have provided a much deeper perspective on the functioning of the judiciary.

<sup>2</sup> E-courts, available online at [https://ecourts.gov.in/ecourts\\_home/static/about-us.php](https://ecourts.gov.in/ecourts_home/static/about-us.php) (accessed on 18 June 2020).

<sup>3</sup> E-courts, available online at [https://ecourts.gov.in/ecourts\\_home/](https://ecourts.gov.in/ecourts_home/) (accessed on 16 April 2020).

# 2

## Need to harmonise data

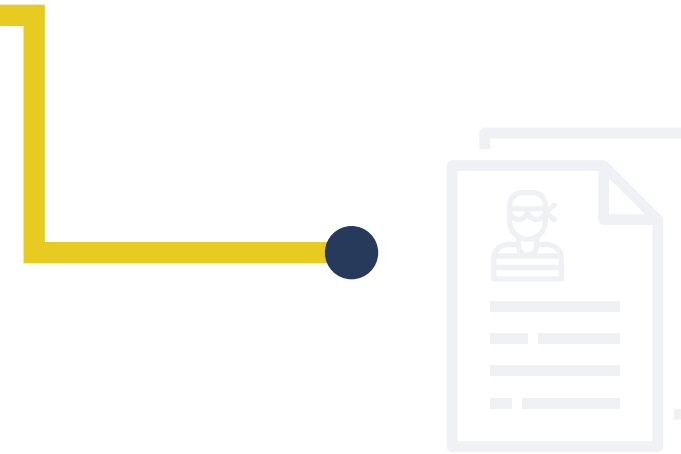


The growth of the e-courts system has led to an exponential increase in the availability of court-related statistics. There are millions of records for case and hearing related information that are on the e-courts website today. These details have been used to understand the functioning of the judiciary and study the causes of delay in courts. DAKSH has been using publicly available data on the e-courts website for various projects, reports, and research papers. The analysis of such data can be useful for judges, advocates, litigants, and various other stakeholders of the system. While certain kinds of analyses can provide judges an in-depth view of their workload and enable them to bring changes that can ensure timely disposal of cases, various other types of analyses can help advocates and government officials understand the litigation landscape of different regions. These insights can assist them in planning the day-to-day proceedings and work closely with parties and witnesses to ensure cases progress smoothly. Further, examining the lifecycle of cases can also benefit litigants and the public as it provides an estimate of the time the judiciary is taking to tackle different types of cases. Policy makers too can use analyses of such data to design future reforms and strategies which can help in bringing sustainable changes to the system.

However, with the inflow of a large volume of data over the past several years, there has also arisen the need to ensure that the data available online is standardised so that it can provide the most accurate insights.

Our research has showed us that there exist various inconsistencies in the data available on the e-courts website which proves to be a challenge for carrying out detailed analyses. Data that is not uniform, needs to be cleaned before any form of analysis can be carried out. This is a tedious and challenging task that requires domain knowledge and resources.

The first form of standardisation is to assess whether a case is civil or criminal. Without such bifurcation of cases based on their nature, any analysis would not provide the most accurate results. Civil and criminal cases not only progress differently in courts, but are also regulated by different laws and involve different sets of rights. For instance, the procedures involved in civil cases as handled by a civil judge, are starkly



different from those in session cases related to serious offences and tried by a sessions court. To arrive at the right conclusions, it is therefore important that these two sets of cases be analysed separately.

The only way to currently identify cases as being civil or criminal in nature is by analysing case types or the Acts and sections under which the cases have been classified. However, case types vary from one state to another for both high courts and trial courts.

**“ DAKSH’s State of the Indian Judiciary Report, 2016 had studied the variation in case types in different high courts in the country<sup>4</sup>. ”**

<sup>4</sup> Kishore Mandyam, Harish Narasappa, Ramya Sridhar Tirumalai, and Kavya Murthy. 2016. ‘Decoding Delay: Analysis of Court Data’, in Harish Narasappa and Shruti Vidyasagar (eds.), *State of the Indian Judiciary: A Report by DAKSH*, pp. 3–24. Bengaluru: DAKSH and EBC. Available online at [http://dakshindia.org/state-of-the-indian-judiciary/11\\_chapter\\_01.html#\\_idTextAnchor009](http://dakshindia.org/state-of-the-indian-judiciary/11_chapter_01.html#_idTextAnchor009) (accessed on 16 April 2020).

To give an illustration, the criminal writ case type was written in different formats in eight different high courts<sup>5</sup>. With non-uniform lists of case types across courts in the country, the task of identifying the nature of a case, based solely on their case type, becomes difficult. While a case type as simple as 'Criminal Case' can be easily identified to being criminal in nature, there are ambiguous case types such as 'Miscellaneous Case' which are difficult to categorise as being civil or criminal. In such cases, the Acts and sections applied becomes important. However here too, problems of standardisation and inconsistencies exist, thereby making it more difficult to identify the nature of cases.

Another important component of the e-courts data relates to day-to-day proceedings, i.e. the stage of a case. Information on the stage of a case is vital to carrying out any analyses to scientifically list cases and maximise judicial time. However, data on the stages of cases is also not standardised - while there may be a dozen stages in the lifecycle of cases, there exist numerous ways in which such data is currently captured on the e-courts website. Such varied data entry hinders any large-scale analyses to understand the stage at which delay occurs, or to prioritise and allocate hearings on a daily basis. Further, such variation also makes it difficult for a litigant to understand the progress of his/her case.

There is a need to ensure that data on the e-courts website is standardised to an optimal level. In this regard, the purpose of this note is to highlight problems relating to judicial data, provide DAKSH's methodology for standardizing data from the e-courts website, so others can build on it.

“ While the ideal goal would be to ensure uniformity in all the data available online, the objective of this note is to focus on a few key variables that are preventing a more in-depth analysis of judicial data, i.e. case types, stages, and subject matter classification. ”

<sup>5</sup> Kishore Mandyam, Harish Narasappa, Ramya Sridhar Tirumalai, and Kavya Murthy. 2016. 'Decoding Delay: Analysis of Court Data', in Harish Narasappa and Shruti Vidyasagar (eds.), *State of the Indian Judiciary: A Report by DAKSH*, pp. 3–24. Bengaluru: DAKSH and EBC. Available online at [http://dakshindia.org/state-of-the-indian-judiciary/11\\_chapter\\_01.html#\\_idT\\_extAnchor009](http://dakshindia.org/state-of-the-indian-judiciary/11_chapter_01.html#_idT_extAnchor009) (accessed on 16 April 2020).

This note examines issues pertaining to data inconsistencies and shares DAKSH's efforts in harmonising the data publicly available on the e-courts website.

While conducting different types of analyses over the past several years, there is a repository of standardised data that we have created in relation to case types and stages. The process started with standardisation of data from high courts. DAKSH pioneered the task of collating information on case types in different high courts in the country and published a detailed note on this in the report, 'State of the Indian Judiciary'<sup>6</sup>. In subsequent years, the effort was expanded to standardise data in the trial courts.

The present note delves into the methodology adopted by DAKSH and presents the standardised data sets that we have been updating from time to time from trial courts. These data sets can be used not only by researchers to analyse data from eCourts but can be used by anyone who intends to understand the judicial system in a better manner. Key decision makers in the judiciary too can benefit from the trends and insights provided by such standardised data. The note also examines the quality of data over time to assess whether data entry has improved over a period of time and proposes steps that can be used to generate better quality data for faster and efficient analysis.

<sup>6</sup> Mandyam, Narasappa, Tirumalai and Murthy, 'Decoding Delay: Analysis of Court Data', p. 3; See also Ramya Tirumalai. 2015. 'Method to the Madness', [www.dakshindia.org](http://www.dakshindia.org), 14 January, available online at <https://dakshindia.org/method-to-the-madness/> (last accessed on 27 March 2020).



# Data description and data sets



As of 20 June 2020  
there were

**3,40,01,538**

case records and

**41,43,49,058**

hearing records from

**1,776** court names/establishments in

**152** districts in the country

available in DAKSH's Database.



As this note seeks to address the inconsistencies in the way data is recorded for case types, stages, and Acts and sections, Table 1 provides an overview of their unique numbers from across the country from DAKSH's database.

# 3

Unique Case Types	Unique Stages
<b>4,835</b>	<b>13,751</b>
Unique Acts	Unique Sections
<b>43,255</b>	<b>22,66,367</b>

Table 1: Unique number of case types, stages, and Acts and sections

# 4

## Problems in judicial data and DAKSH's attempts at harmonisation

While analysing large volumes of data that has been scraped from the e-courts website, we have observed the following issues pertaining to the data available and have attempted to harmonise it:

*a*

### **Variation in case types inter-state as well as intra-state:**

Case types differ across states. Case types are generally provided under the rules of practice passed by different states. Hence, each state has its own categorisation of case types and abbreviations for them. Across the data available in the DAKSH database 20 June 2020 for courts in 152 districts, we found 4835 unique case types. The chart below highlights the unique number of case types across different years from 152 districts in DAKSH's database.

As shown in Figure 1, case types gradually increased over the years with most of number of unique case types being used in 2018. Perhaps the gradual increase in case types can be attributed to the regular use of e-courts and CIS by courts in different cities. Amongst the cases filed in 2019, there were 2,995 unique case types that could be found on DAKSH's database.

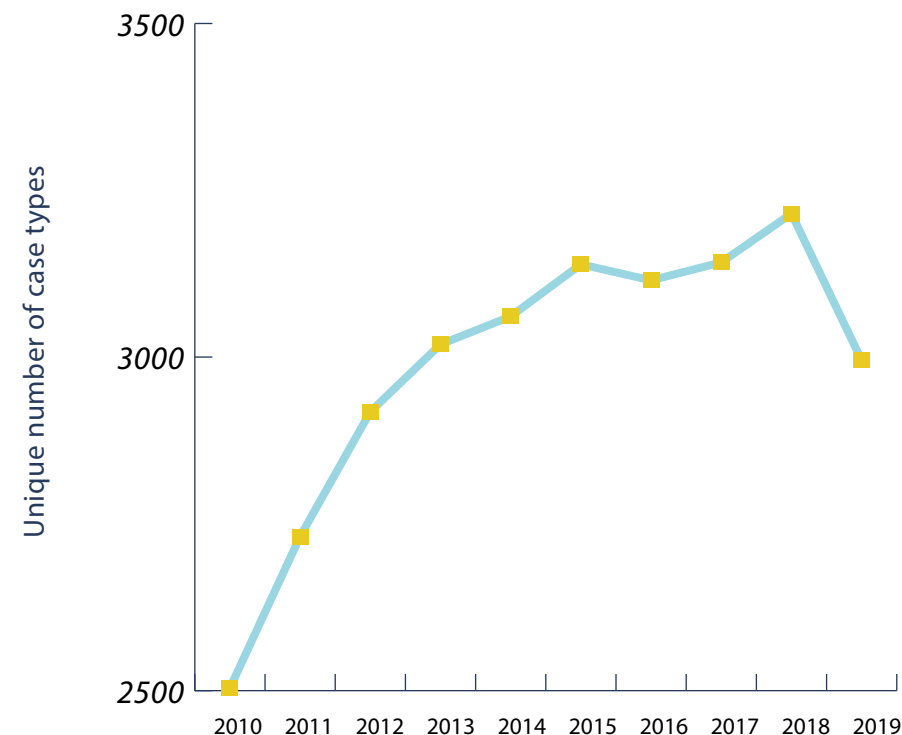


Figure 1: Unique case types across different years

Further, not only do case types vary between different states, our research also reveals that certain case types are written differently even within the same state. For example, in Delhi, the case type for criminal execution cases is written in different ways in different districts - in North West and South West it is written as 'EX CRIMINAL', while in the other districts it is written as 'EX CRL', and in East it is written as both 'EX CRL' and 'EX-CRL'. Annexure A provides the number of unique case types across different states and years.

“ Similarly, in Orissa, the case type for regular first appeal is written in different formats such as 'Rfa', 'R F A', 'R.f.a.-Regular First Apple', etc. ”

b

### **Subject matter classification under case types:**

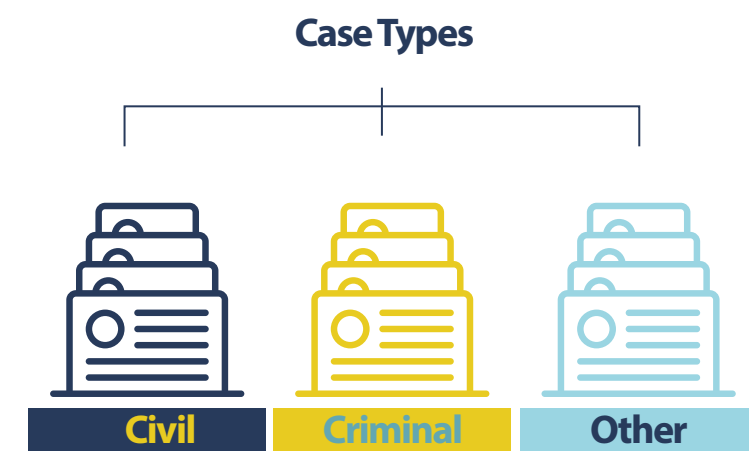
An important function of a case type is to provide information on the nature of a case. For instance, MC (Maintenance Cases), PC (Probate Cases), LAC (Land Acquisition Cases) etc. are different case types that help in identifying the subject matter of a case. However, cases belonging to the same subject matter can be found under multiple case types. For example, cases regarding negotiable instruments can be found under case types such as 'CC', 'Complaint Cases', 'NACT', 'NI Act', 'CRLA' etc. This makes it difficult to identify and isolate cases belonging to a particular subject matter and trace their progress in court.

“**Case types such as Original Suit, Miscellaneous Cases, Regular Civil Suit etc. are too generic in nature and contain a mix of different subject matters.**”

To give an illustration, 'Claim Cases' in Patna district contains cases belonging to Motor Accidents Act, Indian Succession Act, Arbitration and Conciliation Act, etc. This is problematic as these generic case types have a large volume of cases. For example, of the pending civil cases in Bengaluru Rural district, 82 per cent of the cases belong to the case type OS (Original Suit). Such a broad case type does not help provide any indication as to the subject matter of these cases - they could be related to property disputes, money suits, contractual disputes, etc. The lack of granularity regarding the underlying subject matter of these cases hinders any form of granular analysis in improving case listing or case management practices.

Adding to this problem is the fact that the abbreviations for cases can be very similar but refer to, and have, vastly different kinds of cases. DAKSH currently scrapes data from the e-courts mobile application, however there is a restriction on it due to which the full forms of case types do not get scraped and only the abbreviations can be scraped. As a result of this, DAKSH carries out a manual process to classify case types in every court into civil or criminal. To illustrate the problem of similar abbreviations, take an example from Bengaluru district where the case type 'SC' refers to sessions cases (criminal in nature), but 'S.C.' refers to small cause suits (civil in nature). With the variation between the two case types being merely two period symbols, it is important that close attention be paid while classifying cases into being civil or criminal in nature. With case types not being standard across the country, close attention has to be paid to case types in each court before classifying them into civil or criminal. In case of any ambiguity, DAKSH relies on the Acts and sections of cases to assess whether a case type has cases that are civil or criminal in nature.

Despite all these measures, there are case types that cannot be straight-jacketed under either civil or criminal cases. Examples of such case types are, Contempt Cases or Miscellaneous Cases, and case types belonging to specific statutes such as Essential Commodities Act or Electricity Act, which may be civil or criminal in nature, depending upon the facts of an individual case. Further, in some instances the Acts and sections fields are blank, in which case it is unclear if cases are civil or criminal in nature. Therefore, case types that could not be classified as either civil or criminal, have been categorised as 'other' in DAKSH's mapping.





### Non-uniform pattern of Acts and sections:

One of the most difficult tasks while identifying the subject matter of cases, is analysing the Acts and sections fields. The e-courts website provides a field wherein the particular Acts and sections concerning a case is captured. Often, when the subject matter of a case cannot be identified by its case type, the Acts and DAKSH has used sections field to identify the nature of a case. However, there is a huge variation in the manner in which the data is entered under this field. Across courts in 152 districts from the DAKSH

database as on 20 June 2020, the Acts and sections were recorded in 43,255 and 22,66,367 unique ways, respectively. The chart below provides the unique number of Acts and sections across different years from 152 districts on DAKSH's database.

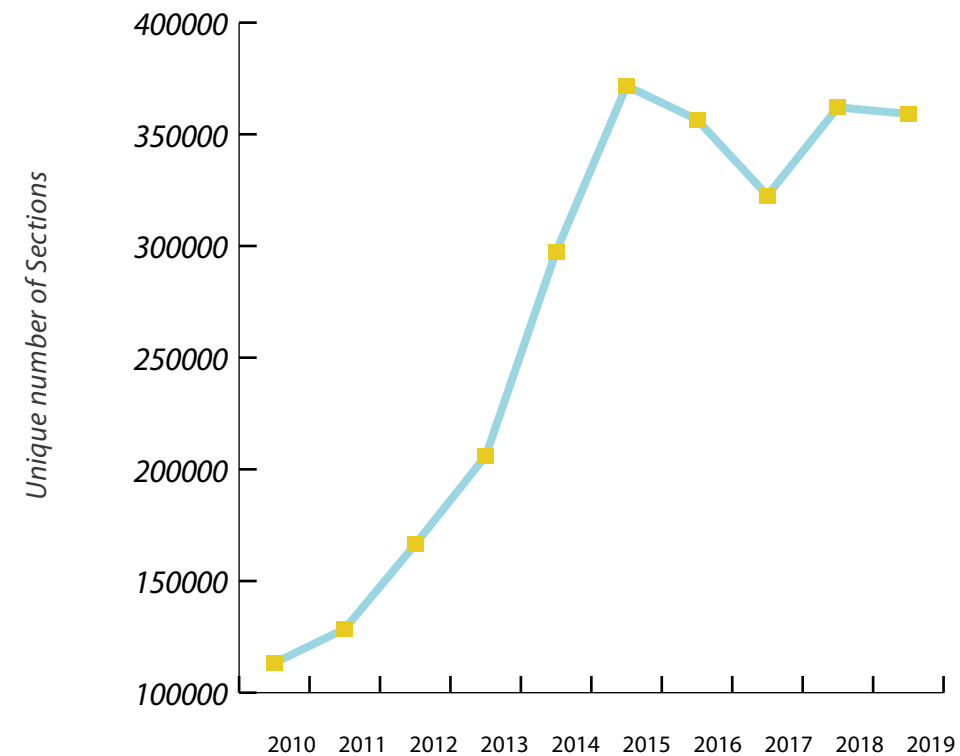
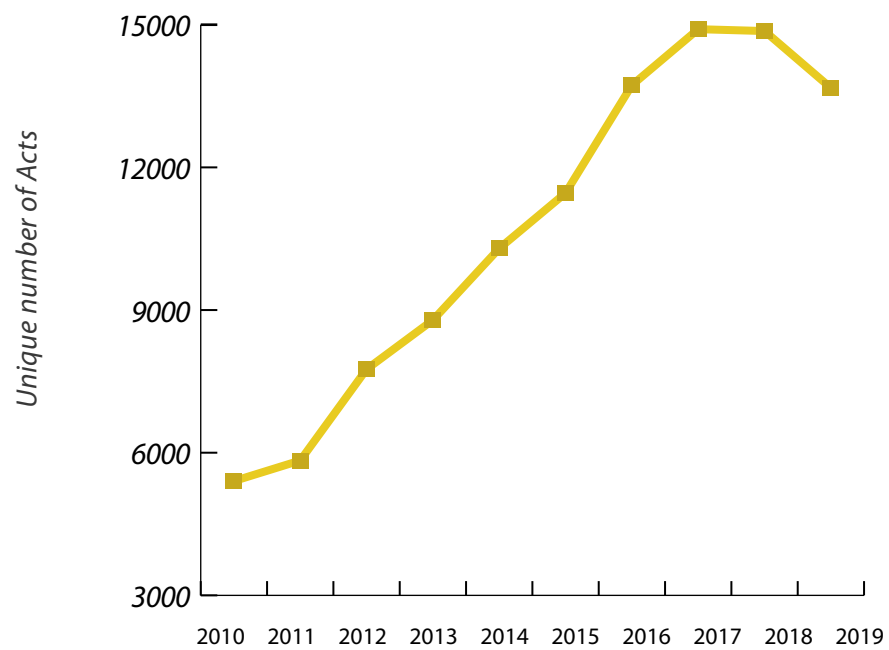


Figure 2: Unique number of Acts (left) and sections (right) in different years

Figure 2 depicts the variation in Acts and sections from 2010 to 2019. The variations in Acts and sections increased drastically over these years. Interestingly, there is a drop in the variation in Acts from 2017 onwards. One of the reasons for the dip could be the improvements made in the CIS versions used by courts. Since the launch of the e-courts, the back-end CIS version has been improved and enhanced to make the data collection process smoother. Providing drop down options for various fields is one such enhancement which may have made the data uniform to an extent, thus, decreasing the variations.

“ Often, many variations in the e-courts data tend to relate to the same legislation, for instance, Indian Penal Code can be seen written in its full form, or as IPC, I P C, i.p.c etc. Similarly, Civil Procedure Code can be written in its full form, or as CPC, c.p.c, etc. Sometimes the legislation is not mentioned and specific provision e.g. Order XLI Rule 5 etc. is mentioned. ”

The Acts and sections data in the current format can be used only for identifying whether cases are civil or criminal in nature. However, if the data entered in these fields are captured in a streamlined systematic manner, it can even help identify the underlying subject matter of each case. Currently, in several cases, the substantive legislation and section under which a case falls are not mentioned and only the procedural law, i.e. Civil Procedure Code or Criminal Procedure Code is mentioned. Furthermore, some cases also do not record any information under the Acts field thereby making it more difficult to identify the nature of the case. Annexure B further provides state-wise variation of Acts and sections across different states and years.

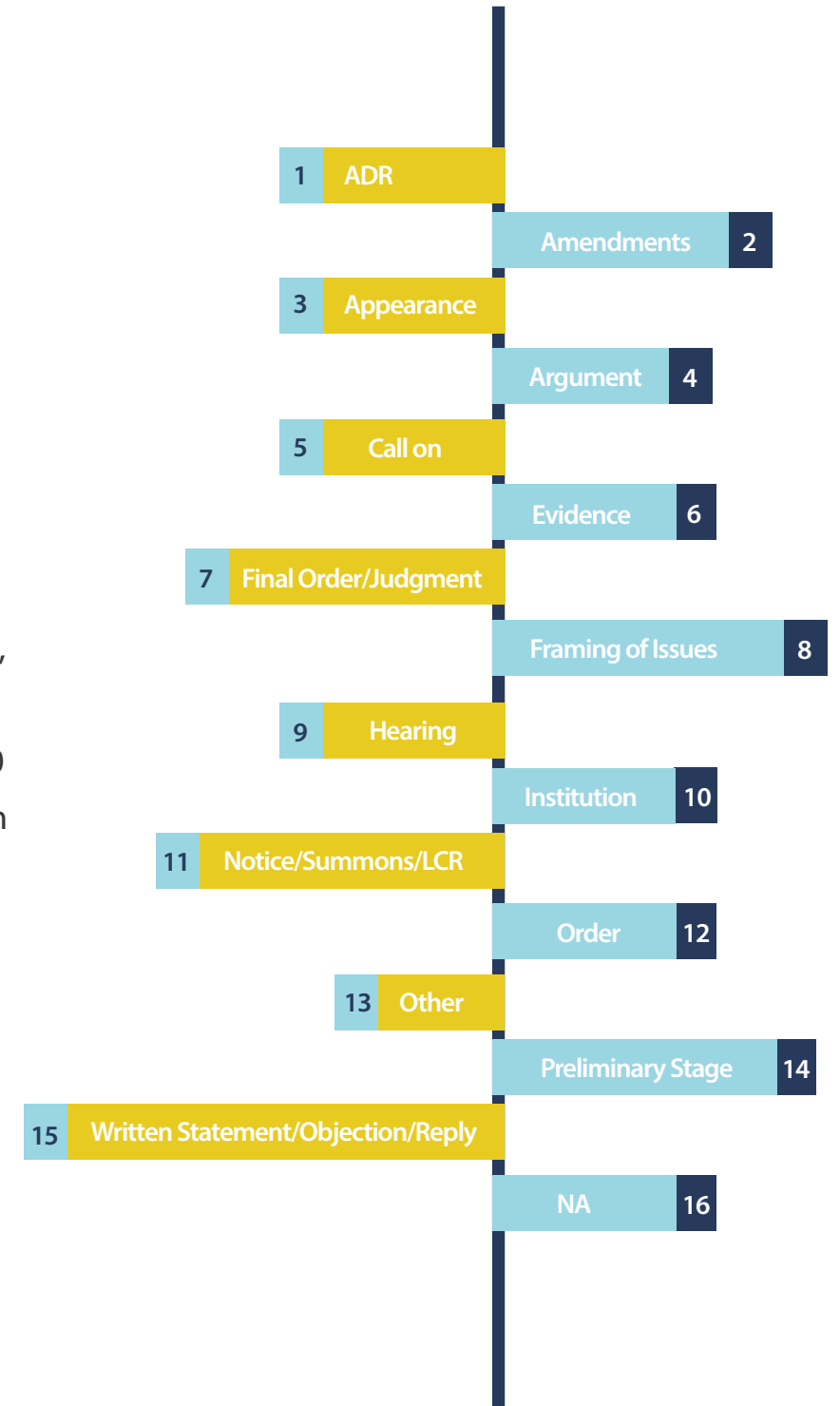
# d

## Non-uniform pattern in stages:

There are several stages through which a case proceeds. The Civil Procedure Code and the Criminal Procedure Code outline the various stages through which a case advances. However, on the e-courts website, there are several variations in these stages. As per the data in DAKSH's database as on 20 June 2020 for 152 districts, stages are written in 13,751 different ways. It is also often seen that stages of a criminal case are mixed with that of a civil case - for example, criminal stages such as 'framing of charges' are captured in a civil case, while 'framing of issues' which occurs in a civil case can be seen entered for a criminal case. Hence, standardising the data set is crucial so that stages are captured accurately. Based on the e-courts data, DAKSH has mapped these 13,751 different stages into the following stages for civil and criminal cases:



Stages in Criminal Cases



Stages in Civil Cases



**“ There are times when the stages entered on e-courts are too broad and difficult to interpret, for example, ‘for trial,’ ‘Misc.Cases/ Purpose’ ‘awaiting’ etc. ”**

However, there are times when the stages entered on e-courts are too broad and difficult to interpret, for example, ‘for trial,’ ‘Misc.Cases/ Purpose’ ‘awaiting’ etc. Sometimes, we have even noticed the nature of the case being entered as a stage, such as ‘custody matters,’ ‘bail matters,’ etc. On several occasions we have also observed that stages are written as free text, and sometimes with typographical errors, thus, making them extremely difficult to understand - for example, ‘NM PH,’ ‘S/R and C/C,’ etc. This category of text entries that could not be associated with any stage have been classified as ‘other’ in the mapping. For any stages that were blank or had mere numbers written in place of the stage, those stages have been mapped to ‘NA’ (not available). Annexure C provides variation in stages across different states and years.



### Changes over time:

While there are several variations in the data on stages in a case, what is heartening to note is that it appears that attempts are being made to harmonise data over the years. Of the 1.2 crore hearings in the Delhi subordinate courts for which DAKSH has details in its database, the number of variations have reduced from 177 in 2014 to 148 variations in 2019. An instance of the reduction of variations can be seen from the below example for hearings at the stage of conciliation:

It can be seen from Table 2 that the number of ways conciliation has been written over the years has come down, with data entry now moving from incorrect spellings strongly towards 'Conciliation'. Further, with constant updates on CIS, an attempt is being made to make the stages uniform. Figure 3 highlights the unique stages across different time periods from DAKSH's database.

Stage	2014	2015	2016	2017	2018	2019
CONCILIATIO	3	11	73	29	18	0
CONCILIATION	793	552	805	538	127	2558
CONCILIATION.	216	389	920	1395	551	15
NCILIATION	3	9	3	3	0	0
ONCILIATION	16	17	143	9	2	0

Table 2: Variations in stages

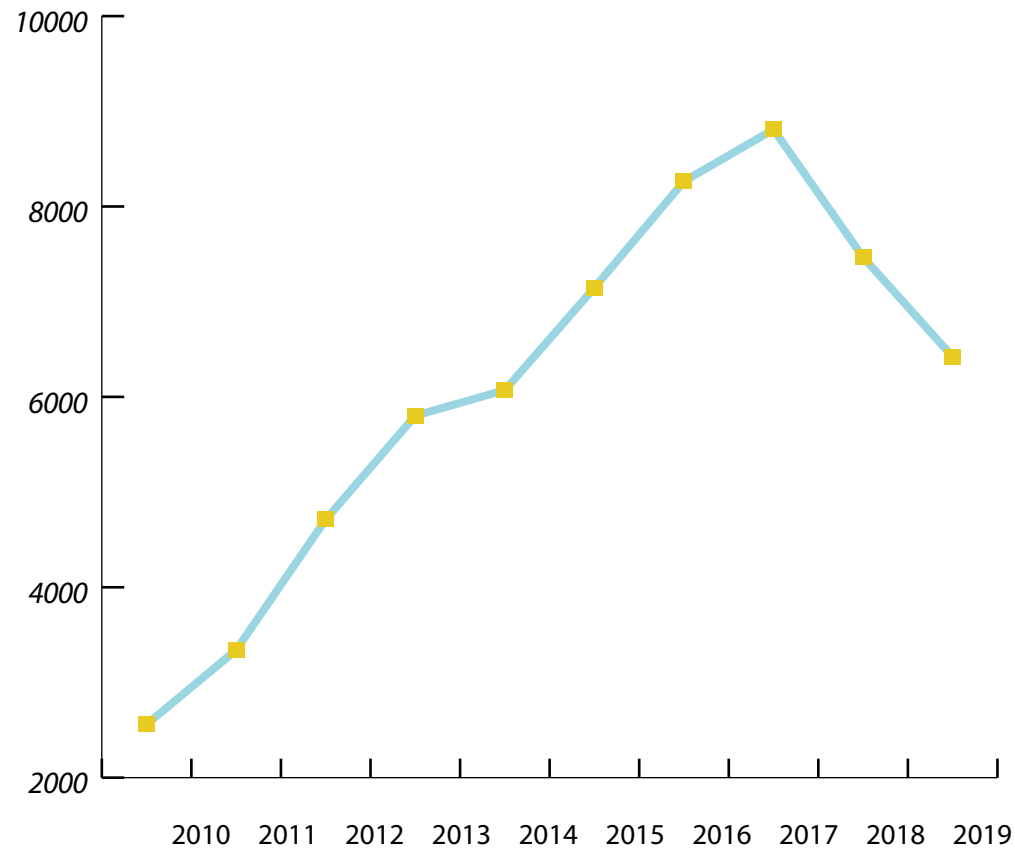


Figure 3: Unique stages across different years

One can note a gradual increase in the number of unique stages and a dip in 2018 and 2019. The reason for the decrease in the number of unique stages can perhaps be explained by the introduction of CIS 3.0 in August 2018 which brought measures to make stages uniform. However, despite stages being controlled, the number of unique stages entered in cases in 2019 was 6,421 which is an extremely high number. To ensure uniformity, it is important that thousands of variations on e-courts be reduced to include only a fixed number of stages as provided under the CPC and Cr. PC.

f

### Population of data:

When data for cases and hearings is scraped from e-courts, we get information for a total of 100 data fields. However, 68 of these data fields are either blank or contain little information. DAKSH therefore provides information for 32 data fields on the DAKSH database. Most of these 32 data fields are populated, but the data populated in fields such as Acts and sections, police station, and party advocates varies from state to state. The excel sheet attached to this note shows the levels of data population in each state for each data field. In order to ensure that data is comprehensive and well captured on the e-courts website, attention must also be paid to how much data is populated by the courts.





### **Lack of data dictionary for understanding terms:**

Lastly, a significant shortcoming of the present e-courts system is the lack of a data dictionary for understanding case types and stage names. E-courts is used not only by lawyers and judges, but also by litigants and researchers who may not have the technical knowledge to understand the terms used. Often, different abbreviations are not comprehensible. For instance, using abbreviations like Exh. for exhibits, S/S for service of summons, NBW for non bailable warrants, WS for written statement, FLW for fine levy warrant etc. need to be expanded or explained. A data dictionary should be created listing out the terms/abbreviations used on the e-courts website which can help everyone understand the legal jargon and terms used.

**“ Abbreviations like Exh. for exhibits, S/S for service of summons, NBW for non bailable warrants etc. need to be expanded or explained. ”**



# 5

## Judiciary's own identification of the problem and attempts to solve it



Since the launch of the e-courts project, judicial data has been upgraded to meet the requirements of the judiciary in multiple phases. The CIS software, which is a unified national core application<sup>7</sup>, has been developed for ensuring that all case related information is captured on a single platform across the country<sup>8</sup>. CIS was launched in a phased manner and is updated from time to time to make it more inclusive and robust. The problem of non-uniform data sets has persisted but has certainly not gone unnoticed. This can be seen through different versions of the CIS which have made the data collection process more uniform and standardised across the country.

<sup>7</sup> eCourts Mission Mode Project, by Ministry of Law and Justice, Department of Justice, available online at <https://doj.gov.in/sites/default/files/Brief%20on%20eCourts%20Project%20%28Phase-I%20%26amp%3B%20Phase-II%29%20Dec%202016.pdf> (last accessed on 27 March 2020).

<sup>8</sup> Case Management through CIS 2.0, by eCommittee, Supreme Court of India, available online at <https://hphighcourt.nic.in/pdf/eCourtebookcmiscis.pdf> (last accessed on 27 March 2020).



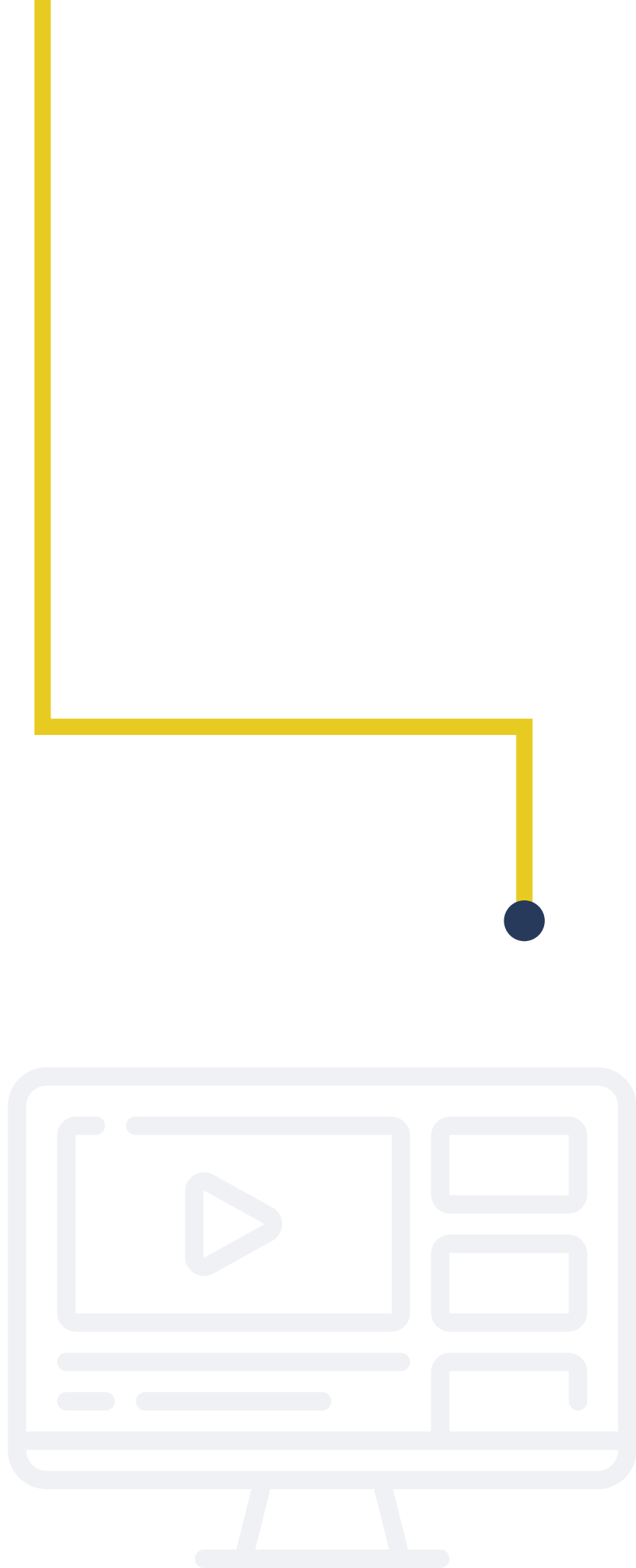
The CIS software started with version 1.0 and then upgraded into 2.0 around 2017, finally transitioning into the current version of 3.0 in 2018. Through these upgrades, the data entry process has also been strengthened and streamlined. Various case-related fields have been modified and improved over the different versions of CIS. To ensure uniformity, fields are divided into national, state, local, and periphery level in the current version of CIS<sup>9</sup>. Important core fields such as stages, case types, acts, sections, police station names etc. are supposed to be controlled at the national level and remain uniform throughout the country<sup>10</sup>. Making certain core features unalterable at the local level and providing standardised dropdowns that are uniform across the country is an important step towards streamlining the data entry process.

**“ However, the figures provided above show that despite introducing measures to control data entry and uniformity, the variations in stages, Acts and sections persist. ”**

Although, variations are less in the recent years, there is still a lot that needs to be done to further curtail these variations and standardize the data.

<sup>9</sup> *Case Management through CIS 3.0, by eCommittee, Supreme Court of India, available online at [https://doj.gov.in/sites/default/files/CIS%203.0%20final\\_0.pdf](https://doj.gov.in/sites/default/files/CIS%203.0%20final_0.pdf) (last accessed on 27 March 2020).*

<sup>10</sup> *Case Management through CIS 3.0, by eCommittee, Supreme Court of India, 10.*



A similar attempt at standardisation can be seen on the recent version of the National Judicial Data Grid (NJDG), a live dashboard providing details regarding cases pending and disposed in different states in the country. The website was launched in 2015, but in a recent upgrade data across the country was standardised to enable analysis of data. Despite there being shortcomings in the newer version of the NJDG, the attempt to standardise data sets across the country demonstrates the the judiciary's intention to move towards uniform data entry for better large-scale analyses. NJDG now also displays stage and case type analyses, as well as reasons for adjournments that can provide in-depth insights - however the methodology used to capture reasons for adjournments, and access to such standardised information is not publicly available on the front-end of e-courts. This hampers any attempts to further analyse the reasons for judicial delay and analyse how pendency and delays can be reduced.

Bearing in mind the progress made thus far on capturing judicial data and the problems identified in it, the next section of this note provides recommendations on how to improve the quality of judicial data.



# 6

## Recommendations

### a **Variation in case types intra-state as well as inter-state:**

As far as possible, there must be a standardised list of case types to be used by all trial courts across the country. While there can be additional case types added on to a standard list, the standard case types must remain uniform across the country. Such standardisation will enable comparability in the way cases progress in different courts, which can in turn help identify potential reasons for delay in specific subject matters and specific jurisdictions.





b

### **Subject matter classification under case types:**

While standardisation of case types may help classify and identify the broad subject matter of some disputes, this must be accompanied by standardisation of the subject matter of cases - for example, tenancy disputes, maintenance cases, murder cases, rape cases, etc. Such subject matter classification can help in granular analysis of different types of cases and will be useful to frame case flow management rules prescribing and enforcing statutorily prescribed timelines for the disposal of cases. These classifications can also be used to compile statistics to monitor the pendency and disposal of cases belonging to a specific subject matter. Judges can also use these statistics to get an overview of cases belonging to different subject matters which can help in charting out the future progress of a case and overall causelist management. Further, for case types such as CC or OS which are very broad, subject matter classifications can help judges get a better sense of the nature of cases in their docket and help allocate their time more effectively.



C

### **Non-uniform pattern of Acts and sections:**

Currently, the vast amounts of variation in the Acts and sections fields of data limit a deeper understanding of the progress of cases relating to specific disputes. Recording of more than one Act leads to an increase in the number of combinations of Acts across the country. It is therefore recommended that drop downs of Acts and sections be provided in every state such that the drop down first lets a user pick an Act and its corresponding section before moving on to the next Act and section. By making separate distinguishable entries for every Act and section combination, it will be possible to analyse cases belonging to specific disputes in a more efficient manner.

d

### **Non-uniform pattern in stages:**

A vast variation in the stages of cases coupled with free text entries of stages makes it very difficult to undertake any analysis of hearing information at a stage level and display reliable summary statistics for judges. In order to help judges with listing cases on a daily basis as well as to understand their docket, it is recommended that drop downs be provided for stages in civil and criminal cases. Further, in order to provide an additional level of granularity, it is also recommended that a sub-drop down be provided for additional details within a stage – e.g. record a stage as evidence and a sub-stage as prosecution evidence.

e

**Changes over time:**

It is apparent from the e-courts data that efforts have been made to reduce variations in data over time. However, in order to ensure that data can be analysed effectively, it is imperative to not only harmonise data going forward, but to also ensure that historical data is standardised. With most decisions in the judiciary being based on past trends in data, it is important to map old data to standardised fields, or if already done, to make public such a possible mapping so as to enable accurate analysis to guide the future.



f

**Population of data:**

In order to ensure that as much information as possible is captured regarding cases and their hearings, it is recommended that periodical reporting and checks be carried out to check for completeness of data.



g

**Lack of data dictionary for understanding terms:**

With judicial data being publicly available for use by citizens, lawyers, researchers, and judges, it is important that the data is capable of being understood. To this end, it is recommended that a data dictionary be provided for terms used in case types, stages, and any abbreviations used in the Acts or sections fields.

h


**Make publicly available hidden fields such as sub-stage, reasons for adjournment, number of witness, etc:**

The NJDG now displays a large amount of summary information including variables such as reasons for adjournments. Further, the back-end of the e-courts software also allows for the capturing of information regarding sub-stages, number of witnesses, etc. which could provide greater insights into reasons of delay<sup>11</sup>. It is recommended that such fields of data also be made publicly available so as to enable litigants, lawyers, and researchers better understand the workings of the judicial system.

<sup>11</sup> Case Management through CIS 3.0, by eCommittee, Supreme Court of India.

# 7

## Way forward for analyses

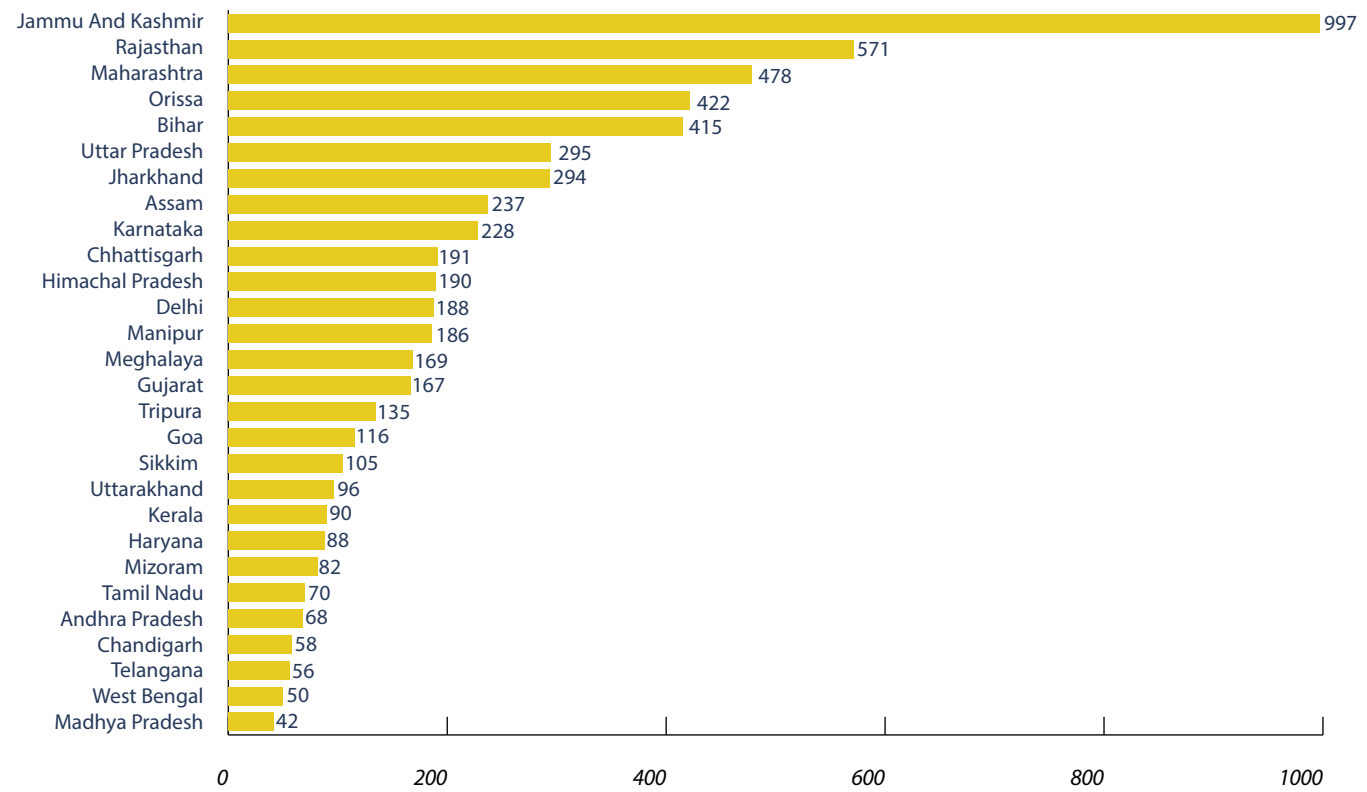


DAKSH's has standardised judicial data and made publicly available its work to enable researchers, lawyers, litigants, and members of the judiciary to better understand the functioning of the judicial system. With a large amount of variation in data recorded across the country, it is possible that the usage of terms may vary from region to region. If you notice or feel that any error has been made in the mapping of case types or stages in the uploaded mapping files, please do get in touch with us and we will look to fix the error. We envisage that the mapping and files will be sharpened in an iterative process through a collective effort of those interested in understanding judicial data and working towards formulating solutions to reduce pendency and delays in the Indian judicial system. If you would like to get in touch with us regarding this data, please write in to: **[info@dakshindia.org](mailto:info@dakshindia.org)**.

# Annexure A

a

Unique number of case types in different states from DAKSH's database as of 20 June 2020





**Variations in unique case types in different states and years from DAKSH's database as on 20 June 2020**

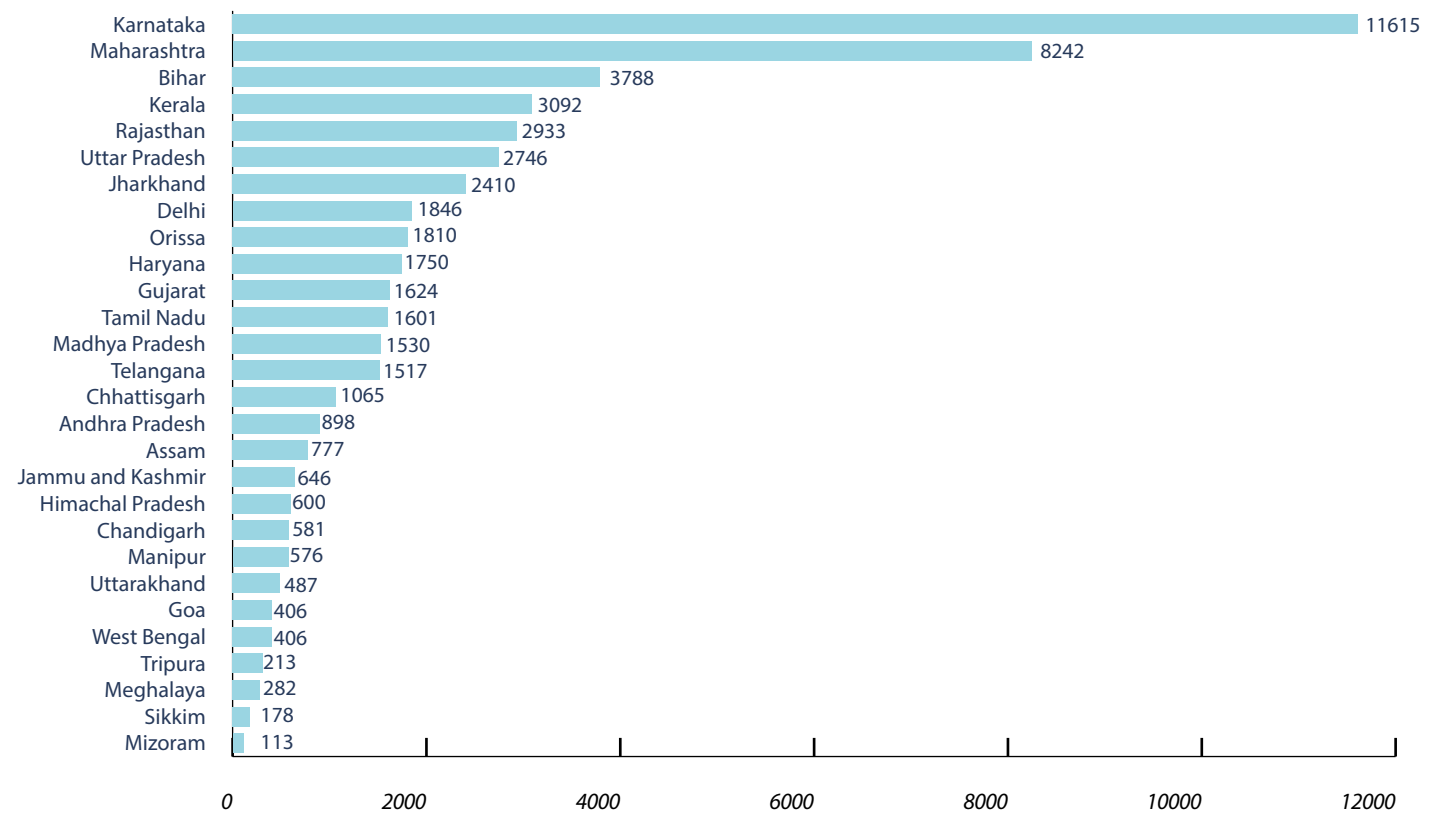
States	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andhra Pradesh	53	53	54	53	56	53	51	52	57	52
Assam	101	110	129	137	125	132	128	136	147	134
Bihar	187	198	207	221	250	251	266	261	268	269
Chandigarh	44	38	48	47	40	40	39	39	41	41
Chhattisgarh	90	92	120	123	119	133	134	142	142	138
Delhi	102	119	120	135	137	138	151	152	160	151
Goa	76	81	79	80	82	83	80	74	75	73
Gujarat	108	113	124	122	126	117	126	121	124	117
Haryana	49	58	59	67	67	64	67	64	64	72
Himachal Pradesh	107	109	121	125	129	122	132	125	141	130
Jammu and Kashmir	308	417	410	398	399	467	448	589	640	543
Jharkhand	167	167	168	173	180	188	163	172	175	168
Karnataka	150	151	144	146	150	160	159	162	135	92
Kerala	59	63	64	64	61	65	67	66	63	67
Madhya Pradesh	39	39	38	41	40	40	36	38	36	36
Maharashtra	326	335	362	360	363	370	370	363	369	348
Manipur	59	78	92	99	115	121	124	143	138	123
Meghalaya	34	49	88	76	74	79	74	76	71	71
Mizoram	22	31	51	44	33	42	43	49	42	41
Orissa	199	195	221	238	253	256	252	272	271	257
Rajasthan	403	407	430	438	423	414	406	219	200	213
Sikkim	21	30	44	55	59	55	57	48	50	49
Tamil Nadu	61	58	59	61	62	56	57	56	56	42
Telangana	39	42	45	44	46	46	49	49	48	47
Tripura	58	68	69	86	94	92	100	91	98	96
Uttar Pradesh	209	219	228	220	225	223	211	218	212	221
Uttarakhand	55	65	67	83	57	60	63	62	58	60
West Bengal	39	39	38	42	45	45	45	45	45	44



# Annexure B

a

Unique number of Acts in different states from DAKSH's database as of 20 June 2020



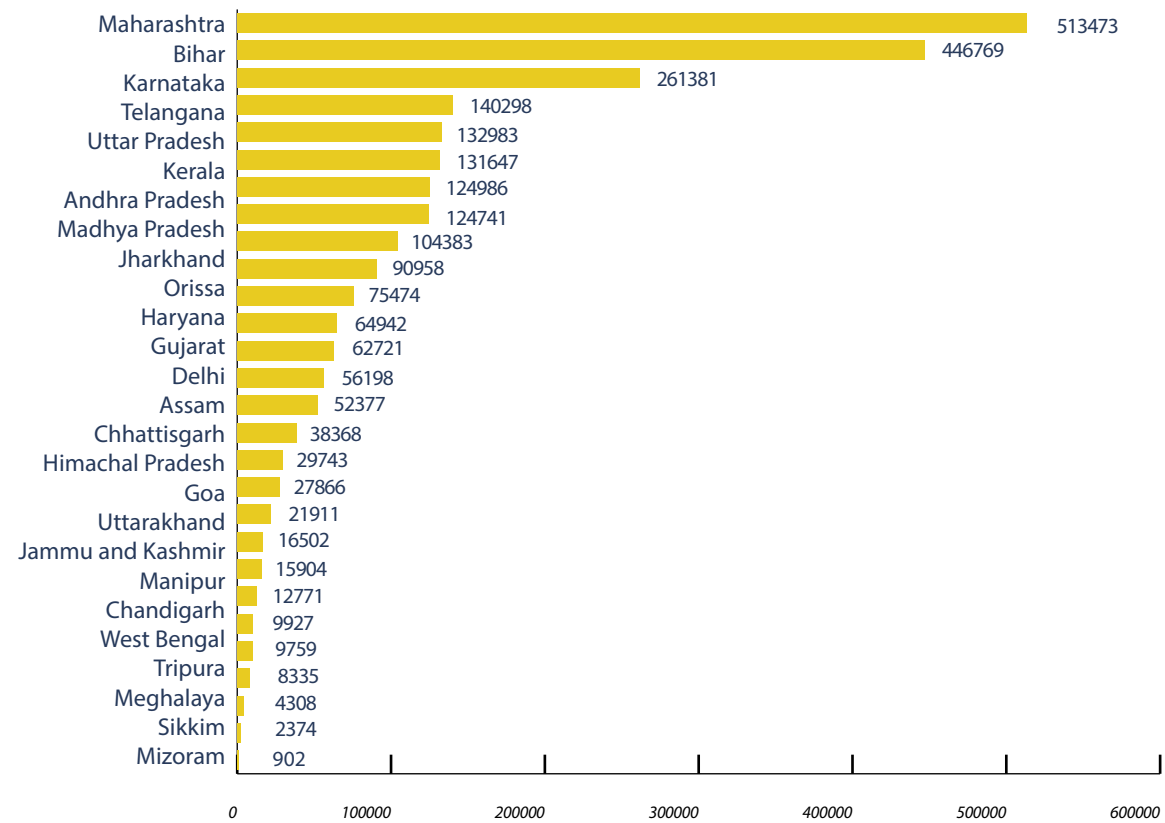


**Variations in unique Acts in different states and years  
from DAKSH's database as on 20 June 2020**

States	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andhra Pradesh	191	231	262	271	306	352	358	356	345	298
Assam	133	105	144	181	256	260	254	272	291	243
Bihar	462	477	507	593	965	1062	1113	1315	1402	1214
Chandigarh	57	57	61	87	162	200	232	215	285	208
Chhattisgarh	140	164	280	197	237	356	413	392	435	327
Delhi	186	245	278	308	326	400	785	849	856	728
Goa	52	48	65	82	71	83	174	183	201	186
Gujarat	238	234	248	315	382	426	442	429	535	618
Haryana	82	126	158	330	459	519	625	587	577	549
Himachal Pradesh	36	49	51	86	220	198	209	226	257	224
Jammu and Kashmir	91	111	91	111	143	188	200	266	326	231
Jharkhand	241	248	297	371	549	598	645	768	930	885
Karnataka	1513	1669	2881	3281	3218	3063	3879	4458	3849	3305
Kerala	500	534	684	725	834	974	1076	1120	1129	922
Madhya Pradesh	217	257	329	368	318	298	366	526	482	452
Maharashtra	1269	1296	1502	1523	1786	2114	2299	2433	2619	2388
Manipur	13	23	24	58	184	196	214	234	243	225
Meghalaya	37	19	19	41	83	88	108	105	100	143
Mizoram	9	14	9	17	41	37	40	55	40	38
Orissa	232	256	322	388	500	523	598	637	556	459
Rajasthan	286	316	371	465	785	1017	1209	1142	1075	984
Sikkim	4	7	10	21	67	75	65	46	68	64
Tamil Nadu	164	175	197	282	429	455	468	545	598	701
Telangana	286	332	311	368	366	455	464	576	576	647
Tripura	23	34	47	59	120	107	120	131	120	101
Uttar Pradesh	413	440	499	538	730	895	1045	1095	1172	1050
Uttarakhand	90	94	103	152	171	157	162	136	147	164
West Bengal	64	81	74	81	129	155	105	132	91	73



**Unique number of sections in different states from DAKSH's database as of 20 June 2020**





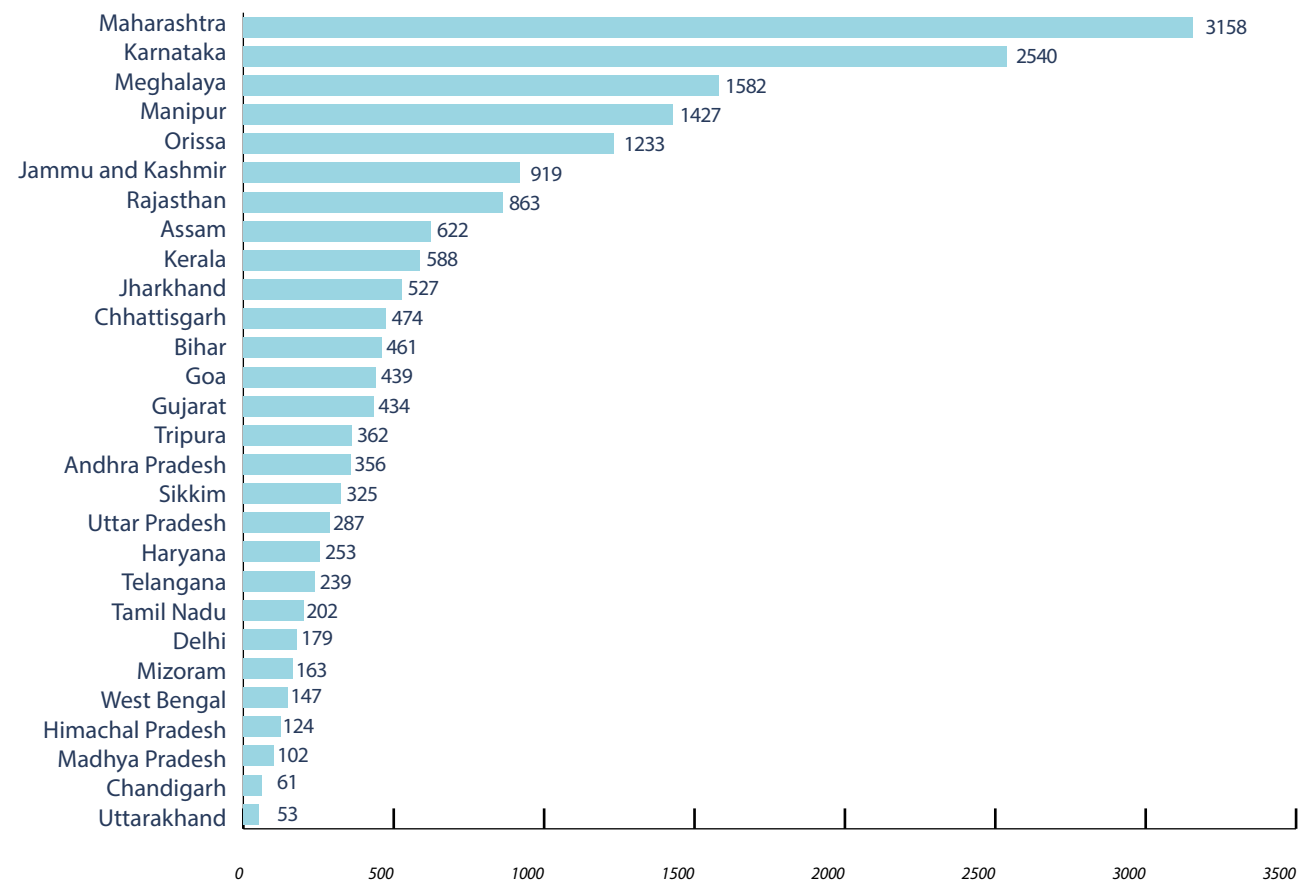
**Variations in unique sections in different states and years  
from DAKSH's database as on 20 June 2020**

States	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andhra Pradesh	8843	12195	14513	16428	21655	22853	21915	14275	17281	14514
Assam	2705	3158	3231	4145	5987	7470	5825	5297	5432	5260
Bihar	20690	21910	26826	34713	56126	67584	63289	66800	81742	70772
Chandigarh	319	384	335	736	2450	2331	2108	1738	1881	1923
Chhattisgarh	1163	1860	5196	2274	3454	4847	5788	5885	5796	5026
Delhi	884	1157	1375	1590	1949	2713	10187	14635	20206	18108
Goa	1107	917	1708	2263	2286	2979	3273	3341	3835	3762
Gujarat	2750	2919	3132	4823	4802	6510	8760	9025	12221	13165
Haryana	742	1192	1806	3789	10191	13273	11959	11259	14274	14894
Himachal Pradesh	426	637	779	1365	5765	6043	5161	4755	7388	7254
Jammu and Kashmir	917	1370	1100	1245	1625	3161	2349	2913	3599	3267
Jharkhand	2981	3481	4068	5724	10562	13936	12878	13725	14593	14201
Karnataka	7980	9912	17203	28140	39509	51122	46369	38282	27293	22852
Kerala	9723	10408	14187	15375	18423	20104	20891	18579	21200	18932
Madhya Pradesh	4083	5527	8181	9930	11796	11253	15415	17378	18187	16861
Maharashtra	35563	36384	43695	47400	56809	63402	54812	55246	61760	61524
Manipur	48	69	85	334	2622	3067	3110	2387	2549	2815
Meghalaya	255	94	110	257	654	747	741	844	802	1145
Mizoram	26	37	71	86	165	259	172	200	170	151
Orissa	3026	4480	4881	7329	9588	10891	10713	9548	8527	9299
Rajasthan	2377	3172	3850	5315	11799	22795	21488	21898	22327	23671
Sikkim	8	17	39	135	550	593	572	436	514	430
Tamil Nadu	4247	4356	5928	8066	19501	24264	20763	18895	23280	25230
Telangana	8917	11239	13971	17379	19469	23485	23079	16803	18771	22750
Tripura	321	390	514	836	1681	1370	1603	1459	1565	1896
Uttar Pradesh	5369	5622	6900	9539	17011	22989	28424	24344	28563	30191
Uttarakhand	1458	1491	1690	2186	1452	2669	2402	1716	1977	3519
West Bengal	851	968	1056	1118	1801	2268	1283	1361	1159	754

# Annexure C

a

**Unique number of stages in different states from DAKSH's database as of 20 June 2020**





**Variations in unique stages in different states and years from DAKSH's database as on 20 June 2020**

States	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andhra Pradesh	88	120	138	144	173	161	146	254	206	151
Assam	129	219	269	290	295	356	353	387	428	433
Bihar	88	130	186	258	306	326	350	366	372	383
Chandigarh	33	45	51	48	46	46	44	42	43	37
Chhattisgarh	94	106	134	138	152	177	275	385	384	369
Delhi	70	75	74	78	80	87	114	146	143	111
Goa	243	225	231	227	223	220	344	318	310	256
Gujarat	167	217	248	312	305	322	330	333	265	244
Haryana	46	100	143	151	158	165	169	168	168	170
Himachal Pradesh	11	60	74	76	87	87	88	90	94	94
Jammu and Kashmir	49	305	370	330	360	402	474	681	719	628
Jharkhand	29	130	216	279	305	342	375	418	354	318
Karnataka	268	391	743	1477	1172	1245	1481	1639	1379	827
Kerala	256	264	285	314	346	347	459	496	442	434
Madhya Pradesh	42	51	49	49	60	74	77	79	85	81
Maharashtra	975	1026	1158	1189	1362	1594	1788	1813	1769	1527
Manipur	23	32	96	213	361	490	643	738	636	492
Meghalaya	225	428	744	520	559	641	661	560	116	85
Mizoram	2	5	95	99	73	65	57	101	102	109
Orissa	105	144	349	559	645	912	940	897	826	821
Rajasthan	100	200	375	504	510	590	655	732	128	85
Sikkim	3	10	68	144	137	132	166	176	188	130
Tamil Nadu	60	105	113	121	125	128	156	153	134	127
Telangana	74	79	88	111	104	128	132	174	154	142
Tripura	70	72	76	86	100	258	290	288	264	255
Uttar Pradesh	86	109	159	175	191	209	233	253	198	185
Uttarakhand	3	5	11	43	45	46	46	48	46	47
West Bengal	57	57	62	64	75	92	95	125	133	127