सत्यमेव जयते

Report of the Comptroller and Auditor General of India

Performance Audit on Land Records Management in Tamil Nadu

लोकहितार्थ सत्यनिष्ठा

Dedicated to Truth in Public Interest

Government of Tamil Nadu
Report No. 3 of 2022

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Comptroller and Auditor General of India

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PREFACE

This Report for the year ended March 2021 has been prepared for submission to the Governor of Tamil Nadu under Article 151 (2) of the Constitution of India, for being laid before the State Legislature.

The Report of the Comptroller and Auditor General of India contains the results of Performance Audit on Land Records Management in Tamil Nadu covering the period from 2016-21.

The instances mentioned in the Report are those, which came to notice in the course of the performance audit conducted during August 2020 to October 2021. Matters relating to the periods outside the audit period have also been reported in places where they were found necessary.

The Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

The Purpose

Land is an important natural resource of every country. It plays a major role in economic progress, social development, environmental protection, etc. Besides owning large chunks of land, Government is the custodian of all lands. Government seeks to regulate private ownership of land for orderly development. It is one of the oldest and most prominent functions of Government.

In 2008, Government of India (GoI) launched the National Land Records Modernisation Programme (NLRMP) with the objective of digitising all land records, to improve their quality and to make them more accessible. In 2016, NLRMP was revamped as the Digital India Land Records Modernisation Programme (DILRMP). It is being implemented as a centrally sponsored scheme with cent *per cent* GoI funding with effect from 1 April 2016. DILRMP seeks to (a) usher in a system of updated land records, (b) automate mutation, (c) integrate textual and spatial records, (d) interconnect Revenue records and Registration records and (e) establish conclusive land titles and title-guarantee.

This Performance Audit was conducted to assess (1) the achievement of computerisation in ensuring a conclusive land-titling with title guarantee (2) the effective use of data by Revenue and Registration Departments, and (3) the efficacy of the system in place for ensuring data security, capacity building, monitoring, etc.

Results in brief

At the outset, digitization of land records in the State has resulted in better access and more transparency in land record management. The outcomes of the scheme were, however, marred by significant deficiencies in converting manual records into digital records, abnormal delays in launching online services for *Natham* land records and *e-Adangal*, and unresolved issues affecting transparency and timely delivery of online *patta* transfers. Moreover, there were also deficiencies in data linkage between Registration and Revenue Departments, asset management, data security and monitoring of the scheme.

Principal Findings

- In 61 *per cent* of the sampled villages, there were significant differences in the total land area of the village, between the manual and computerised A-Register.

(Paragraph 2.2.1)

- Lack of validation controls in the application software resulted in errors and discrepancies in capture of old Survey numbers and assigning Sub- division numbers as per notation rules.

(Paragraphs 2.2.2 and 2.2.3)

- Continued erroneous classification of 3.22 lakh private land parcels as Government land in the computerised land records has put the land owners to hardship.

(Paragraph 2.2.4)

- Multiple *patta* numbers assigned to a single land owner in a village and redundant *patta* numbers hampered the workflow processing of online *patta* transfers.

(Paragraph 2.2.5)

- Computerisation of Field Measurement Sketches (FMS) is far from complete. Delivery of services to citizen was impacted, as 6.25 out of 23.25 lakh Sub-divisions in the A-Register had no corresponding entries in the FMS database. FMS data also had errors in land area when compared to computerised A-Register.

(Paragraphs 2.3.1 and 2.3.2)

- As of March 2021, 1.42 crore computerised and validated *Natham* land records were not brought on-line even after four years and also had deficiencies. The *e-Adangal* Project, taken up in 2017, was not fully implemented.

(Paragraph 2.4 and 2.5)

- In the sampled taluks, delays in approving, rejecting and processing of on-line *patta* transfer applications, which did not involve Sub-division, were 43 *per cent*, 79 *per cent* and 60 *per cent* respectively. Similarly, delays in approving, rejecting and processing of on-line *patta* transfer applications, which involved Sub-division, were 53 *per cent*, 93 *per cent* and *73 per cent* respectively.

(Paragraph 3.1.1)

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- Despite integration of data between Registration and Revenue Departments, 49 *per cent* of *patta* transfers, not involving Sub-divisions, were rejected resulting in delays and hardship to land owners. Due to incorrect classification of OPT applications, abnormal delays were noticed in approving, rejecting and processing on-line applications seeking *patta* transfers.

(Paragraph 3.1.2 and 3.1.6)

- Manual scrutiny of sample *patta* transfer applications disclosed that 66 *per cent* of the applications were approved incorrectly. Similarly, 86 *per cent* of applications were rejected incorrectly.

(Paragraph 3.1.5)

- The Resurvey work taken up is incomplete and in its present form could not reach the final stage of 'Settlement'. In three sample Taluks the 'Settlement' process was still in progress though the town survey work commenced 13 to 19 years ago.

(Paragraphs 4.1.1 and 4.1.2)

- Despite spending ₹ 33.91 crore under the scheme for establishing Land Record Management Centres (LRMCs), 15 out of 22 LRMCs in the sampled taluks did not have all the envisaged facilities.

(Paragraph 4.2.1)

- Monitoring at all levels was deficient and especially at the district level, in three sampled districts, the monitoring committee did not meet even once.

(Paragraph 5.6)

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CHAPTER I
INTRODUCTION

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CHAPTER I

INTRODUCTION

1.1 About the schemes

Government of India (GoI) launched (2008) the National Land Records Modernisation Programme (NLRMP) to achieve digitization of all land records, to improve their quality and to make them more accessible. NLRMP is a Centrally Sponsored Scheme formulated by merging two Centrally Sponsored Schemes of Computerisation of Land Records[1] (CLR) and Strengthening of Revenue Administration and Updating of Land Records[2] (SRA&ULR). NLRMP, was revamped as the Digital India Land Records Modernisation Programme (DILRMP) with cent *per cent* Central funding with effect from 1 April 2016.

Major components of DILRMP are: (i) computerisation of record of rights; (ii) digitization of cadastral maps; (iii) integration of record of rights (textual) and cadastral maps (spatial); (iv) survey/resurvey; (v) modern record rooms; (vi) computer centres at taluk, Sub-division, district level and data centre at State level; (vii) connectivity between revenue offices; (viii) computerisation of registration; (ix) connectivity between Sub-Registrar offices and taluks; and (x) integration of registration and land records. The main objectives of DILRMP are

- To usher in a system of updated land records
- Automatic mutation
- Integration between textual and spatial records
- Interconnectivity between Revenue records and Registration records
- To replace the present deeds registration and presumptive title system with conclusive title and title-guarantee.

NLRMP was to be completed by the end of the 12th Five Year Plan period *viz.,* 31 March 2017 and as per the revised DILRMP guidelines, the State targeted to complete all the components/activities of DILRMP latest by 31 March 2020.

1.2 Audit Objectives

The objectives of audit will be to assess whether:

(i) the Record of Rights (RoR) computerisation, digitization of maps, survey/resurvey of lands and activities under other components were carried out to achieve conclusive land-titling system with title guarantee,

Abbreviations used in this report are listed in the Glossary at Page 102

[1] CLR was launched in 1988-89.

[2] SRA&ULR was launched in 1987.

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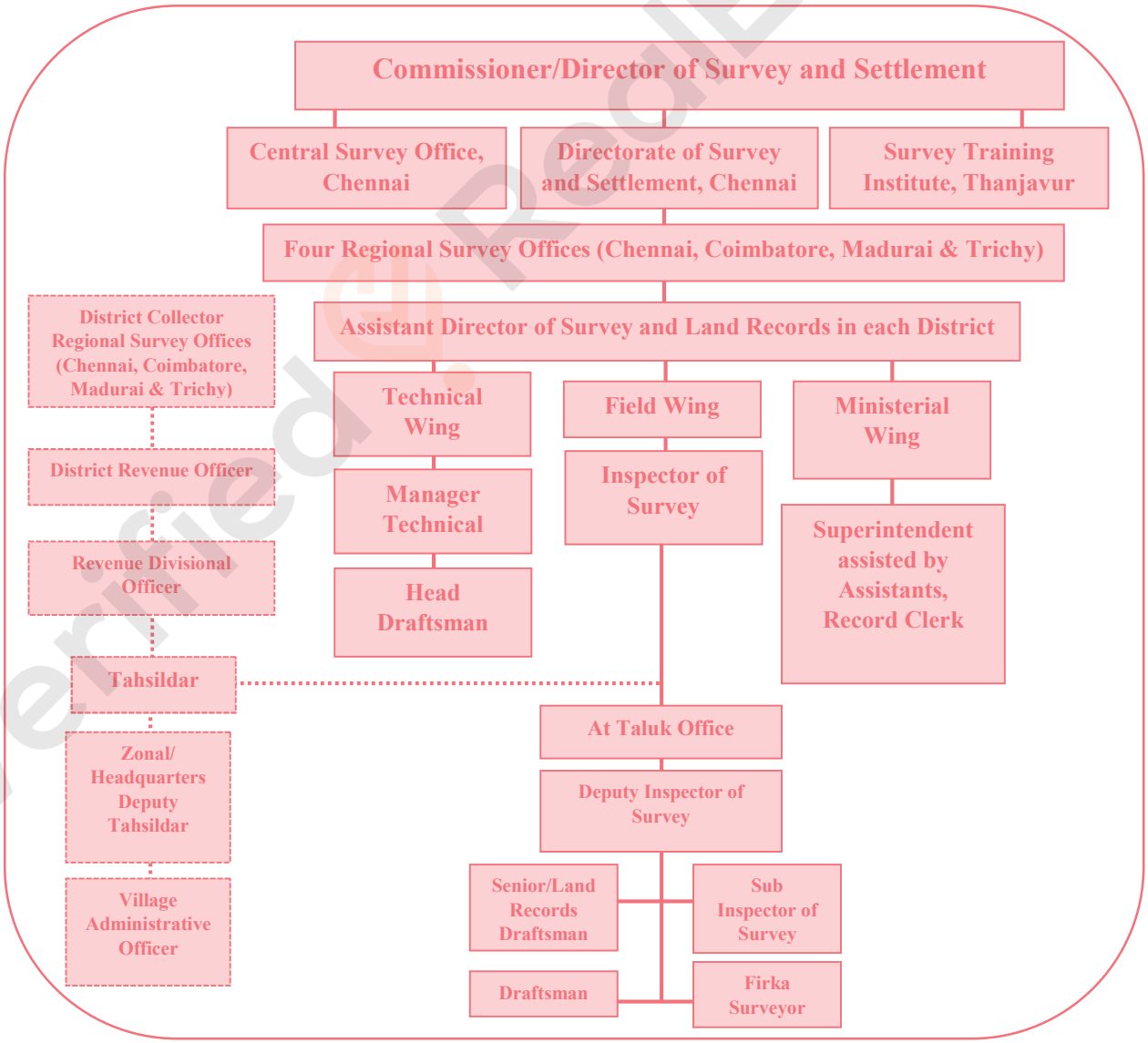
(ii) the available data is effectively used by the Revenue and Registration Departments, and

(iii) data security, required infrastructure, adequate training and capacity building for effective maintenance and sustenance of the scheme were in place and monitoring of the programme was adequate.

1.3 Organisational set up

The Revenue and Disaster Management Department (R&DMD), headed by the Additional Chief Secretary to the Government, is the custodian of Government land. The Director of Survey and Settlement (DoSS), coming under R&DMD, heads the field formations handling the land records of the State. All Survey and Settlement schemes and other related works are designed, implemented and monitored by the DoSS. A chart depicting the organisational structure of the Directorate as well as the hierarchy of Revenue officials associated with land records is shown in **Exhibit 1.1** below.

Exhibit 1.1 – Organisational set up



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1.4 Audit Scope

The Performance Audit (PA) covered the activities during 2016-21. The field visits included examination of records at the offices of R&DMD, DoSS, Assistant Directors of Survey and Land Records (ADSLR) and Taluks.

Audit sampled 25 *per cent* of the 32 districts[3] in the State, i.e. eight districts. *viz.,* Chennai, Kanyakumari, Madurai, Perambalur, Thanjavur, The Nilgiris, Tiruvallur and Tiruppur. Sample selection was done by geographically grouping the 32 districts into West, East, South and North regions and adopting stratified random sampling method. Taluks are responsible for maintaining the registry of land records and for carrying out Sub-division and mutations of land records. Therefore, out of the 305 Taluk offices in the State at the time of commencing the PA, 22 Taluks[4] being 25 *per cent* of the Taluks in each of the selected districts were selected by random sampling for field verification.

1.5 Audit Methodology

Patta transfer (Record of Rights) transactions relating to all the lands in the State are carried out through a web-based online workflow system developed and maintained by the National Informatics Centre (NIC). Tamil Nadu Information System on Land Administration and Management (*TamilNilam*) database and Field Measurement Sketches (FMS) database in CollabLand[5] are the back-end databases for the above computerised workflow system. Audit obtained and analysed the back-end data of land record management, *viz., TamilNilam* data of Rural and Urban areas, including Online *Patta* Transfer (OPT), *Natham*[6] and *Adangal*[7] data, together with the CollabLand data of FMS as 'data dumps', in respect of the 22 sampled taluks. The observations emerging from the data analysis were verified randomly in the selected 22 Taluks to ensure data accuracy and completeness.

The Audit commenced with an entry meeting with the Additional Chief Secretary, R&DMD and the DoSS on 22 July 2020 to discuss the audit objectives. An exit conference was held with the Principal Secretary, R&DMD and the DoSS on 4 October 2021 to discuss the Audit observations.

---

3 At the time of commencement of Audit, the State had 32 districts.

4 (i) Alandur, (ii) Velachery, (iii) Mambalam and (iv) Madhavaram Taluks in Chennai District; (v) Agastheeswararm and (vi) Vilavancode Taluks in Kanyakumari District; (vii) Madurai North, (viii) Tirupparankundram and (ix) Madurai East Taluks in Madurai District; (x) Perambalur and (xi) Veppanthattai Taluks in Perambalur District; (xii) Thiruvaiyaru, (xiii) Papanasam and (xiv) Thiruvidaimaruthur Taluks in Thanjavur District; (xv) Kothagiri and (xvi) Udhagamandalam Taluks in the The Nilgiris District; (xvii) Avadi, (xviii) Gummidipoondi and (xix) Tiruvallur Taluks in Tiruvallur District; (xx) Tiruppur-North, (xxi) Uthukuli and (xxii) Avinashi Taluks in Tiruppur District.

5 Software for digitization and mosaicing of survey maps.

6 Dwelling area of a village.

7 Basic land register which captures season-wise crops cultivated by the farmers, its yield, irrigation source etc.

The replies received from DoSS, eight ADSLR offices and 22 Taluks and the response of the Department in the exit conference were considered while drafting this Report.

1.6 Audit Criteria

With a view to validate the Audit Objectives (i) and (iii) mentioned under **Paragraph 1.2** above, the audit findings were benchmarked against the following criteria:

- NLRMP and DILRMP guidelines issued by Government of India.
- Survey Manual - Volumes I ,II and III; Chain Survey Manual-Volumes I & II, 1923; Tamil Nadu Survey Boundaries Act / Rules.
- Registration Manual/Revenue Manual/Revenue Standing Orders/ Board of Standing Orders.
- Government Orders issued by R&DMD.
- Notifications/Gazette/Amendments to Legislative Act.
- Agreements between GoI and GoTN, NIC etc.
- Tamil Nadu Tender Transparency Act, 1998 and Rules.

Similarly, with a view to validate the Audit Objective (ii), the audit findings were benchmarked against the following criteria:

- System Requirement Specifications/User Manuals relating to software applications.
- Guidelines/circulars/instructions issued by DoSS/Project Management Unit/Committees.

1.7 Previous Audit Reports

Two Performance Audits (PA) on Computerisation of Land Records were included in C&AG's Audit Reports on GoTN for the years 2002-03 and 2008-09. The Public Accounts Committee (PAC) of the Legislative Assembly discussed the findings included in the AR 2002-03 and gave its recommendations in 2012. The PA included in the AR 2008-09 is yet to be discussed (March 2022) by the PAC.

Despite bringing out various issues in the management of land records in these two PAs, GoTN had not taken effective action on the inaccuracies in land and ownership details, deficiencies in Field Measurement Sketches etc., which resulted in non-achievement of objectives of Computerisation of Land Records.

1.8 Acknowledgement

Audit acknowledges the co-operation and assistance extended by the Department and audited entities in conduct of this Performance Audit. Audit also acknowledges and appreciates the action taken by the Government to put

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in place a suitable system through two[8] Government Orders issued in October 2021 to address issues such as (i) data entry errors, (ii) missing entries, (iii) land extent correction, (iv) owner/relative name corrections including relationship status, (v) enumerating classification changes like Government to Private and vice versa etc. pointed out in this report.

1.9 Audit Findings

The audit findings are grouped under the following Chapters.

- Chapter II: Computerisation of land records
- Chapter III: Citizen services
- Chapter IV: Project implementation
- Chapter V: Data security and monitoring

[8] R&DMD (Survey and Settlement Wing) G.O. Ms. No. 612 dated 01/10/2021 and G.O.Ms. No. 644 dated 11/10/2021.

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CHAPTER II

COMPUTERISATION OF LAND RECORDS

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CHAPTER II

COMPUTERISATION OF LAND RECORDS

2.1 Status of computerisation of land records

2.1.1 Physical progress

The important land records in rural areas of the State are (i) 'A' Register[1], (ii) *Chitta*[2], (iii) Field Measurement Book (FMB), (iv) *e-Adangal* and (v) Village maps. Land records of urban areas are (i) Town Survey Land Register (TSLR) and (ii) Block maps. The manual land records are over a century old. Under a scheme for Updating of Registry (UDR), the manual land records relating to all agricultural lands were inspected and the revenue records were updated during 1979-87.

Computerisation of Land Records (CLR) scheme was launched in 1988-89. After computerising 'A Register' and *Chitta*, the *TamilNilam* application started running in stand-alone computers in all the taluks from 2002. In 2014, a special drive was carried out to make *TamilNilam* error-free and the system was brought online. By 2016, under DILRMP, all land records except *Natham* textual and Urban spatial records were made online and as of 2020-21, 3.75 crore textual records and 0.55 crore spatial records are held online in *TamilNilam*. But 1.42 crore *Natham* land records are still maintained in stand-alone computers in district survey offices. The component-wise status of DILRMP as of March 2021 is given in **Table 2.1**.

Table 2.1: Component-wise status of DILRMP

Component	Status as of March 2021
Creation of Land Records Management Centres (LRMC)	Out of the 305 LRMCs proposed, 161 were completed and 144 LRMCs are yet to be established.
Data entry	Data entry of Rural, Urban and *Natham* textual land records has been completed. While Rural and Urban land records have been brought online, *Natham* is yet to be brought online as software is under development.
Creation of Taluk/Division/District data centres	Completed
State Data Centre for Land Records	Completed
Interconnectivity	Established
Project Management Unit (PMU)	Established
Digitization of Cadastral Maps	Out of 55.20 lakh FMS in rural taluks, 54.90 lakh were digitized and brought online. In urban taluks only 2,343 FMS out of 25,840 have been digitized so far.
Survey/Resurvey	Resurvey taken up in the pilot taluks in three districts is in progress.
NLRMP Training Cell	Created and functioning in Orathanadu, Thanjavur District.

(Source: Details furnished by DoSS)

1 Land register containing details of Survey number, Sub-division number, old Survey number, whether part or independent, Government/Private, Dry/Wet, Irrigation source, Cropping frequency, Soil texture, Soil quality, Rate of tax per hectare/Ares, Area (Hectares/Ares), Total tax, *patta* number and remarks for each land parcel.

2 Document providing details of ownership of land.

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2.1.2 Financial management

As per guidelines of NLRMP, the funds are managed by NLRMP Implementation Society of Tamil Nadu (NIST), which is registered under the TN Societies Registration Act, 1975. The year-wise expenditure during the audit period, and the component-wise breakup since commencement of the scheme are furnished in **Tables 2.2** and **2.3** respectively**.**

Table 2.2: The year-wise breakup of release of funds and expenditure during the audit period

(₹ in lakh)

Year	Fund released	Expenditure	Balance
2016-17	40.00	37.21	2.79
2017-18	10.00	10.00	0
2018-19	1,530.21	1,300.07	230.14
2019-20	375.13	18.94	356.19
2020-21	230.63	83.54	147.09
Total	**2,185.97***	**1,449.76***	**736.21**

* Details of funds released and expenditure shown here differs with that shown in Columns (4) and (5) in Table 2.3 which include the funds released and expenditure incurred since 2011-12

(Source: Details furnished by DoSS)

Table 2.3: The component-wise breakup of release of funds and expenditure

(₹ in lakh)

Component	Funds released			Expenditure	Balance available	Percentage of expenditure to funds released
	GoI	GoTN	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7) ((5)/(4) x 100)
Creation of LRMCs	2,742.50	1,545.00	4,287.50	3,390.88	896.62	*79*
Data entry	123.00	0	123.00	121.18	1.82	*99*
Creation of Taluk/Division/ District data centers	259.80	0	259.80	250.26	9.54	*96*
State Data Centre for Land Records	200.00	0	200.00	198.73	1.27	*99*
Interconnectivity	89.60	0	89.60	89.60	0	*100*
Creation of NLRMP Cell	173.77	0	173.77	159.68	14.09	*92*
Project Management Unit	67.20	0	67.20	59.52	7.68	*89*
Expenses towards meeting	1.49	0	1.49	1.49	0	*100*
Digitization of Cadastral Maps	319.00	0	319.00	319.00	0	*100*
Survey/Resurvey	728.79	1,002.21	1,731.00	1,518.16	212.84	*88*
NLRMP Training Cell	147.34	0	147.34	0	147.34	*0*
Total	**4,852.49**	**2,547.21**	**7,399.70**	**6,108.50**	**1,291.20**	*83*

(Source: Details furnished by DoSS)

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Under the 'Survey/Resurvey' component, despite utilising 88 *per cent* of funds, the works were completed only in 19 to 24 *per cent* of the villages in the three Taluks where these works were taken up, as discussed in **Paragraph 4.1.1**.

Only 53 *per cent* of LRMCs were established despite utilising 79 *per cent* of the funds earmarked therefor, as commented in **Paragraph 4.2**.

DOSS did not utilise the funds earmarked for setting up NLRMP Training Cell at Chennai, and hence the entire provision of ₹ 1.47 crore was lying idle with NIST.

2.2 Textual land records

As per para 6.4.1 of GoTN Policy Note for the year 2016-17, the land records are maintained in two formats *viz.,* textual ('A-Register' containing details of land and '*Chitta*' containing details of ownership) and Spatial (Field Measurement Sketches).

2.2.1 Differences in land area captured in manual and computerised A-Registers

As per Rule 27 of Chapter IX of Survey Manual Volume I, the area of the village should be the sum of the areas of the Survey fields in that village. Audit compared the land extent between the computerised (in *TamilNilam*) and the manual A-Registers of the 463 test-checked[3] villages, variations (61 *per cent*) in the extent were noticed in 282 villages (**Appendix 2.1**).

To ascertain the reasons for the above variation, Audit reconciled the land extent of each Sub-division under all the Survey numbers in one village in each of the sampled taluks.

- For eg. in Kattanagaram village of Tiruvidaimarudhur Taluk in Thanjavur District, out of the five Survey numbers where there was difference in area of land between manual A-Register and computerised A-Register, in four Survey numbers the area as per computerised A-Register was lesser by 17 Ares. In one Survey number the area was more by 0.25 Are. The details are given in **Appendix 2.1 (a)**.

In response to Audit, the Tahsildars attributed the differences in the land extent to (i) incorrect totalling in the UDR A-Register, (ii) omission during computerisation and (iii) data entry errors.

However, the fact was that the wrong entries and totalling errors caused these deficiencies even after carrying out a special drive in 2014 for verification and updation. The Principal Secretary to Government and DoSS accepted (October 2021) the points relating to wrong entries and agreed to take corrective action to rectify the differences.

[3] Ten randomly selected villages per sampled taluk were checked. In taluks, where the number of villages were less than 10, the actual number of villages were checked. In Tiruvallur, Avinashi and Madurai East taluks, based on the data furnished, all the villages were checked.

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2.2.2 Capturing information from manual registers to computerised records

An order issued by GoTN in September 2003, made the computerised land records as the only legally valid document and envisaged ensuring its accuracy. During digitization of manual land records, all information available in A-Register and *Chitta* were to be taken to the computerised system without any omission or error. Since the computerised records form the basis for all land transactions, the correctness and completeness of the computerised records were verified in Audit. The deficiencies noticed in this regard are as follows:

(i) Rule 44 under Chapter VI (Field Demarcation) of the Tamil Nadu Survey Manual of Departmental Rules (Volume-I) published in 1976 state that 'fields must be numbered consecutively throughout a village commencing from the north-west corner of the first *khandam*[4]. The last field in the first *khandam* must touch the boundary of the second *khandam* and so on, so that there may be no break in the continuity of the numbers'. An analysis of the *TamilNilam* Rural database disclosed that there were gaps in the Survey numbers. In the verification it was found that the gaps were mainly due to clubbing of Survey numbers and splitting of villages. However, the computerised A-Register did not contain information about the clubbed Survey numbers and their respective land type. The details of such cases noticed in the sampled taluks are furnished in **Appendix 2.2**.

Under the manual system, whenever there was skipping of Survey numbers, reasons for the same were indicated in the manual A-Register against each number. However, in the *TamilNilam* software, no suitable provision was made to capture and store this information. Non-capture of all land details would be an impediment to the field level survey officials and impact smooth flow of information to the public. Thus, incorrect mapping of business rule had resulted in discontinuity in Survey numbers. The Principal Secretary instructed (October 2021) DoSS/NIC to look into the issue and put up an action plan for capturing the missing information.

(ii) As laid down in the Survey Manual, land parcels under a Survey number will be assigned a new Sub-division number whenever they are sub-divided or clubbed. In order to keep track of the history of the sub-divided/clubbed land parcels, the Survey number under which the Sub-division/clubbing took place is stored in the 'Old Survey number' column in the manual system. The computerised system also provides for a column to store the old Survey number.

With a view to ascertain the completeness and correctness of the old Survey numbers stored in the *TamilNilam* database, Audit examined the data of sampled taluks and found that in 5,06,518 out of 23,24,618 records (22 *per cent*) the old Survey number column did not contain any reference to the Survey number from which the Sub-division was done. The details are given in **Appendix 2.3**.

[4] Survey field in a village.

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The missing/incomplete information in the data was due to lack of input controls in *TamilNilam* software. It is the responsibility of the DOSS to ensure a trail of land transactions as it has legal implications. The failure of the system to keep track of the old Survey numbers would lead to legal complications. The Principal Secretary instructed (October 2021) NIC to ensure that old Survey numbers are correctly captured in the system and also rectify the errors pointed out by Audit.

(iii) A special drive to clean the Survey/Sub-division numbers having special characters like '= / . - space' was undertaken from December 2018. In this regard, Tahsildars were tasked with the work of checking and reconciling such Survey and Sub-division numbers, communicated by NIC through the ADSLR, with the respective A-Register/*Chitta*/FMS and to send the purified data to NIC through DOSS for cleansing *TamilNilam* database.

However, from the data analysis of sampled rural and urban taluks it was found that 212 Survey and 1,282 Sub-division numbers continue to carry special characters as given in **Appendices 2.4 (a)** and **(b)**. These discrepancies persist despite undertaking the special data cleaning drive. Capturing of inadmissible special characters would impact issue of online *patta* as the system would not respond to the actual Sub-division number keyed in by the applicant.

2.2.3 Non-adherence of notation rules while sub-dividing land parcels

DoSS reiterated (November 2017) the revision of notation rules restricting the length of the Sub-division number to a maximum of four digits/characters and intimated NIC that if the number of characters in the existing Sub-division exceeds four digits/character, while creating a new Sub-division, the next to the last of the whole Sub-division number within the same Survey number should be automatically assigned as the next Sub-division number. It was also stated that it is mandatory to retain the parent Sub-division number.

During field visit to taluks, it was noticed that the software prompts for new numbers to be provided for newly sub-divided land parcels thereby preventing the retention of parent Sub-division number for the newly sub-divided parcel.

Audit noticed that out of 23,24,618 Sub-divisions in 1,029 villages of the sampled taluks, in 53,711 instances the Sub-division notation exceeded the four-character limit. Number of such instances that occurred after the implementation of Online *Patta* Transfer (OPT) i.e. 2016 was 34,656. The details of such instances are given in **Appendix 2.5**.

In 2,70,692 Sub-divisions relating to transactions Involving Sub-divisions (ISD) (**Appendix 2.6**) in the sampled taluks, it has been observed that the mandatory retention of parent Sub-division number had not been followed as illustrated below:

- In Placepalayam village of Tiruvallur Taluk, the parent Sub-division 3A1A under Survey number 292 was sub-divided into 3A1A1 and 3A1A2. As per the revised notation rule, one of the

newly sub-divided land parcel should have retained parent Sub-division *viz*. 3A1A.

- In Movur village of Tiruvallur Taluk, the parent Sub-division 1A1 under Survey number 224 was sub-divided into 1A1A, 1A1B, 1A1C, 1A1D, 1A1E, 1A1F and 1A1G. In this case, one of the newly sub-divided land parcel should have retained parent Sub-division *viz.* 1A1, in line with revised notation rule.

2.2.4 Classification of private lands as Government lands

As per the Survey Manual, *Patta* is the document establishing the ownership of lands held by individuals. Therefore, *patta* cannot be issued to private parties for lands, which are categorised as 'Government land'. During scrutiny of files in the office of the DoSS, Audit noticed that certain *patta* lands (private lands) in Coimbatore District were not accessible in *TamilNilam* for the applicant to register OPT applications through Common Service Centre (CSC) or for downloading Record of Rights (RoRs). These *patta* lands categorised as 'Government *Punjai*'[5] in the original survey records of 1912, had *patta* numbers as per the system in vogue at that time. In the subsequent Town Survey (1955), these lands continued to be categorised as '*Sarkar Punjai/Nanjai*'[6]. Later, under Updating of Registry (UDR) scheme (1979) in the Towns, the ownership type of these lands was recorded as '*Ryotwari Nanjai/Punjai*'[7] and *pattas* were issued. At the time of computerising urban land records these lands were captured under the category '*Sarkar Nanjai/ Punjai*' in the *TamilNilam* (Urban) database based on Town Survey records instead of relying on UDR scheme which categorised these lands as '*Ryotwari*'.

Any change in land classification from Government to private required the orders of the District Collectors. Therefore, all the District Collectors were informed (September 2018) about the wrong categorisation of 6.22 lakh land records across 111 towns in the State i.e., land parcels reflected in Revenue records as private ownership but classified as *Sarkar Nanjai/Punjai/Manai/ Poromboke*[8], for taking suitable action.

DoSS replied (January 2021) that this issue was prevalent across 30 districts and stated (October 2021) that nearly 3 lakh out of the 6.22 lakh cases have been rectified till date and assured that the remaining cases would also be rectified soon.

It is, however, a matter of serious concern that owners of about 3.22 lakh land parcels are put to hardship in getting *patta* transfers.

5 Government dry lands.
6 Government dry lands/wet lands.
7 Private dry lands/wet lands.
8 Government wet lands/dry lands/residential plot/waste lands.

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2.2.5 Deficiencies in ownership details

As per System Requirement Specifications (SRS) of *TamilNilam, Patta* number is the common information, which links the A-Register (details of lands) and the *Chitta* (details of owners) tables. The *Patta* extract (RoR) issued to the land owners is generated by combining information from these two tables. Data analysis of '*Chitta*' table revealed the following deficiencies:

(i) Assigning of multiple *patta* numbers to single *pattadhar* in a village: As per SRS of *TamilNilam*, if the buyer already has a *patta* number in that village, then his new land holdings would be added to that *patta* number. This control is intended for ascertaining the maximum extent of land that a family can hold in the State as envisaged under the Tamil Nadu land Reforms (Fixation of Ceiling on land) Fourth Amendment Act, 1972 (Tamil Nadu Act 39/72). New *patta* number would be assigned only for new *Pattadhars (*one who holds the land title).

Data analysis in sampled rural taluks revealed that 1,43,808 land owners in 1,029 villages **(Appendix 2.7 (a))** were assigned different *patta* numbers for their land holdings within a village. Similar analysis in the sampled urban taluks revealed that 29,128 land owners **(Appendix 2.7 (b))** were assigned different *patta* numbers for their land holdings within a village.

Even after implementation of OPT system, 66,290[9] such cases were created as controls in *TamilNilam* were inadequate as it allowed the workflow officials to bypass the existing *patta* number.

DOSS stated (October 2021) that Aadhar integration could be an effective solution and till its implementation, suitable instructions would be issued.

(ii) Discrepancies in ownership details: *Patta* is the primary land document which gives conclusive titling rights to the land owner and it should be complete in all aspects. Data analysis in the sampled taluks revealed discrepancies in 75,929 (3.27 *per cent*) out of 23.25 lakh Sub-divisions. As these discrepancies are only in respect of the sampled 22 out of 305 taluks (seven *per cent*), the magnitude of similar cases across the State would be significant. Hence, timely remedial action by the Department is required. The details are discussed below:

- 13,359 private lands did not have any ownership information like name of the owner, name of the relative and the nature of relationship (father, son, mother, wife etc.). In another 8,68,140 cases, though a record was available in the '*Chitta* table'[10], the name of owner/relative was not available. As a result RoRs downloaded by the citizen would be without complete information.

[9] 50,553 cases in the sampled rural taluks and 15,737 cases in the sampled urban taluks.

[10] '*Chitta* table' contains the ownership details of private lands in the following columns *viz.*, *Patta* Number, Owner Name, Relative Name, Owner Number, Relative Number etc.

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- The combination of owner name, relative name and *patta* number should be unique and should not be duplicated in the '*Chitta*' table. It was, however, seen that in 19,374 records of the *Chitta* table, this combination occurred more than once for a *patta* number resulting in duplication of owner name in the *Chitta* copy generated through e-services.

- In 43,196 cases, it was found that there were names ending with 'ற' and 'ம' instead of 'ர்' and 'ம்' respectively. Hence, an error in Tamil will result in the English spelling of the name 'Kumar' as 'Kumara'. Similarly the name 'Venkatram' will be 'Venkatrama'. In all these cases the *Pattadhars* have to apply for name change for getting the owner/relative name with correct spelling in their *patta*/*Chitta* extracts. As the above inaccuracies are only sample cases pointed out by Audit, corrective action has to be taken by the Department to identify and rectify errors of similar nature in all taluks and also take suitable steps to prevent recurrence of such events.

The above deficiencies were grouped rural and urban taluk-wise and are given in **Appendices 2.8 (a)** and **2.8 (b)** respectively. DoSS stated (October 2021) that necessary steps would be taken to resolve the issues.

(iii) Redundant *patta* numbers: Data analysis in sampled rural and urban taluks revealed that 2,95,780 out of 16,15,975 *patta* numbers **(Appendices 2.9 (a)** and **2.9 (b))** in *Chitta* table in the *TamilNilam* software were available with no matching entry in the A-Register. On further analysis, it was observed that these were redundant *patta* numbers as the connected land parcel had already been assigned with a new *patta* number during subsequent land transactions.

As the land transactions in the State are completely dependent on the *TamilNilam* database, keeping the redundant *patta* numbers poses a risk of misuse in the online workflow system.

DoSS stated (October 2021) that redundant *patta* numbers were required for tracing all land mutations that a land parcel underwent. DoSS further added that these redundant records would be archived separately within the database to prevent their misuse.

As the *patta* number is the common information, which links the A-Register and the *Chitta* tables, once a new *patta* number is assigned to the land transferred to new owner, details of the old *patta* number in the A-Register and *Chitta* tables should be moved together and archived separately. If this is not done, the old *patta* number in the *Chitta* table without a corresponding entry in the A-Register could be misused to issue *patta* to wrong persons. Therefore, it is suggested that necessary action to archive the old *patta* number should be taken to make the system efficient.

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2.2.6 Inconsistent capture of legacy records in *TamilNilam* (Urban) database

As per para 3.1 of DILRMP guidelines, all textual land records and other attributes of land are to be computerised. However, examination of the Management Information System (MIS) reports revealed that there were land records yet to be brought into *TamilNilam* software, which were pending verification by the Tahsildar. It would be available online for OPT transaction only after verification. The pendency in such instances in the sampled taluks are as detailed in **Table 2.4**.

Table 2.4: Inconsistent capture of legacy records in *TamilNilam* (Urban) database

Taluk	Number of 'Land not verified' cases	Number of 'Owner not verified' cases
Alandur	-	1
Madurai North	28	68
Mambalam	-	333
Thirupparankundram	33	2
Tiruppur North	-	1
Tiruvallur	22	55
Velachery	5	6
Total	**88**	**466**

(Source: Tahsildar's login in the *TamilNilam* workflow system)

Due to this, whenever an individual applies for OPT transactions in respect of these land records (**Table 2.4**) a message 'Contact Tahsildar' pops-up in the OPT registration screen. Unless these cases are verified and updated in *TamilNilam*, the land owner cannot apply for OPT. Taluk offices attributed damaged/missing land records for the 'non-verified' status of these cases. Thus, the MIS reports are to be utilised by the Tahsildars to monitor the pendency and conduct the verification at the earliest.

2.2.7 Discrepancies in allotment of Sub-division numbers

As per Rule 44 and 45 of the Tamil Nadu Survey Manual Departmental Rules Volume-I, 'Sub-divisions in each Survey field should be numbered consecutively from the north-west corner of the field'. Lands records (Textual data of 'A' Register and *Chitta*) of Chennai District were ported to *TamilNilam* (Urban) in July 2016. During scrutiny of files in DoSS, Audit noticed that there were missing entries in the *TamilNilam* (Urban) database of Chennai District besides other errors. In order to verify these discrepancies, Audit obtained the MIS exception reports relating to Chennai District through the Department's login. The MIS report was then analysed and compared with e-services web portal and the observations are as follows:

When a Survey number is divided into two or more Sub-divisions, the Sub-division notation '0' should not be continued and the numbering should commence from '1' onwards. However, 910 Survey numbers with multiple Sub-divisions, had one of the Sub-division numbered as '0'. Further analysis

also revealed that there were gaps in the Sub-division numbers. Out of the above, it was seen that 3,416 Sub-divisions were missing under 137 Survey numbers.

In the illustration given in **Table 2.5**, while the last Sub-division is 5 (Record No.3), the Survey number 102 should carry five records as per the rule cited. The availability of only three records thus indicates that either two land record details were not brought into the *TamilNilam* database or the information captured was incorrect.

Table 2.5: Illustrative case of discrepancies in allotment of Sub-division numbers

Record No.	Town	Ward	Block	Survey number	Sub-division number
1	Ambattur	Mogappair	0060	102	0
2	Ambattur	Mogappair	0060	102	4
3	Ambattur	Mogappair	0060	102	5

(Source: MIS Report from the *TamilNilam* web portal)

Similar analysis of sampled urban taluks data revealed that 10,592 Sub-divisions in 978 Survey numbers were missing as detailed in **Appendix 2.10**.

DoSS in their reply (January 2021) stated that this occurred due to human error and such errors were rectified as and when brought to notice. He further stated that instructions were already issued through circulars (March 2020) and review meetings to complete the restoration of missing records. In continuation, GoTN has issued orders (October 2021) *inter alia* to verify and rectify the deficiencies pointed out. The reply of DoSS confirms that the VAOs and line officials need to be trained in this area or land related rules, provisions and processes so as to capture data without errors or minimise error.

2.2.8 Non-updation of land Sub-division changes in *TamilNilam* - Aranthangi taluk

As per GoTN order issued in December 2016, transfer of Record of Right should be carried out only through online mode. During scrutiny of files in the Directorate, it was seen that OPT applications were being rejected in Aranthangi Taluk, Pudukottai District due to the following discrepancies:

- The land Sub-division changes effected in the manual records *viz*., A-Register and *Chitta* were not captured/updated in *TamilNilam* resulting in name of earlier *pattadars* continuing in the system.
- 769 Sub-divisions of four Wards of Aranthangi Town (A Ward - 125; B Ward - 111; C Ward - 133 and D Ward - 400) were not captured in *TamilNilam*.

To an audit enquiry in this regard, DoSS stated (January 2021) that this was an isolated incident arising from human error and missed out during verification and that such errors were rectified as and when brought notice. It was also

stated that the errors were rectified/updated by tracing out the *patta* transfer files for the omitted entries. Audit cross checked (October 2021) the status of rectification and found that out of the 769 Sub-divisions only 271 were set right by capturing their details and the remaining 498 Sub-divisions were not yet brought into *TamilNilam*. In October 2021, GoTN has issued orders *inter alia* to verify and rectify the deficiencies pointed out.

2.3 Spatial land records

The spatial data has been organised in two ways *viz.*, (i) village maps with land parcel boundaries and (ii) ladder data of individual land parcels as Field Measurement Sketches (FMSs). FMS form an integral part of the land records and is the basic input for digitization and mosaicing[11] of the cadastral maps.

According to NLRMP guidelines 2009, FMS is the sketch showing measurement boundaries of the Survey number, and it contains measurement of all land parcels in a village. Thus, each Survey number should have a corresponding FMS showing measurement boundaries of the Survey number, outlines of all the Sub-divisions contained within the Survey number and the Survey number of all its adjoining fields. Field Measurement Book (FMB) contains several FMS covering all lands in a village. Digitization of FMSs result in faster processing of the FMS including creation of new Sub-divisions, modification of existing sketches, portability of data, facility to draw the FMS to different scales leading to higher clarity, and quicker delivery of copies of FMS to land owners.

The Department claimed (October 2020) that out of 55.20 lakh FMSs, digitization of 54.97 lakh FMSs were completed and brought online. The digitization work was executed in-house at the district level by outsourcing. Out of the 0.23 lakh FMSs required to be computerised, 0.20 lakh were stated to be missing and the available FMSs were yet to be computerised. DoSS stated that efforts were underway to trace the missing FMSs in the State's archive and those not traceable will be recreated through Resurvey. In the case of Block maps (Urban areas) the digitization was in progress and only 2,343 out of 25,840 were digitized so far.

In the CollabLand software[12], the process of digitization of FMS involved generation of FMSs based on the ladder data of legacy FMS. However, the area of the Survey number/Sub-division calculated and displayed in the FMS in CollabLand differed from the area as per the textual data i.e. manual A-Register. The Department attributed this difference to the traditional Survey methodology (using links and chains) that was adopted earlier and the computerisation of the traditional ladder data in CollabLand. To overcome this, the Department decided to overlay the area as per the manual A-Register

[11] Combining sketches of smaller and irregular land parcels to generate field maps, village maps and higher order maps.

[12] CollabLand software can handle a variety of Survey systems like Chain, Theodolite and Electronic Total Station. CollabLand can create maps of individual land parcels and mosaic them to village maps. Besides, it can import maps from Shape files, and can handle a host of measurement units.

on to the CollabLand generated FMSs to avoid complaints from land owners. For this purpose, the area of the Survey number/Sub-division as available in the computerised A-Register was brought into CollabLand by data entry. Prior to computerisation, land owners sought and obtained copies of their land sketches on payment of prescribed fees. Consequent to computerisation, the land owners can download the FMS free of cost through the Department's e-services web portal.

In order to derive assurance on the digitization of the legacy spatial data (FMS), its completeness, correctness and updation of subsequent land maintenance carried out at the Taluk level, Audit scrutinised related files and records in the office of the DoSS, offices of the ADSLR in the sample districts, the sampled taluks offices and the spatial database maintained in PostgreSQL. The findings are as follows:

2.3.1 Discrepancies between textual and spatial records

- Lack of matching Survey number between *TamilNilam* (Rural) and FMS database: All the Survey numbers available in A-Register (textual data) should have corresponding entries with matching details in FMS (spatial data). However, it was observed that 20,679 out of 2,58,661 Survey numbers **(Appendix 2.11)** did not have corresponding FMS in the CollabLand database.

- Lack of matching Sub-division number between *TamilNilam* (Rural) and FMS database: A similar examination to check whether all the Sub-divisions available in the A-Register had corresponding entries in the CollabLand database of the sampled taluks disclosed that 6,25,223 out of 23,24,618 Sub-divisions **(Appendix 2.12)** had no corresponding FMSs in the CollabLand database.

2.3.2 Differences in land area between *TamilNilam* (Rural) and FMS database

On comparison of the A-Register with FMS databases relating to the sampled taluks **(Appendix 2.13)**, it was found that the land area under 32,120 out of 2,37,982 Survey numbers and 2,27,459 out of 15,88,564 Sub-divisions were at variance.

The reason for this was that the Department did not auto populate the required details from the already available computerised A-Register and instead chose to capture the details by data entry. This resulted in incorrect display of land area in the FMSs in the above cases resulting in deficient service to citizens through the e-services web portal of the Department.

NIC accepted (October 2021) that these details were captured by data entry in CollabLand. The Department stated that these data entry errors would be rectified.

2.3.3 Differences in land extents captured and calculated in spatial (FMS) database

Considering the wide variations between the area in the A-Register and the area calculated by the CollabLand, the Department decided to permit variation

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allowance of up to five *per cent*. Audit analysed the FMS database by comparing the textual and the calculated areas. The analysis disclosed that the percentage of variation exceeded in 32,143 out of 2,37,974 FMSs in the sampled taluks as detailed in **Appendix 2.14**. The variation ranged from 6 to more than 100 *per cent*. This was due to lack of validation checks.

The Department replied (October 2021) that these variations would be checked in consultation with NIC and sorted out. DoSS also informed that A-Register and FMS would be integrated to avoid inconsistency shown in land area between the textual and spatial computerised data.

Cases of variations beyond the allowed limit should be reviewed, by doing a Resurvey using the latest technology, wherever required and the extent of land on the ground should be adopted to achieve conclusive land-titling system with title guarantee.

2.3.4 Inconsistent capture of details in spatial (FMS) database resulting in non-accessibility of FMS by citizens

It was noticed that in 55,386 out of 22,26,501 Sub-divisions (**Appendix 2.15**), the Survey number/Sub-division information was erroneously captured. In these cases, citizens would not be able to download their FMSs. A sample case bringing out the above deficiency is given in **Table 2.6**.

Table 2.6: Illustrative case of inconsistent capture of details in spatial (FMS) database

'landRecID' **3201003316**	**32** denotes Tiruppur District **01** denotes Tiruppur North Taluk **003** denotes Nerupperichal Village and **316** denote the Survey number which has two Sub-divisions *viz*., '1' and '2' as per A-Register
Survey number and Sub-divisions as per 'A-Register'	316/1, 316/2
Survey number and Sub-divisions as per spatial data	315/1, 315/2
In e-Services, only the Sub-divisions as available in the A-Register under the selected Survey number were displayed to the user to fetch either the *patta* or the FMB. In the above instance, when either Survey number/Sub-division 316/1 or 316/2 was selected by the user for downloading the FMS, the e-services portal displayed the message 'Sub-division 316/1 does not exist in the map' or 'Sub-division 316/2 does not exist in the map', and did not display the FMS.	

(Source: FMS database furnished by the Department)

ADSLR, Tiruvallur while accepting the erroneous data entry, replied (August 2021) that they have rectified the data entry error in the sample cases pointed by Audit. ADsSLR, Tiruppur and Madurai (August/September 2021) stated that these errors would be rectified after verification of FMS data with *TamilNilam* data on getting orders from DoSS for the proposed special drive.

2.3.5 Incorrect capture of adjacency details in FMS

Paragraphs 140 to 143 under Chapter XIII of The Tamil Nadu Survey Manual of Department Rules Volume I, envisage that the measurements for the common boundaries between adjoining properties and blocks should be carefully examined to see whether they agree.

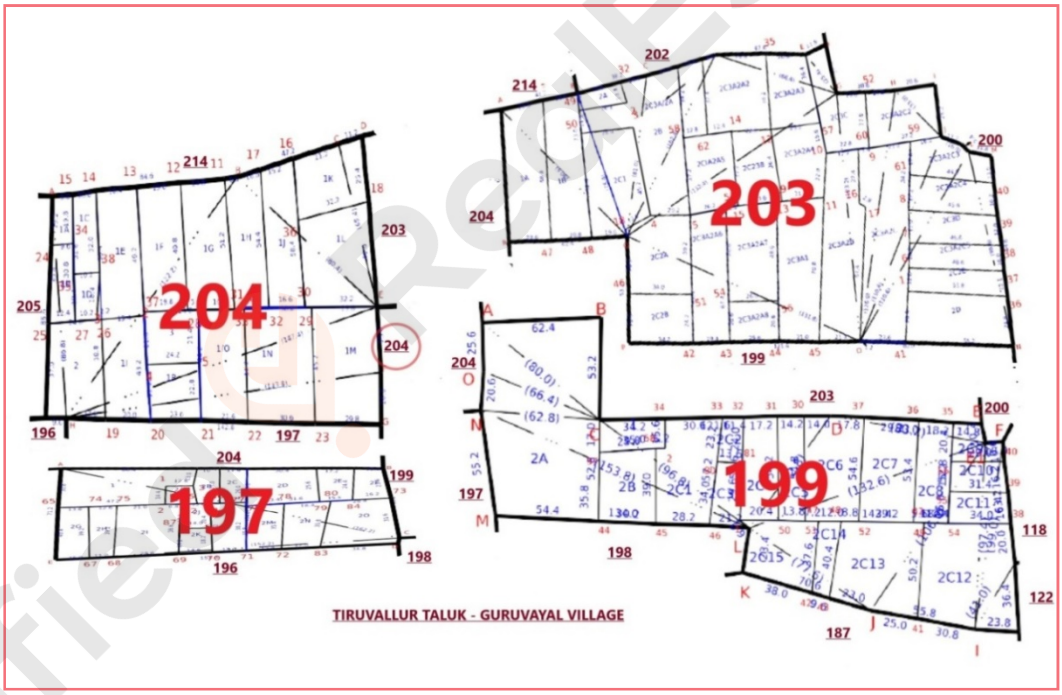
The details of all fields adjoining a Survey field are captured and stored in column 'ad1' of the '*adjacencytabledatamain'* table in the CollabLand database. This information was used by the system to fetch and display the FMS of a Survey field as well as the Survey numbers of its adjoining fields. This information was also required for the complete and accurate mosaicing of village maps which is a prelude to mosaicing higher order maps like Taluk, District and State maps.

Examination of CollabLand data in the sampled taluks disclosed that out of 8,82,977 FMSs in 1,411 FMSs (**Appendix 2.16**) details of adjoining fields of a Survey field was captured incorrectly.

An illustration, bringing out the deficiency is given in **Exhibit 2.1** below:

Exhibit 2.1: Illustrative case depicting incorrect capture of adjacent field details

Taluk	Village	Survey Field	Adjacent Survey numbers
Tiruvallur	Guruvayal	204	214, 203, **204**, 197, 196, 205



In the above example, it is observed that one of the adjacent field details of Survey field 204 is denoted as 204 (circled) which is not correct as the Survey number of the FMS itself cannot be one of its adjacent field number. On placing the adjacent fields of Survey field 204 beside each other, it was noticed that the number circled in the diagram above should be 199 instead of 204. The sketch of Survey field 199 placed in the diagram above also confirms this observation.

(Source: Department's e-services web portal)

Thus, the presence of errors in the adjacent field numbers would impede the envisaged goal of mosaicing maps. In reply, the ADsSLR stated that the above data entry errors will be verified and corrected. These lapses in the FMS

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indicate that the quality checks carried out by the technical staff in the respective district survey offices i.e. ADsSLR at the time of digitization of FMS were deficient.

In response, DoSS informed that these errors would be corrected in the FMS database in co-ordination with NIC.

2.3.6 Delay in updating records in FMS database

As per the departmental instructions issued by DoSS in 2017, as soon as the OPT application in respect of ISD cases are approved in the Taluk, the resultant changes in land details are to be entered in Taluk manual registers and Sub-division sketches drawn in the manual records as well as in CollabLand System. However, due to non-integration of the textual and spatial computerised land records, after approval of an ISD OPT application by Tahsildar, the related FMS had to be updated in the manual records and then the FMS database was to be updated using CollabLand application in the Taluk Server within 24 hours.

With a view to ascertain the status of updation of FMS changes in the Taluk CollabLand, 50 applications were randomly selected from the ISD cases approved during January 2021 to March 2021 for audit scrutiny in the sampled taluks. Audit noticed that while the non-updation of FMS at the Taluk Server level was 30 *per cent,* at the Central Server level it was 61 *per cent*. The details of non-updation both at the Taluk and at the Central Servers are given in **Appendix 2.17**.

NIC replied (October 2021) that they had taken action to clear the backlog of FMS changes in the CollabLand and also stated that they would soon implement Web CollabLand (*BhuNaksha*) for real time updation of spatial data and are taking all efforts to bring the FMS database up-to-date.

When both textual and spatial land records were computerised and brought online, the non-integration of the two databases in the *TamilNilam* application was responsible for not achieving real time updation of spatial data for delivery of better services to the public.

2.3.7 Delay in preparation of Village/Taluk/District Maps in Tamil

In September 2014, GoTN issued orders for the preparation of village/taluk/district maps in Tamil language in addition to the existing maps in English. Sale of these maps besides being a service to the public also generates revenue for the Government. During the period March 2017 to February 2020, the Department collected ₹ 64.48 lakh from the sale of village, taluk and district maps (English version).

GoTN instructed DOSS to complete the preparation of village/taluk/district maps in Tamil language on or before 31 March 2016. The status (October 2020) of the work of digitization of maps in English and Tamil is as given in **Table 2.7**.

Table 2.7: Status of the work of digitization of maps in English and Tamil

Sl. No.	Category of map	Number of maps	Vectorised so far	
			In English	In Tamil
1	Village	16,721	11,734	7,684
2	Taluk outline	312	312	267
3	Taluk colour	312	256	2
4	District outline	38	38	15
5	District colour	38	32	11

(Source: Details furnished by the Department)

From the **Table 2.7** it is seen that the digitization work remained incomplete, even after more than four years of the timeline for completing the work. Due to this, sale of digital village, taluk and district maps to the public through online mode was delayed and also caused hardship to the public as they are compelled to visit district survey offices for purchasing maps in the absence of sale of manual maps at the Taluk level.

The Department, in its reply (October 2020) stated that in so far as district and taluk outline maps of the newly created districts and taluks are concerned, Gazette notification, verification from the District office concerned (ADSLR) and approval from the Ministry of Defence, Survey of India and Ministry of Environment and Forests were awaited. Reply stated only about the newly created district/taluks and is silent about the delay in/non-completion of the work of digitization of nearly 30 *per cent* of village maps in English and 46 *per cent* of village maps in Tamil.

2.4 Computerisation of *Natham* (dwelling) land records

According to land classification, being followed by Revenue Department, Government lands used for dwelling purposes by the public were classified as '*Natham*' and *pattas* were issued by conducting survey in 1989. While *Natham* Settlement[13] work was completed in all the villages of the State, the same is in progress in municipal towns and Corporations.

The Department carried out the work of computerising 1.42 crore *Natham* land records in the State, through its District Survey Offices i.e. O/o the Assistant Director of Survey and Land Records (ADSLR) and completed it in 2017. This activity was carried out by utilising the services of outsourced Data Entry Operators. The computerised *Natham* land records, pending online porting is currently available/stored in the respective ADSLR offices in the districts. Audit checked the correctness and completeness of the *Natham* database relating to the seven sampled taluks and found the following inconsistencies.

[13] An activity, which verifies, corrects and establishes aspects of a land record such as land type, classification, assessment and ownership.

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2.4.1 *Natham* land parcels without ownership details in computerised *Natham Chitta*

Audit examined the *Natham* database of the sampled taluks using the key field '*Patta'* numbers (which links the '*Natham* A-Register' and '*Natham Chitta*' tables) and found that ownership details were not available in 14,604 out of 4,29,299 private land parcels (**Appendix 2.18**).

2.4.2 Redundant *Natham patta* numbers in computerised *Natham Chitta*

Audit examination also revealed the presence of *patta* numbers in the '*Natham Chitta*' table with no corresponding record in the *Natham* A-Register (*Adangal*) table indicating that these *pattas* were redundant. The number of redundant *patta* numbers noticed in Audit was 19,646 in the sampled taluks (**Appendix 2.19**).

2.4.3 Deficiency in computerised *Natham Chitta*

During the Audit examination, it was also seen that the *Natham Chitta* table did not have name of the owner and/or the relative. The number of such instances in the sampled taluks were 293 and 328 cases respectively (**Appendix 2.20**).

All the above lapses point to the fact that the computerised *Natham* database was deficient due to lack of validation control in the application software and also not carrying out the data verification exercise properly with reference to the manual records. Besides, after a lapse of four years, 1.42 crore *Natham* land records have not been brought online due to non-development of required software. As a result, all transactions relating to *Natham* lands are being carried out manually till date.

The Principal Secretary stated (October 2021) that necessary arrangements are being made to bring the *Natham* land records online at the earliest. Given the importance of *Natham* land data, the Principal Secretary instructed DoSS and NIC to iron out the errors pointed out by Audit before going online.

2.5 Computerisation of *Adangal* records (*e-Adangal* project)

According to Board of Revenue Standing Order 12, 1976, *Adangal,* the basic land register maintained by the Village Administrative Officers (VAOs) for each village, captures season-wise crops cultivated, its yield, irrigation source etc., and the data so collected is used to generate G-Return (total cultivation statistical report). It is an essential document for giving relief to the farmers for crop damage whose crops are damaged due to flood, drought and insect infestation.

GoTN ordered the computerisation of *Adangal* in August 2017. The web based *e-Adangal* application was launched on 26 October 2018. Up to the

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Fasli year[14] 1428, the *Adangal* was written manually by VAOs, which was laborious and time consuming.

In the earlier system, the farmer had no role in the *Adangal* register prepared by VAOs. Under the *e-Adangal* system, to empower them, farmers are allowed to record their crop details. Whenever there is a mismatch between the entries made by the VAO and a farmer, it is automatically referred to the next higher level officer to verify the correctness of the entry. The other stakeholders like Agriculture, Horticulture, Sericulture and Statistics Department officials are also authorised to make entries of crop raised in their jurisdiction in a separate window in the *e-Adangal* thereby enabling the automated reconciliation of the crop data and eliminate the manual process of reconciliation. Farmers can view their *Adangal* entry and download the *e-Adangal* extract at their convenience or at the Common Service Centres (CSCs) on payment of ₹ 100 per page.

2.5.1 Delay in procurement of dedicated server infrastructure for *e-Adangal*

Tamil Nadu e-Governance Agency (TNeGA) was entrusted with the work of development of online application and mobile application for *e-Adangal* in June 2017. TNeGA contracted M/s. CMS Computers Ltd., for software development in October 2017. The User Acceptance Testing (UAT) was completed on 25 October 2018 and the application was hosted in the existing *e-Sevai* server.

But after the launch, owing to steep increase in the number of simultaneous users and the size of the software application, the developer requested (September 2019) dedicated infrastructure for hosting the *e-Adangal* application. GoTN accordingly sanctioned ₹ 2.24 crore towards the purchase of server for *e-Adangal* application and the amount was transferred to TNeGA in September 2020. However, the procurement has not been done (October 2021). In reply, TNeGA stated (May 2021) that they were totally engaged in Information Technology (IT) support for COVID related issues and action was being taken for procurement within a short period of time.

2.5.2 Deficiencies noticed in the *e-Adangal* System

Under the *e-Adangal* system, farmers can enter the crop details either directly through their registered login or through CSC. During registration, the farmer's personal details (*viz.,* Name, Address, Contact numbers, Bank account) are captured. The land details of farmers are fetched from the *TamilNilam* database. Once the process is completed a Citizen Access Number (CAN) is generated and crop details *viz.*, irrigation source, land owner name, type of cultivation, crop type, crop name, date of sowing for the season are captured. Similarly, in case of crop damage and when the field is cultivated again, the re-sown details are also captured. The captured details are then

[14] Fasli year is the period of 12 months from July to June and is specifically used for land revenue purposes. Adding 590 to a fasli year will be the Gregorian calendar year. Fasli year 1428 corresponds to Gregorian year 2018.

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available in the login of the VAOs concerned to enable physical verification of these details during their field inspection. VAOs can also make *suo-moto* crop entries based on their field inspection.

The *e-Adangal* data for the State, obtained from the Revenue Department, was analysed in respect of 18 taluks relating to seven out of eight sampled Districts (excluding Chennai) *viz.,* Kanniyakumari, Madurai, Nilgiris, Tiruppur, Thanjavur, Perambalur and Tiruvallur District. Audit analysis revealed the following:

- **Farmers' crop entries not inspected/verified by VAOs:** Of the 38.87 lakh crop entries captured in the *Fasli* year 1429 (2019-20), 5,317 entries (0.14 *per cent*) were made by farmers through CSCs. However, none of the farmers' entries were verified by the VAOs concerned despite mandatory 100 *per cent* inspection. This situation was noticed in respect of *Fasli* years 1428 and 1430 also as given in **Table 2.8**.

Table 2.8: Farmers' crop entries not inspected/verified by VAOs

Fasli Year	Total crop entries	Crop entries made through CSCs by farmers
1428	29,031	228
1429	38,87,090	5,317
1430	11,31,999	719

(Source: *e-Adangal* database furnished by Tamil Nadu e-Governance Agency)

- **Crop cultivation details not captured by VAOs:** Crop details of cultivable lands have to be captured in its entirety under the *e-Adangal* system. Audit however noticed that, in the sampled districts, the percentage of capture of cultivated crop details in *Fasli* year 1429 was meagre in all the sampled districts except in The Nilgiris and Perambalur districts as shown in **Table 2.9**.

Table 2.9: Crop cultivation details not captured by VAOs

Sl. No.	District	Total Survey numbers under cultivable lands	Survey numbers for which crop entries was captured	Percentage captured
1	Kanniyakumari	54,748	6,111	*11.16*
2	Madurai	1,37,374	32,872	*23.93*
3	Perambalur	1,29,976	78,988	*60.77*
4	Thanjavur	1,83,698	6,520	*3.55*
5	The Nilgiris	52,471	47,150	*89.86*
6	Tiruppur	1,23,518	23,372	*18.92*
7	Tiruvallur	3,99,875	69,019	*17.26*

(Source: *e-Adangal* database furnished by Tamil Nadu e-Governance Agency)

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- **Incomplete data capture:** *e-Adangal* application is designed to capture the stages of the cultivated crops *viz*., sowing stage, standing stage, harvesting stage etc., to watch the progress of crop cultivation and VAOs can capture the dates of each stage. It was noticed that the data captured in the sampled taluks was incomplete as it did not completely flow through the stage-wise hierarchy to its finality i.e. 'Harvesting stage' as tabulated in **Table 2.10**.

Table 2.10: Incomplete data capture

Sl. No.	District	Total Survey numbers having crop entries	Sowing stage captured	Standing stage captured	Harvesting stage captured
1	Kanniyakumari	6,111	6,111	0	0
2	Madurai	32,872	32,854	13,517	6,837
3	Perambalur	78,988	78,961	441	54
4	Thanjavur	6,520	6,507	212	2
5	The Nilgiris	47,150	47,144	14,014	0
6	Tiruppur	23,372	23,340	270	7
7	Tiruvallur	69,019	69,016	748	9

(Source: *e-Adangal* database furnished by Tamil Nadu e-Governance Agency)

- **Cultivation details captured against Government *poromboke* lands:** Data analysis disclosed instances of crop details cultivated in Government *Poromboke* lands in the sampled taluks/villages as detailed in **Table 2.11**.

Table 2.11: Cultivation details captured against Government *poromboke* lands

Sl. No.	District	Survey numbers for which crop entries were made in Government *Poromboke* land (Cases specified are from sampled taluks)	Area cultivated (in Ares)
1	Kanniyakumari	4	58.00
2	Madurai	185	1,248.15
3	Perambalur	15	763.50
4	Thanjavur	10	39.00
5	The Nilgiris	45	5,307.97
6	Tiruppur	6	42.71
7	Tiruvallur	73	1,953.40

(Source: *e-Adangal* database furnished by Tamil Nadu e-Governance agency)

Since *e-Adangal* is integrated with *TamilNilam*, the type of land of each Survey number is available in *e-Adangal*. The cases mentioned above are categorised as Government lands in *TamilNilam* also. In the absence of suitable validation controls as envisaged in the SRS for tackling such issues, the system allows VAO's to enter crop details in Government lands.

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- **Discrepancies shown in the chronology of crop stages in *e-Adangal*:** The facility to capture stage-wise date under *e-Adangal* takes into account the hierarchy of each stage, where one stage by its very nature cannot precede its subsequent stage for e.g. the 'Harvesting' cannot be preceded by 'Inspection' etc. However, there were inconsistencies (as given in **Table 2.12**) in the stage wise capture indicating lack of suitable validation controls.

Table 2.12: Discrepancies shown in the chronology of crop stages in *e-Adangal*

Discrepancies	No. of Cases
Inspection after harvested	3,558
Inspection before sowing	13,418
Sowing date not within Fasli Year	10,21,154
Invalid inspection date ('01-01-1900')	2,42,734
Invalid sowing date ('01-01-1900')	7,34,763

(Source: *e-Adangal* database furnished by Tamil Nadu e-Governance agency)

From the above stated issues, it is recommended that the VAO's should be instructed to complete the *e-Adangal* data capture in its entirety and necessary verification completed. Moreover, proper validation controls should also be put in place to make the system more robust.

In its reply (May 2021), TNeGA stated that *e-Adangal* software is working with limitations at present. DoSS stated (October 2021) that this was being handled by TNeGA and that the software was developed by a private company *viz.,* M/s. CMS Computers Ltd., but agreed that there were issues in its implementation. The Principal Secretary stated that the *e-Adangal* would be integrated with *TamilNilam* to make it more effective.

2.6 Non-updation of records relating to Government acquired/alienated lands even after final notification

According to Section 11 of Land Acquisition Act 2013, the Revenue Department should update the land records whenever private lands are acquired by Government for public use. Scrutiny of land records in Tiruppur district revealed that lands acquired from private land owners by the Government for various schemes were pending updation in the land records since September 2018, thus not only reflecting incorrect ownership of the land record but also making it susceptible to misuse. For example, audit observed that the work of acquiring 57 land parcels measuring a total extent of 16,062 sq.m. in South Avinashipalayam (Tiruppur District) for four-laning and strengthening of Ottanchatram-Dharapuram-Tiruppur Road was completed and compensation to the tune of ₹ 10.05 crore was paid to private land owners.

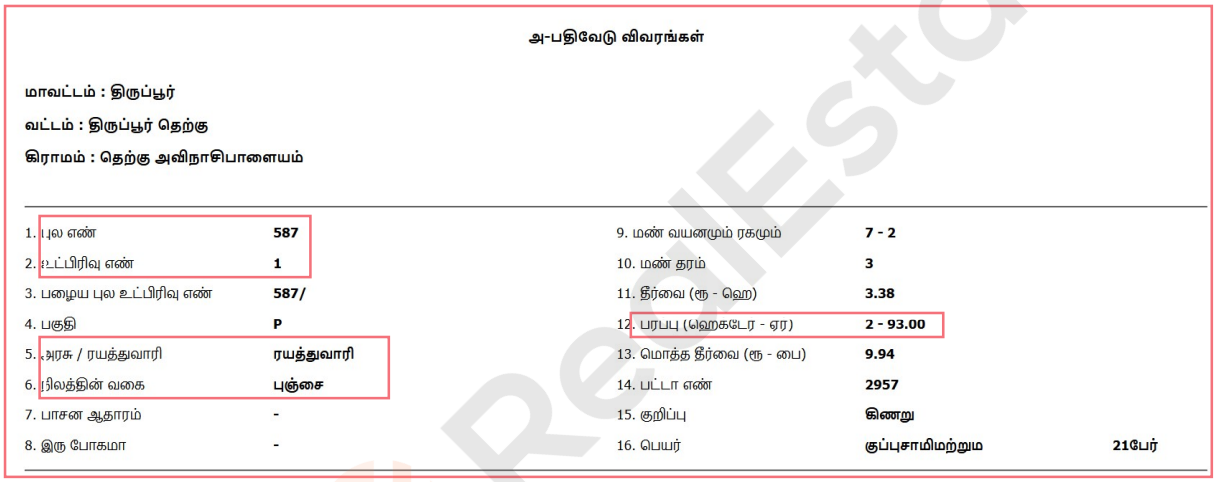
A sample case of the final award passed in one land parcel is given in **Table 2.13** and **Exhibit 2.2**.

Table 2.13: Illustrative case of non-updation of records relating to Government acquired/alienated lands even after final notification

	Old Survey number	Extent of land (Hect-Are-Sq.m.)	Sub-division made during land acquisition	Extent of sub-divided lands (Hect-Are-Sq.m.)
District: Tiruppur Taluk: Tiruppur South Village: South Avinashipalayam	587/1 (Ryot – *Punjai*)	2.93.00	587/1A (Ryot – *Punjai*)	2.07.11
			587/1B (Government *Poromboke*)	0.85.89
	Total			**2.93.00**

(Source: Information furnished by the Taluk)

Exhibit 2.2: Present Status as per computerised A-Register (as on 13 September 2021)



அ-பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : தெற்கு அவிநாசிபாளையம்

1. புல எண்	587	9. மண் வயனமும் ரகமும்	7 - 2
2. உட்பிரிவு எண்	1	10. மண் தரம்	3
3. பழைய புல உட்பிரிவு எண்	587/	11. தீர்வை (ரூ - ஹெ)	3.38
4. பகுதி	P	12. பரபபு (ஹெகடேர - ஏர)	2 - 93.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	9.94
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	2957
7. பாசன ஆதாரம்	-	15. குறிப்பு	இணறு
8. இரு போகமா	-	16. பெயர்	குப்புசாமிமற்றும 21பேர்

(Source: Department's e-services web portal)

In the sampled taluks, Audit noticed similar cases where mutation of computerised land records were yet to be given effect even though orders for change of ownership to Government departments were issued as early as in the year 2005 as given in **Table 2.14**.

Table 2.14: Number of cases where computerised land records not updated to reflect change of ownership to Government

Sl. No.	Taluk	Type	Completed Cases	Orders passed between
1	Agastheeswaram	Land Alienation	7	October 2008 to November 2017
2	Avinashi	Land Transfer	2	July and August 2020
3	Kothagiri	Land Transfer and Alienation	3	July 2019 to May 2021
4	Madurai East	Land Transfer and Alienation	2	July and September 2021
5	Papanasam	Land Transfer and Alienation	2	May 2013 and January 2021
6	Perambalur	Land Transfer and Alienation	7	June 2014 to August 2015
7	Thirupparankundram	Land Transfer and Alienation	5	March 2019 to December 2020
8	Tiruppur North	Land Transfer and Alienation	13	November 2005 to January 2021
9	Veppanthattai	Land Transfer	1	November 2014
		Total	**42**	

(Source: Information furnished by the taluks)

In this connection, when Audit compiled information on lands that were notified for acquisition by various government departments for various

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schemes/projects during the years 2015-2018, it was noticed that nearly 26,000 land parcels were under acquisition process. The department-wise details of such land parcels are tabulated in **Table 2.15**.

Table 2.15: Land parcels notified for Acquisition

Sl. No.	Name of departments	Number of land parcels
1	Energy	959
2	Highways and Minor Ports	14,945
3	Industries	3,886
4	Planning, Development & Special Initiatives	223
5	Transport	6,094
Total		**26,107**

(Source: Compilation of Gazette Notifications from the GoTN website)

Timely updation of records of the lands acquired/transferred/alienated to the Government should be taken up to safeguard the interest of the Government as well as to prevent the risk of fraudulent transactions.

The Principal Secretary stated (October 2021) that there were many instances of lands acquired by Government from private owners which have not been updated in *TamilNilam* and added that this would be addressed on completion of the work of updation of Adi Dravidar lands which was in progress.

2.7 Deficient integration between Revenue and Registration Departments

Registration Department rolled out a comprehensive web-based software (STAR 2.0) in which data of land records of Revenue Department was linked with the Registration database through a separate integration module (February 2018) to facilitate transfer of *Patta* without calling for fresh applications from the land buyers immediately after registration. From a scrutiny of the related files, Audit noticed the following:

2.7.1 Deficiencies in codification of Government lands

GoTN advised Revenue Department (June 2018) to take steps to enter details of *Panchami* lands, *Bhoodhan* lands, Wakf Board property in *TamilNilam* software to enable Registration Department to assign the land value as zero to prevent transaction of such lands and this was reiterated in the subsequent meeting (July 2018) conducted by DoSS with the Inspector General of Registration and NIC officials.

In the *TamilNilam* database the ownership of Government lands is coded as '1' and for private lands as '2' which are indicated against each land parcel. In addition, Government lands had further sub categories *viz., Natham*, *Panchami*, Hindu Religious and Charitable Endowments (HR&CE) lands, excess lands under Land Ceiling Act, Private Forest Act, Forest lands etc. These sub categories were not codified in *TamilNilam*.

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Ordinarily, land transactions are not permitted on Government Lands (Code '1'). The Registration Department assigns market/guideline value as '0' in the database shared periodically by Revenue Department to prevent clandestine registration of Government lands. In the absence of a separate codification for all the sub categories of Government lands, their market/guideline value could not be assigned as zero.

In the sampled taluks, Audit found that the Registration Department permitted transactions and sent 593 'Involving Sub Division' (ISD) and 163 'Not Involving Sub Division' (NISD) OPT applications of such cases to Taluk offices (**Appendix 2.21**). These applications were then rejected by the taluks for the reason that they were sub categories of Government lands. This indicated that the integration module implemented in 2018 did not effectively prevent the registration of Government lands due to non-codification.

DoSS stated (October 2021) that they were already taking action in this regard and that nearly two lakh temple lands belonging to HR&CE Department have been codified as 'T' as of now and similarly all other Government lands would also be appropriately codified. However, the interface module needs immediate correction with the addition of codes to all categories of Government lands.

2.7.2 Ineffective use of provisions available in integration module for Sub-Registrar Office Transfer Registry applications

Scrutiny of files revealed that scanned Registration documents for the period from July 2009 onwards was shared with the Revenue Department and was available for viewing within the dashboard of *TamilNilam* users.

DoSS advised (July 2018) the District Collectors to instruct all taluk offices of the availability of this facility and to insist for production of original link and parent documents only for the period prior to July 2009, wherever required.

It was also instructed that the Revenue Department/NIC had to make a provision in the logins of VAO and Surveyor to enter details of missing documents (i.e. mandatory documents not submitted by the applicant at the time of applying for OPT) and to send an SMS to the applicant asking him to scan and attach the missing documents to the related application through CSC.

Despite the above instructions and provision of links in the workflow it was noticed in the sampled taluks that 10,640 NISD and 19,841 ISD OPT applications (**Appendix 2.22**) were rejected with reasons like 'No Link', 'Document file not open', 'தொடர்பு பத்திரம்/மூலப்பத்திர நகல் சமர்ப்பிக்கவில்லை', 'need link document', 'EC not properly submitted' etc.

The Principal Secretary replied (October 2021) that necessary instructions would be issued to the concerned officials to avoid such occurrences in future. In any case, the applicants had not received the desired services.

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2.8 Conclusion

The digitization of land records contributed to overall improvement in access of land records to the public. The digitized land records, however, had errors and deficiencies. There were differences in land area between manual and computerised A-Register in 61 *per cent* of sampled villages. Though the Department claims that all the FMS in rural taluks are online, it was seen that 6.25 lakh out of 23.25 lakh (27 *per cent*) Sub-divisions in the A-Register had no entries in the FMS database. Further, there were difference in land area in 2.27 lakh out of 15.89 lakh (14 *per cent*) Sub-divisions between A-register and FMS data. 3.22 lakh private land parcels were erroneously classified as Government land in the computerised land records resulting in the private land owners not being able to transact their land in *TamilNilam*. Due to the absence of suitable validation controls in the application software, errors and discrepancies were noticed in capture of old Survey numbers and assigning Sub-division numbers as per notation rules. Further, as multiple *patta* numbers were assigned to the same land owner, all the land holdings of an individual in a village cannot be ascertained. As of March 2021, 1.42 crore computerised and validated *Natham* land records were not brought online even after four years. The *e-Adangal* project taken up in 2017 was not fully implemented.

2.9 Recommendations

Government may consider:

- Reviewing the computerised A-Register, *Chitta* and FMS to ensure their correctness and completeness so as to ensure error free conclusive titling.
- Auto-populating the FMS database from the computerised A-Register, wherever required, to avoid errors.
- Validating and bringing Natham land records online within a definite timeframe.
- Making *e-Adangal* fully functional and integrate with *TamilNilam* on priority.
- Imparting periodical training to VAOs and other line officials to avoid or minimise data entry errors. Further, the Department may ensure that data entry is duly validated with physical records to ensure correctness.

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CHAPTER III
CITIZEN SERVICES

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CHAPTER III

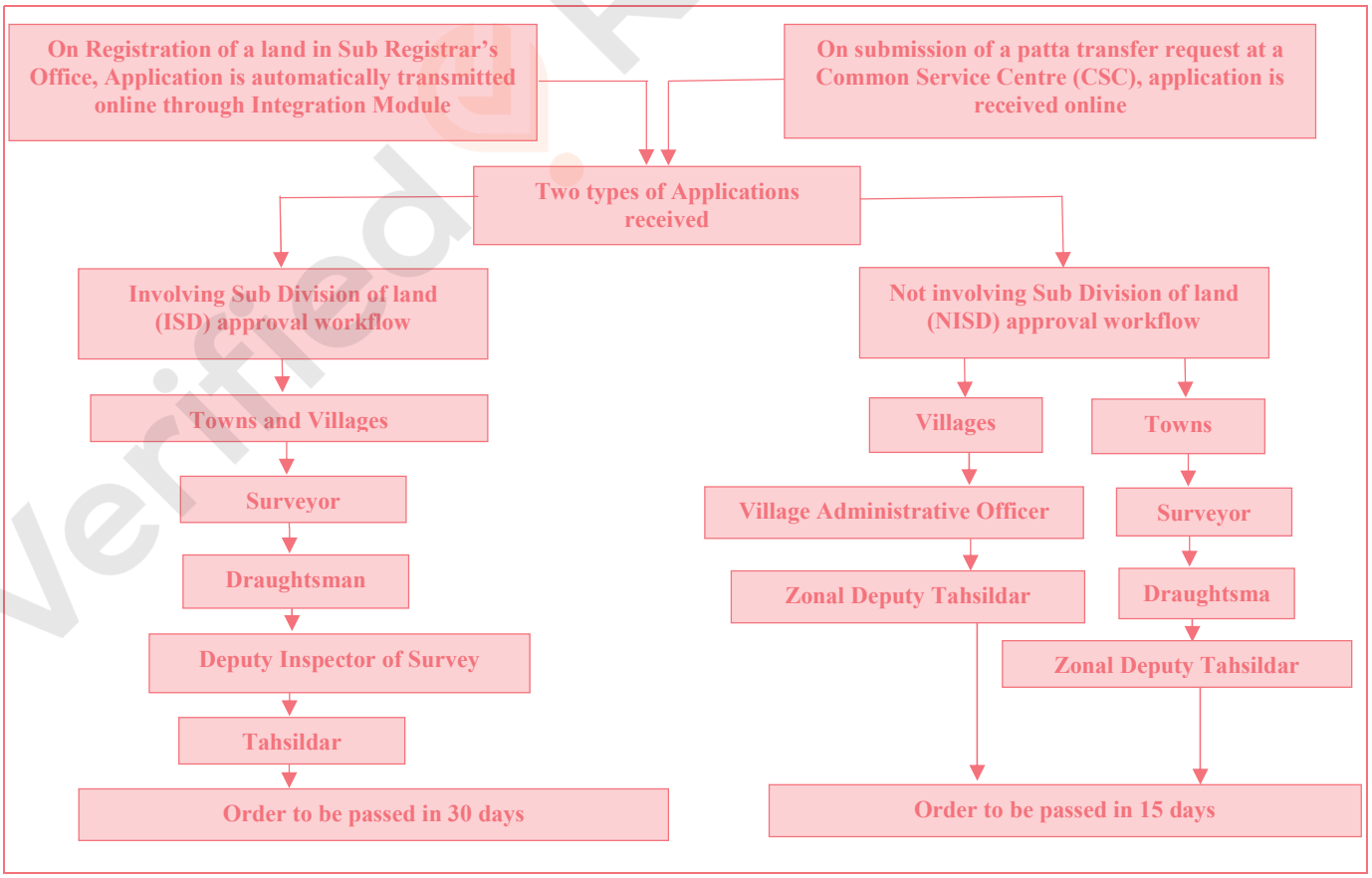
CITIZEN SERVICES

3.1 Processing of online *patta* transfer application

One of the scheme objective of conclusive title with title guarantee warrants accurate mutation of land records. Immediately after the transfer of land ownership through registration, the ownership details are to be reflected in the records of the Revenue Department. Despite repeatedly pointing out issues in the system by Audit from 2003 onwards, the issues persist in the delivery of mutation related services to citizens. The issues are discussed in the subsequent paragraphs.

From November 2014, Online *Patta* Transfer (OPT) applications are being received through *TamilNilam* workflow software of the taluk offices from two sources *viz.*, Sub-Registrar Office Transfer Registry (STR) and Revenue Transfer Registry of Common Service Centres. There are two categories of OPT applications *viz.*, Not Involving Sub Division (NISD) and Involving Sub Division (ISD). The workflow showing the receipt and processing of the OPT applications are given in the following **Exhibit 3.1**.

Exhibit 3.1: Workflow showing the receipt and processing of the OPT application

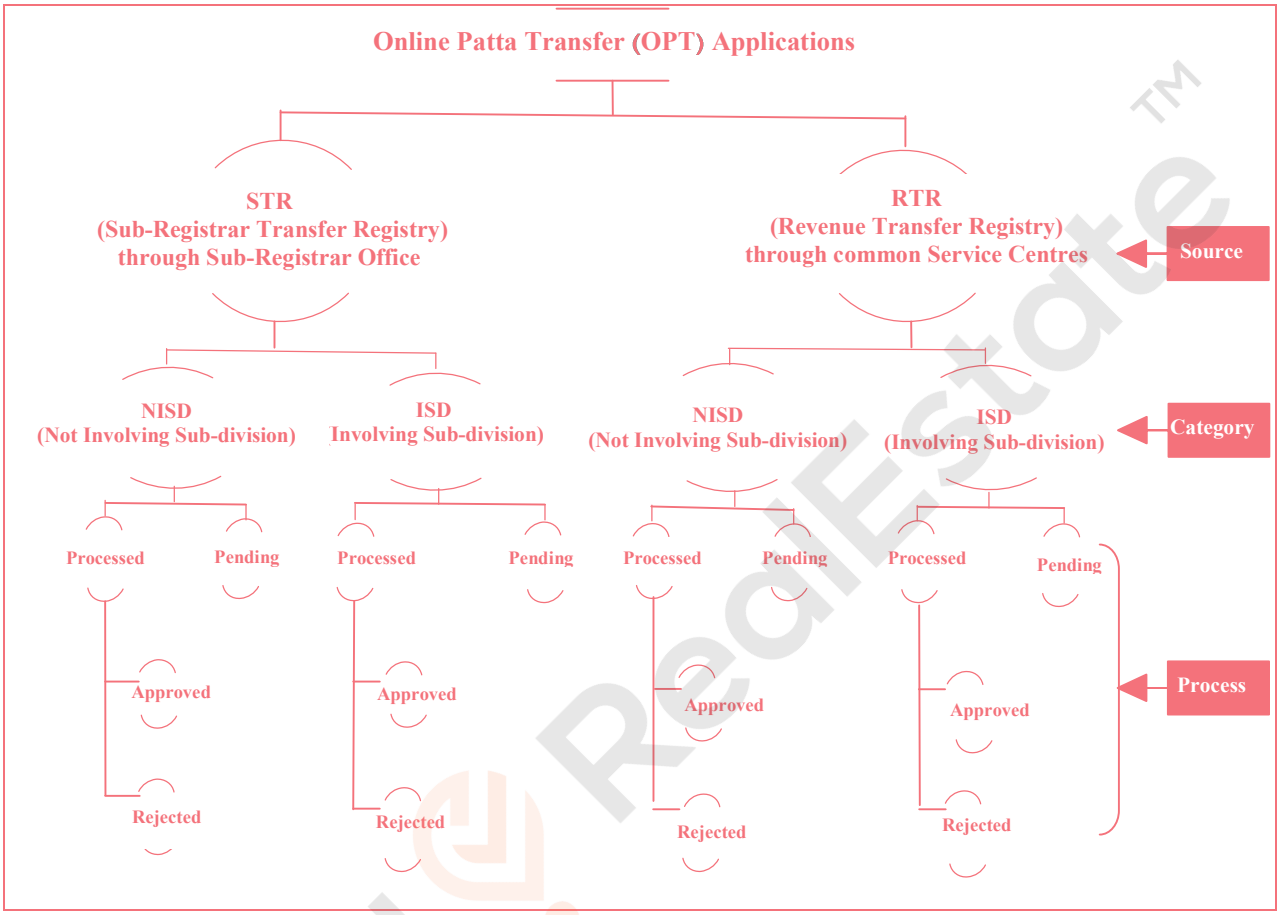


(Source: Instructions issued by the department for *TamilNilam* OPT workflow)

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The following **Exhibit 3.2** describes the sources and categories of OPT applications and how they are processed (approved/rejected/pending) at different stages in the web-based workflow system.

Exhibit 3.2 Sources and categories of OPT applications and stages of processing



(Source: Instructions issued by the department for *TamilNilam* OPT workflow)

With a view to ascertain whether the OPT applications were processed within the prescribed timelines, audit examined data relating to 9,42,102 completed applications and 50,881 pending applications from the *TamilNilam* databases provided for the sampled taluks. The observations are as follows:

3.1.1 Delay in processing OPT applications

(a) According to the Citizen Charter of the Revenue Department, NISD-OPT applications should be decided within 15 days of its receipt. NISD applications are processed through a workflow in web-based *TamilNilam* software in all rural and urban taluks of Tamil Nadu. The VAO/Surveyor, on receipt of the RTR/STR applications processes, recommends either for approval/rejection and sends it online to the Zonal Deputy Tahsildar (ZDT) for his assent which is sealed with the Digital Signature Certificate (DSC).

In order to ascertain the adherence to the timeline of 15 days, the data dump for the period from 2014 till 2021 was analysed. The analysis also factored in the loss of time arising due to return of OPT application by the approving authority (i.e. ZDT) to VAO seeking clarifications etc., and excluded such

records from the analysis. The results are tabulated in **Table 3.1** and Taluk-wise details are available in **Appendices 3.1, 3.2** and **3.3**.

Table 3.1: Delay in processing NISD-OPT applications

Sl. No.	Category and status of OPT applications	Number of applications where delay was noticed and its percentage	Delay range in number of days
1	NISD approved OPTs	1,73,567 out of 4,05,027 cases (43 *per cent*)	From 16 to 519 days
2	NISD rejected OPTs	1,23,061 out of 1,56,354 cases (79 *per cent*)	From 16 to 1,206 days
3	NISD pending OPTs	6,132 out of 10,226 cases (60 *per cent*)	From 16 to 1,379 days

(Source: *TamilNilam* taluk database furnished by the department)

(b) Similarly, the workflow of ISD-OPT applications involves a hierarchical set-up of four officials *viz.*, Surveyor, Land Record Draughtsman (LRD), Deputy Inspector of Survey (DIS) and Tahsildar for processing the OPT applications to its finality within 30 days. The Surveyor on receipt of ISD-OPT application, will schedule for field visit as per seniority and submit field enquiry report to the LRD for vetting. The LRD, in turn, verifies the submitted manual sketch scans and uploads the same to the online workflow and escalates it to the DIS login along with remarks. The DIS, after ensuring the receipt of the prescribed sub-division fees into Government Account, forwards the application online with his/her remarks to the approving authority i.e. Tahsildar. The outcome of the data examination by Audit is tabulated in **Table 3.2**. Taluk-wise details are available in **Appendices 3.4, 3.5** and **3.6**.

Table 3.2: Delay in processing ISD-OPT applications

Sl. No.	Category and status of OPT applications	Number of applications where delay was noticed and its percentage	Delay range in number of days
1	ISD approved OPTs	85,148 out of 1,60,048 cases (53 *per cent*)	From 31 to 651 days
2	ISD rejected OPTs	2,05,889 out of 2,20,673 cases (93 *per cent*)	From 31 to 866 days
3	ISD pending OPTs	29,644 out of 40,655 cases (73 *per cent*)	From 31 to 321 days

(Source: *TamilNilam* taluk database furnished by the department)

(c) On examination of delay at various stages of the workflow, it was found that 69 to 82 *per cent* of the ISD applications and 27 to 29 *per cent* of the NISD applications were kept pending for more than 50 days with at least one of the officials in the approval workflow (**Table 3.3**).

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Table 3.3: Pendency of OPT applications

Officials involved in the workflow	OPT applications pending for						Percentage of applications kept pending for more than 50 days
	16 to 25 days	26 to 50 days	51 to 75 days	76 to 100 days	More than 100 days	Total	
NISD - VAO	1,311	1,645	487	283	332	4,058	*27*
NISD - ZDT	488	985	354	153	94	2,074	*29*
		31 to 50 days	51 to 75 days	76 to 100 days	More than 100 days		
ISD - Surveyor	-	5,118	4,391	4,475	12,171	26,155	*80*
ISD - LRD	-	80	38	44	100	262	*69*
ISD - DIS	-	55	33	27	62	177	*69*
ISD - Tahsildar	-	141	172	231	1,398	1,942	*82*

(Source: *TamilNilam* taluk database furnished by the department)

In response to the delays in processing brought out above, the Tahsildars generally attributed the following reasons *viz*., (i) increase in number of applications consequent to integration of STR applications in *TamilNilam*, (ii) non-submission of required documents by the applicant, (iii) inability to contact the applicant due to incorrect phone numbers furnished, (iv) poor response of the applicant when contacted, (v) diversion of survey staff for other work, (vi) inability to process applications, if another application in the same Survey number is pending at any level in the ISD/NISD workflow and (vii) vacancies in the post of Surveyor etc.

DoSS accepted (October 2021) that they were aware of such delays and necessary MIS reports were available in the *TamilNilam* for monitoring. He assured that appropriate action would be taken to reduce the delay in processing of OPT applications by making use of MIS reports more effectively.

(d) Processing of addition/deletion/correction applications

A new software module was included in the web based *TamilNilam* Rural from September 2016 for incorporating the corrections in the existing records and for adding new entries in the on-line *TamilNilam* database. By using this module, missing Survey numbers/Sub-division numbers could be added and errors that had crept into the existing land records can be corrected. The corrections could be carried out in the database after the authorised officers at appropriate levels[1] pass orders in the manual files.

Analysis of the correction module data of the sampled taluks revealed that there were delays in processing the applications. Out of 16,100 applications relating to addition/deletion of land records, it was noticed that

[1] Revenue Divisional Officer for all corrections/additions other than those related to Government to private land transfer entries. District Collector for all corrections/ additions in respect of Government to private land transfer entries.

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684 (4.2 *per cent*) were still pending action. Further 2, 096 (13 *per cent*) and 809 applications (5 *per cent*) respectively were approved and rejected belatedly (**Appendix 3.7 (a)**). Similarly, out of 18,965 applications for correction of land records, while 630 (3.3 *per cent*) were pending action for various periods ranging up to four years, 2,180 (11.5 *per cent*) and 1,029 applications (5.4 *per cent*) were approved and rejected belatedly (**Appendix 3.7 (b)**).

Further analysis revealed that the 'correction' module had no provision for storing details of sub-categories like name correction, address correction, land area correction, etc. It was also noticed that the 'correction' module did not have a provision to store the history of changes arising from corrections. Any correction made by an unauthorised user could not be prevented or monitored.

3.1.2 High percentage of rejection of OPT applications from Sub Registrar office

As per the 'STAR 2.0' - '*TamilNilam*' integration module, once a land is registered in the Sub Registrar office, the details mentioned in the schedule of properties in the land document is transmitted to *TamilNilam* for *patta* transfer. This process eliminates the need for land owners to apply for *patta* transfer again. Data analysis of OPT applications from sampled taluks revealed that there was high percentage of rejection of OPT applications received from Sub Registrar Office (SRO). Taluk-wise details of approved/rejected OPT applications is given in **Appendix 3.8**.

It was noticed that the percentage of STR rejection was 49 *per cent* for NISD. The high rejection rate of STR-NISD applications which are simple *patta* transfers involving only name change of owner without need for field inspection indicate that monitoring of OPT system by the Tahsildar was not effective.

3.1.3 Non-observance of queuing while processing OPT applications

As per the SRS of *TamilNilam*, *patta* transfer applications are required to be processed on a first-come-first-served basis unless prevented by the system due to an earlier application under the same Survey number for which processing is pending.

To check the implementation of the above seniority principle, NISD and ISD applications of 10 sampled villages in each of the sampled taluks which were pending in the *TamilNilam* VAO and Sub Inspector of Survey (SIS) logins were examined. It revealed that while 2,617 ISD **(Appendix 3.9)** and 700 NISD **(Appendix 3.10)** applications received earlier were pending, applications received later were already scheduled for processing. This was in contravention to instructions on seniority-wise processing of *patta* transfer applications, which is irregular.

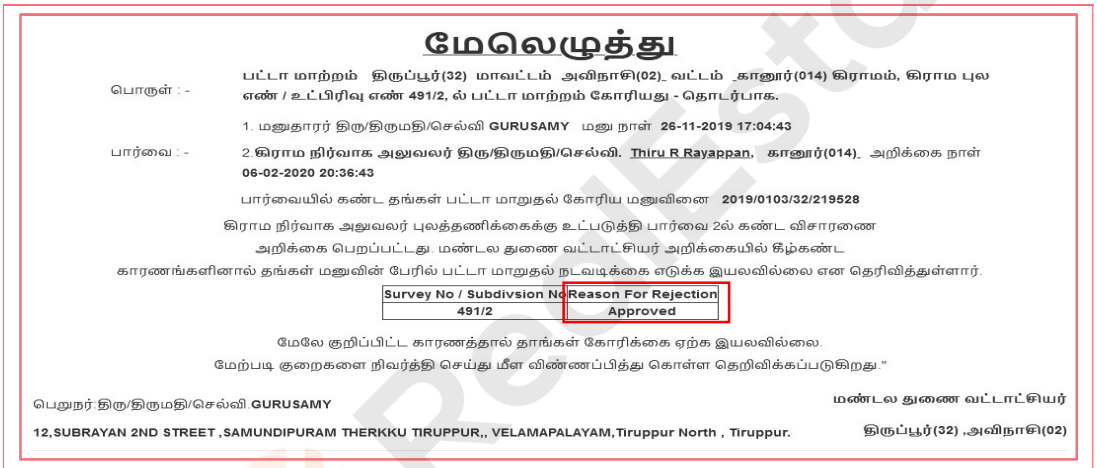
DoSS informed (October 2021) that though scheduling was available, due to logistical difficulties, the surveyors visiting a village would complete the work for all the applications relating to that village irrespective of the seniority. However, audit found many instances of queue jumping within a village itself

and reasons necessitating the queue jumping were not recorded in the system to ensure transparency.

3.1.4 Non-use of codified reasons for rejection

According to the workflow system, each line official record their remarks while recommending/rejecting/approving OPT applications. The 'Remarks' column permits the capture of text upto 500 characters and the 'Recommend' column captures 'Y' or 'N'. In respect of rejected cases, the remarks of final approving authority is printed under the column 'Reason for Rejection'. An illustrative *Patta* transfer rejection order is given in **Exhibit 3.3**.

Exhibit 3.3:Illustrative sample case: Rejection orders of OPT in Avinashi Taluk having contradictory reason



மேலெழுத்து

பொருள் : - பட்டா மாற்றம் திருப்பூர்(32) மாவட்டம் அவிநாசி(02) வட்டம் காணூர்(014) கிராமம், கிராம புல எண் / உட்பிரிவு எண் 491/2, ல் பட்டா மாற்றம் கோரியது - தொடர்பாக.

1. மனுதாரர் திரு/திருமதி/செல்வி GURUSAMY மனு நாள் 26-11-2019 17:04:43

பார்வை : - 2.கிராம நிர்வாக அலுவலர் திரு/திருமதி/செல்வி. Thiru R Rayappan. காணூர்(014) அறிக்கை நாள் 06-02-2020 20:36:43

பார்வையில் கண்ட தங்கள் பட்டா மாறுதல் கோரிய மனுவினை 2019/0103/32/219528

கிராம நிர்வாக அலுவலர் புலத்தணிக்கைக்கு உட்படுத்தி பார்வை 2ல் கண்ட விசாரணை அறிக்கை பெறப்பட்டது. மண்டல துணை வட்டாட்சியர் அறிக்கையில் கீழ்கண்ட காரணங்களினால் தங்கள் மனுவின் பேரில் பட்டா மாறுதல் நடவடிக்கை எடுக்க இயலவில்லை என தெரிவித்துள்ளார்.

Survey No / Subdivsion No	Reason For Rejection
491/2	Approved

மேலே குறிப்பிட்ட காரணத்தால் தாங்கள் கோரிக்கை ஏற்க இயலவில்லை.
மேற்படி குறைகளை நிவர்த்தி செய்து மீள விண்ணப்பித்து கொள்ள தெரிவிக்கப்படுகிறது."

பெறுநர்:திரு/திருமதி/செல்வி.GURUSAMY
12,SUBRAYAN 2ND STREET ,SAMUNDIPURAM THERKKU TIRUPPUR,, VELAMAPALAYAM,Tiruppur North , Tiruppur.

மண்டல துணை வட்டாட்சியர்
திருப்பூர்(32) ,அவிநாசி(02)

In the above case, though the application for *patta* transfer was rejected, the reason for rejection was recorded as 'Approved'.

(Source: Department's e-services web portal)

Though *TamilNilam* has a codified set of 17 reasons for rejecting applications these were not recorded as the reason by the approving official while rejecting OPT applications. Instead, the custom text entered by the line officials was stored in the remarks column, indicating that the officials were not using the codified reasons. It was noticed from the data examination that in 85,044 instances the reasons for rejection were either contradictory to the final orders (2,134 applications) passed on OPT applications or was without any specific reasons (82,910 applications) as given in **Appendix 3.11**.

The Principal Secretary stated (October 2021) that the software should not permit such deficiencies and advised NIC to bring in suitable controls in the system. He also stated that the codified remarks already available in the system could be increased and strictly adhered to by the officials. However, Audit is of the view that the reasons for rejection of OPT applications must be rationalized under broad categories and made user friendly for correct selection of reasons for rejection by the workflow officials.

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3.1.5 Deficiencies noticed during manual scrutiny of processed OPT applications

The OPT workflow clearly outlines the procedures to be followed for acceptance or rejection of applications. In addition to the data analysis, audit also manually verified the complete workflow process by randomly selecting 20 OPT applications (a mix of RTR/STR and ISD/NISD applications) that were processed during 2019-20 for detailed scrutiny in each of the sampled taluk.

The taluk-wise and application category-wise number of instances, with deficiencies in processing the OPT applications are given in **Appendix 3.12**. An abstract is given in **Table 3.4**.

Table 3.4: Deficiencies in OPT application processing

Type and source	Number of approved applications		Number of rejected applications	
	Checked	Deficiencies noticed by Audit	Checked	Deficiencies noticed by Audit
ISD - RTR	79	68	54	49
NISD - RTR	72	53	40	31
ISD - STR	45	27	46	43
NISD - STR	42	8	50	41
Total	**238**	**156**	**190**	**164**

(Source: Taluk records and Department's e-services web portal)

The deficiencies noticed were as follows:

- OPT approval process was to be carried out based on Sale Deed and Encumbrance Certificate uploaded at CSC. However, 141 OPT applications in 18 taluks, where the uploaded mandatory documents were either incorrect or missing, were approved.
- Nine OPT applications relating to five taluks received from SRO through integration module were rejected whereas the same were approved when applied through CSC.
- 'Correction Module' in *TamilNilam* software was used for correction of name/relationship of the *Pattadhar*. Revenue Divisional Officer (RDO) is the approving authority for such corrections. In two instances in two taluks, instead of 'Correction Module' OPT workflow module was used for correcting the name/relationship. A suitable validation control using the applicant's mandatory information and Aadhaar number will prevent such occurrences.

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- Two OPT applications in two taluks were rejected citing them as 'Double Entries' though such applications related to different land parcel under different Sale Deed.
- 19 STR applications in 10 taluks were rejected with reasons 'Link Documents not submitted', though such documents were available in the online workflow for scrutiny.
- Two OPT applications in two taluks were rejected stating that (i) '*Patta* already issued' when the *Patta* was issued for a different Plot Number and (ii) 'Already Sub-divided' though it remained undivided till date.

It is seen from **Table 3.4** that 66 *per cent* (156 out of 238) of approved and 86 *per cent* (164 out of 190) of rejected OPT applications were not processed correctly. DoSS stated (October 2021) that necessary instructions would be issued and stringent action would be taken wherever such cases were brought to notice.

3.1.6 Delay in transfer and rejection of incorrectly classified applications

As per instructions (October 2015) of DoSS, CSCs should capture the details under ISD or NISD after checking the details submitted by the applicant in the OPT application. Data analysis of sampled taluks revealed the following:

(i) Delay in transfer: The OPT application, if wrongly categorised (NISD as ISD and *vice versa*), has to complete all the stages in the workflow before it can be transferred to the right category. In case of wrong categorisation, ZDT (NISD) and DIS (ISD) transfer the applications to Surveyor (ISD) and VAO (NISD) respectively and the date on which the application is transferred to another categorisation (NISD or ISD) becomes the date of application in the new categorisation.

During 2018-21, taluk-wise breakup of transfer of OPT applications is given in **Appendix 3.13**.

Audit noticed significant delays in transferring the wrongly categorised applications adding further delay in service to the applicants **(Table 3.5)**.

Table 3.5: Time taken for transfer of incorrectly classified applications

Sl. No.	Delay range	NISD	ISD
1	0 to 10 days	2,079	15,835
2	11 to 25 days	1,757	7,140
3	26 to 50 days	1,701	7,151
4	51 to 75 days	904	4,297
5	76 to 100 days	500	3,701
6	More than 100 days	500	13,321
Total		**7,441**	**51,445**

(Source: *TamilNilam* taluk database furnished by the Department)

(ii) Rejection instead of transfer: 3,006 out of the 1,57,163 NISD applications were rejected stating that they were sub-division cases i.e. ISD cases. These applications should have been transferred to Surveyor in ISD workflow instead of being rejected.

Similarly, 4,263 out of 2,83,535 ISD applications were rejected on the ground that they are 'Full *Patta*' transfer cases i.e. NISD cases. These applications should have been transferred to VAO in NISD workflow instead of being rejected. The details are furnished in **Appendix 3.14**.

The time taken to reject these cases is tabulated in **Table 3.6**.

Table 3.6: Time taken for the rejection

Sl. No.	Delay range	NISD	ISD
1	0 to 10 days	489	89
2	11 to 25 days	653	144
3	26 to 50 days	668	280
4	51 to 75 days	383	339
5	76 to 100 days	245	426
6	More than 100 days	568	2,985
Total		**3,006**	**4,263**

(Source: *TamilNilam* taluk database furnished by the Department)

DoSS accepted (October 2021) that they were aware of such delays and necessary MIS reports were available in the *TamilNilam* for monitoring. He assured that appropriate action would be taken to reduce the delay in processing of OPT applications. The line officials would also be strictly instructed to promptly transfer the OPTs correctly (i.e. NISD as ISD and *vice versa*) to avoid hardship to the applicants.

3.1.7 Deficiencies in the SMS communication to applicants

As per activity No. 8 of the SRS of *TamilNilam* (Rural), the details of approval/rejection order and date should be intimated to the applicant through SMS. This has also been reiterated in the DOSS's instructions for implementing OPT system.

In the OPT workflow, the receipt of an OPT application is to be acknowledged through the SMS module and applicant should also be intimated about its stage-wise progress and final outcome through this module. It was observed that the SMS log in respect of rejected applications either (i) did not have any entry, (ii) had entry as 'failed' or (iii) had an entry but carried a blank message in the following cases **(Tables 3.7, 3.8** and **3.9)**.

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Table 3.7: Rejected applications without SMS log entry

Description	Number of OPT applications	
	ISD	NISD
Number of applications which were rejected without SMS intimation	94,180	65,963
Out of the above, applications where mobile number (10 digits with numbers starting with 6,7,8 & 9) was available for intimation	61,108	57,549
Cases where application was rejected either because applicant did not attend field visit or for want of physical documents	17,510	7,151

Table 3.8: Rejected applications with SMS log entry as 'failed'

Description	Number of OPT applications	
	ISD	NISD
Number of cases where SMS intimation failed and applications were subsequently rejected	1,176	469
Number of cases where failure was attributable to department (not enough balance for bulk SMS, Daily SMS limit reached, TRAI exemption validity expired)	1,039	437
Cases where application was rejected either because applicant did not attend field visit or for want of physical documents	266	86

Table 3.9: Rejected applications with SMS log entry but with blank message

Description	Number of OPT applications	
	ISD	NISD
Number of applications which were rejected subsequent to a 'blank' SMS intimation	38,005	17,099
Cases where application was rejected either because applicant did not attend field visit or for want of physical documents	7,176	3,273

(Source: *TamilNilam* taluk database furnished by the department)

As intimation by SMS is the only mode of communication to the applicant by the Department, the above deficiencies meant that the applicant was deprived of an opportunity to rectify any shortcomings on his/her part for the successful completion of the land transaction request.

The Principal Secretary asked (October 2021) Inspector General of Registration/NIC to probe the reasons for such discrepancies and to take action against document writers etc., who were repeatedly giving their mobile numbers instead of the applicant's mobile number or giving mobile numbers in non-standard format.

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Capturing of the mobile numbers not pertaining to the actual buyers pointed to deficiencies in input controls, which could potentially enable vitiation of the process by agencies/middlemen involved in the process.

3.1.8 Non-collection of sub-division fees for RTR applications

Government revised (July 2020) the sub-division fees from ₹ 40 (for Villages), ₹ 50 (for Municipalities) and ₹ 60 (for Corporations) to ₹ 400, ₹ 500 and ₹ 600 respectively.

The details of Sub-division fees remitted by the applicant were captured in the *TamilNilam* OPT workflow system by the Deputy Inspector of Survey through the front-end screen before forwarding the application to Tahsildar for approval.

During field visit in four sampled taluks, Audit noticed that the Sub-division fees was not being collected. The details of RTR-ISD applications processed as per the reports furnished by the respective taluks and the amount of fees that should have been collected for such cases, as worked out in Audit, is given in **Table 3.10**.

Table 3.10: Non-collection of Sub-division fees for RTR applications

Sl. No.	District	Taluk	Sub-division fees not collected between April 2015 - August 2021 (In ₹)
1	Kanyakumari	Agastheeswaram	26,04,960
2	Madurai	Madurai East	34,22,480
3	Madurai	Madurai North	40,29,560
4	Madurai	Thirupparankundram	10,89,240
		Total	**1,11,46,240**

(Source: Information compiled from the details furnished by the taluks)

Non-collection of Sub-division fees, as ordered by the GoTN, in the above taluks is a failure on the part of workflow officials. The lapse is also due to inadequate controls in the *TamilNilam* application software, which permitted forwarding of OPTs to the approving authority without entering the information about the Sub-division fees collected.

To an Audit enquiry, the Tahsildars replied that they will get the matter clarified from the competent authority and based on the clarification, they will collect Sub-division fees hereafter. The Principal Secretary accepted (October 2021) that the inadequate controls in *TamilNilam*, contributed to the non-collection of Sub-division fees and stressed the necessity of integrating the payment of Sub-division fees within the *TamilNilam* application software in co-ordination with NIC. The Government however, did not fix any timeframe for the integration, exposing the system to the risk of revenue loss.

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3.2 Conclusion

Despite integrating the data between Registration and Revenue Departments, 49 *per cent* of OPT applications, not involving Sub-division, received from Sub Registrars, were rejected, resulting in citizens applying for OPT again through Common Service Centre. As against the stipulated timeline of 15 days for OPT applications, not involving Sub-division, there were delays in approving (43 *per cent* cases), rejecting (79 *per cent* cases) and processing (60 *per cent* cases). Similarly, as against the timeline of 30 days for OPT applications involving Sub-division, the percentage of delays in approving, rejecting and processing them were 53 *per cent*, 93 *per cent* and 72 *per cent* respectively. Further, 66 *per cent* of approved and 86 *per cent* of rejected applications were not processed correctly. OPT applications were not processed within the stipulated time period. The lack of controls in the system resulted in rejection of OPT applications with inconsistent remarks and processing of OPT application, involving Sub-divisions, without collecting Sub-division fees.

3.3 Recommendations

Government may consider:

- Identifying the reasons and reducing the delays in OPT system for ensuring time bound delivery of *patta* transfer services to citizens.
- Rationalising the list of reasons for approval/rejection of OPT applications for ensuring transparent service to citizens.
- Ensuring percentage check of the approved/rejected applications is carried out effectively on a monthly basis by the ADSLR in respect of all the taluks under his control. Suitable MIS may be developed to ensure the same.

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CHAPTER IV
PROJECT IMPLEMENTATION

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CHAPTER IV

PROJECT IMPLEMENTATION

4.1 Execution of Survey work using modern equipment

As per para 3.2 of DILRMP guidelines, the 'Survey and Resurvey' component should be implemented using modern technology like Differential Global Positioning System (DGPS) and Electronic Total Station (ETS) which ensures accuracy in creation of digital database of lands and their attributes. This helps the public to know about their land details and also aids the land administration officials for land use planning. Also, fraudulent transactions will be curbed and Government lands can be protected through the digital database and web-based monitoring.

4.1.1 Resurvey

(i) Funding

Funding for the Resurvey component of DILRMP was shared equally between GoI and GoTN upto 31 March 2016 and funded wholly by GoI from 01 April 2016. Under this component, GoI sanctioned (October 2014) ₹ 16.91 crore for Resurvey work in Kanyakumari, Krishnagiri and The Nilgiris districts using DGPS (in open/semi-open areas) and ETS (in built up areas/areas covered by foliage).

(ii) Status of Resurvey work

The status (October 2021) of the Resurvey work in the three districts is given in **Table 4.1**.

Table 4.1: Status of Resurvey work

District (Number of Taluks)	Total villages	Progress of Survey/Resurvey work			
		Completed		Ongoing	Not started
		Number	*In per cent*		
Kanniyakumari (6 Taluks)	188	36	*19.15*	6	146
Krishnagiri (8 Taluks)	636	84	*14.47*	13	539
The Nilgiris (6 Taluks)	54	13	*24.07*	2	39

(Source: DILRMP MIS report)

As seen from the table above, the progress of Resurvey work was poor and also had deficiencies which was seen in two sampled Taluks as discussed below:

- Only '*poromboke*' lands were Resurveyed in 6 of the 15 villages in Kothagiri Taluk. This serves no purpose as it constitutes a partial Resurvey and cannot be stated as 'Settlement', which is the final stage of the Resurvey.

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- 'A stones' and 'B stones' are fixed to identify the village and field boundaries respectively. Re-fixing of fallen and missing stones is one of the preliminary works in Resurvey. In Kothagiri and Agastheeswaram Taluks, out of 804 'A' stones and 25,210 'B' stones which were found to be missing, only 1,710 'B' stones were fixed.

- DoSS procured (June 2017) 70 Continuously Operating Reference Stations (CORS) at an amount of ₹ 696.50 lakh which was not among the GoI approved equipment for Resurvey. The CORS units were installed all over the State at 70 locations. However, due to non-sanction of funds, payment to the vendor has not been made till date. Due to non-payment, the vendor did not provide training and technical support, which is required for uninterrupted functioning of CORS units. Thus, the CORS units in Kothagiri and Agastheeswaram Taluks were not utilised and Resurvey work was conducted with DGPS units alone.

The above deficiencies indicated that the Resurvey work is incomplete and in its present form could not reach the final stage of 'Settlement'.

DoSS stated (October 2021) that this was only a pilot study and due to technical issues and the topography of the pilot Taluks the work could not be completed. The Principal Secretary added that alternative methodology was being worked out to complete the Resurvey work. The reply of DoSS was not acceptable as the technical specification of the equipment should have been based on the topography.

4.1.2 Town Survey - status of settlement work in sampled taluks

As per Chapter XIII of Survey Manual, when a Town is notified for Town Survey and the Survey is carried out, a new set of urban land records *viz.* Town Survey Land Register (TSLRs) and Block Maps are created and these records replace the rural land records (A-Register and FMB). The Town Survey which ascertains individual land parcels, their extents and redraws them into wards, Blocks, Town Survey numbers and Sub-divisions for identification, is to be ideally followed by Town Settlement, an activity which verifies, corrects and establishes other aspects of a land record such as land type, classification, assessment and ownership. However, it was observed that Towns have come under 'maintenance'[1] i.e for *patta* transfer, without 'settlement' process. The status of Town Settlement, which was in progress in three out of the 22 sampled taluks is in **Table 4.2**.

[1] The intervening period between creation of new set of urban land records upto completion of settlement process is termed as 'coming under maintenance'.

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Table 4.2: Town Survey - status of settlement work

Taluk	Year of completion of Town Survey	Year of commencement of settlement	Status of settlement work as on the date of Audit
Alandur	2002	2011 (Under progress)	14,514 out of 19,429 Town Survey numbers completed
Avadi	2005	2017 (Under progress)	3 out of 9 wards completed
Madhavaram	2008	2013 (Under progress)	18,679 out of 28,043 Town Survey numbers completed

(Source: Information furnished by the Taluks)

From the above table, it is observed that the settlement process is still in progress though survey activities were completed 13 to 19 years ago. The abnormal delay in commencing the settlement work and its slow progress resulted in non-achievement of the objective of the Survey. Consequently, the land owners were given manual *pattas* and the land transaction under these TSLRs remain outside *TamilNilam* defeating the objective of computerisation of Land Records.

4.2 Asset Management

4.2.1 Land Record Management Centres

Land Record Management Centres (LRMCs) is a component under NLRMP/DILRMP for establishing a modern record room in each taluk with three distinct functional areas. The three areas are (i) a storage area with compactors/storage devices for physical storage of records and maps, (ii) an operational area with computers/servers, storage area network, printers, etc., and (iii) a public services area for waiting/reception, etc. The physical and financial status of the implementation of LRMC component in the State as of 31 March 2021 are as given in **Tables 4.3** and **4.4**.

Table 4.3: Physical: Phase-wise status of Land Record Management Centres as on 31 March 2021

Sl. No.	Phase	Sanctioned LRMCs	LRMCs commenced operation	LRMCs pending completion
1	Phase I	21	21	0
2	Phase II	57	57	0
3	Phase III	76	41	35
4	Phase IV	138	42	96
5	Phase V	13	0	13
Total		**305**	**161**	**144**

(Source: Information furnished by the Department)

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Table 4.4: Financial: Phase-wise funds sanctioned, released and expended as on 31 March 2021

(₹ in lakh)

Year	Phase/ Number of LRMCs sanctioned	Amount sanctioned	Funds Released			Expendi -ture	Balance
			GoI	GoTN	Total		
2011-12	I/ 21 LRMCs	525	157.50	157.50	315.00	303.25	11.75
2013-14	II/57 LRMCs	1,425	427.50	427.50	855.00	811.07	43.93
2014-15(1)	I (40 *per cent*)/ 21 LRMCs	--	105.00	105.00	210.00	210.00	0.00
2014-15(2)	III/ 76 LRMCs	1,900	570.00	570.00	1,140.00	946.74	193.26
2015-16	II (40 *per cent*)/ 57 LRMCs	--	285.00	285.00	570.00	284.12	285.88
2018-19	IV/ 138 LRMCs	3,450	1,035.00	--	1,035.00	804.86	230.14
2020-21	V/ 13 LRMCs	325	162.50	--	162.50	30.84	131.66
Total	**305 LRMCs**	**7,625**	**2,742.50**	**1,545.00**	**4,287.50**	**3,390.88**	**896.62**

(Source: Information furnished by the Department)

It could be seen from the **Table 4.3** that as of March 2021 only 161 out of 305 LRMCs (53 *per cent*) commenced operations. In the joint physical verification of 22 sampled taluks, the following were noticed:

- In seven[2] taluks, LRMC was not established.
- In 15 taluks where the LRMC was established it was noticed that
  - Seven taluks did not have storage area for physical storage of records and maps. No compactors were provided in the 15 taluks.
  - Though all 15 taluks had operational area, 11 taluks did not have networking (LAN) facility.
  - Three taluks did not have a waiting/reception area for the public.
  - Among the 15, the LRMCs at Thirupparankundram and Uthukuli taluks had all the necessary facilities except compactors.
- In two out of the 15 taluks (Agastheeswaram and Vilavancode), the LRMC was established by constructing a new building which was not in line with the programme guidelines which stipulated that central funding will not be provided for new constructions and renovations. In Agastheeswaram Taluk, the new building for LRMC

[2] Alandur, Avadi, Avinashi, Tiruppur North, Mambalam, Perambalur and Udhagamandalam.

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was used by Taluk Supply Office and e-Aadhaar Service Centres and in Vilavancode Taluk, it was not put to use for the desired purpose.

- LRMC established in the Kothagiri Taluk building, was not put to use.

DoSS replied (October 2021) that LRMCs were only an extension of the existing office infrastructure and added that as all records were digitized and available through e-services and as scanning of land records for archival purpose was also underway, the relevance of LRMCs had come down. However, he accepted that LRMCs could not be established as originally envisaged with facility of compactors for storing maps, etc.

As the Department had spent ₹ 33.91 crore (56 *per cent* of the total expenditure under DILRMP) on LRMCs (March 2021), it should take appropriate steps to establish all the envisaged facilities for utilisation of the public. Further, Government should device a mechanism to record the details of citizens visiting the LRMCs for land related services and take action for redressing their grievances.

4.2.2 Utilisation of programme funds on excluded activities

As per Para 3, 'Choice of Software' of Chapter 4 of NLRMP guidelines - Technical Manual, "States should bear in mind that they have to meet the required funding for software from their own resources". Further, the terms and conditions of GoI sanction orders state that funds shall be utilised for the purpose for which it was released.

It was seen that between May 2017 and August 2020, the Department released ₹ 98.29 lakh towards outsourcing programmers for developing *TamilNilam* (Rural & Urban) software which were sanctioned for other components of the programme like Digitization of FMS, Programme Monitoring Unit, State Data Centre, Survey/Resurvey and LRMC.

In reply to an Audit enquiry, the DoSS replied (January 2021) that there is no provision of funds under DILRMP specifically for development of software and that savings in other components of the programme was used for the purpose and that GoI had been addressed seeking ratification of the inter component transfers. It further stated that while ₹ 3.18 crore was released from State funds to NIC till date towards software and hardware, funds sanctioned by the Central as well as State Governments was used interchangeably depending on the need and availability for bringing the computerised land records online through e-services to the public.

Reply is not acceptable, as pending ratification by GoI for development of software, the utilisation of programme funds for other than the approved programme expenditure, tantamount to violation of DILRMP guidelines.

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4.2.3 Other points of interest

(i) Non-compliance with e-Waste Policy

As per the e-Waste (Management) Rules 2016, the maximum e-waste storage period is 180 days. As per the Government guidelines[3], the Head of Department should form a Hardware Disposal Committee (HDC), with a minimum of three members each from Finance/Accounts, Purchase/Procurement and Technical/Computer knowledge, and empower them to identify, certify and recommend item-wise disposal. Based on the recommendations of the HDC, the Department may go for replacement of the items with proper entry and removal in stock register. After ensuring proper backup of the data held in old system, the recommended condemned items had to be disposed off as per Tamil Nadu Government's e-Waste Policy. Further, an inventory system was to be maintained and the departments had to implement a web based Asset Management System for managing e-waste disposal.

As the Department has been procuring Information Technology (IT) hardware and equipment for replacement of old hardware and for adoption of latest technology in Survey/Resurvey, most of the IT hardware purchased under the CLR/NLRMP/DILRMP programmes over a period spanning 25-30 years have become obsolete now due to regular wear and tear and adoption of latest technology.

During the field visit to ADSLR offices in three sampled districts, Audit noticed that no action was taken to identify e-waste in the units under the control of the respective ADSLR for their eventual disposal, as IT assets to the taluks are issued only through ADSLR.

The ADsSLR of The Nilgiris, Perambalur and Kanyakumari Districts replied (August to October 2021) that action would be taken shortly to prepare exhaustive list of e-waste for their disposal.

(ii) Non-utilisation of 'A0' Plotter provided to District Survey Offices

In March 2005, GoTN issued orders outlining the procedure for maintenance of computers and peripherals. During field visit (June 2021 to October 2021) to the sampled district survey offices (ADSLR), Audit noticed that an 'A0' Plotter was supplied (during the period 2007 to 2012) to each of the eight ADSLR offices for taking print outs of ward maps, block maps and village maps. However, in all the sampled ADSLR offices, the 'A0' Plotters were not in working condition as detailed in **Table 4.5**.

[3] (i) Information technology (e.Gov.II) Department G.O.Ms. No.18 Dated 07 May 2010 on E-Waste Policy of Tamil Nadu 2010 and (ii) Information Technology (e.Gov.II) Department G.O.Ms.No. 9 dated 23 April 2013.

Table 4.5: Status of 'A0' Plotter provided to District Survey Offices

Sl. No.	District	Month & Year of receipt of A0 plotter	Period upto which the plotter was stated to be working	Present state of A0 plotter	Remarks
1	Chennai	Not Known	Not Known	Not working	Certified to be unserviceable by the technician deputed from DoSS.
2	Kanniyakumari	2008	Not mentioned	Not working-unserviceable	Service engineer stated that the printer is unserviceable.
3	Madurai	2007	2015	Not working due to 'frozen toner'	Status reported to DoSS vide letter dated 09 December 2020, further action awaited.
4	Perambalur	2008	Not mentioned	Not Working	Annual Maintenance Contract not executed.
5	Thanjavur	2012	Not mentioned	Not Working	Letter addressed to DoSS, Technician visited to assess the condition of the plotter. No funds provided for consumables.
6	The Nilgiris	2008	Warranty ended by 2011	Not Working	No funds provided for printer consumables.
7	Tiruppur	2012	2014	Was repaired and then it was not used	Awaiting visit from Service Engineer to be deputed by EPSON on instructions from DoSS.
8	Tiruvallur	2008	Not Known	Not working	As per inspection report of the technician, Repair Estimate given to Head Office.

(Source: Compiled from information furnished by District Survey Offices)

In the absence of connected records in the sampled units, the cost of each plotter and the source of funds could not be ascertained in Audit. To an Audit query, it was stated by the ADsSLR concerned that the Plotters could not be put to use and had declined into state of disrepair due to non-provision of funds for printer consumables. It was also stated that no funds were provided for executing Annual Maintenance Contract after the expiry of warranty.

(iii) Non-installation of procured AutoCad in Survey Training Institute, Orthanadu

Under NLRMP, Government of India sanctioned ₹ 26.25 lakh and released ₹ 15.75 lakh for the purchase of Geographical Information System (GIS) ready digitization software with AutoCAD for imparting training on 'Digitization and GIS' to Surveyor and Draughtsman in Survey Training Institute (STI), Orathanadu. The software was procured (February 2015) at a cost of ₹ 9.50 lakh. However, it was observed that the licensed AutoCAD software was not installed.

The Principal, STI, Orathanadu in his reply (October 2021) stated that in the absence of AutoCAD, training was imparted through other applications like CollabLand and MS CAD. Thus, the expenditure on procuring the AutoCAD became infructuous and the programme objective of imparting training in AutoCAD was also defeated.

4.3 Conclusion

Computerisation of land records has been in progress since 1998 under three schemes *viz*., CLR, NILRMP and DILRMP. As per the latest target, the Project should have been completed by March 2020. It is, however, a matter of concern that due to the lack of adherence to deadlines for the Project, the desired objectives of providing timely and efficient services to the citizen were yet to be achieved. The Resurvey works in three districts were progressing in a slow pace. LRMCs were not completed in 144 out of the 305 taluks (47 *per cent*), thereby the envisaged facilities were not provided to the citizens seeking land record related services.

4.4 Recommendations

Government may consider:

- Accelerating the Resurvey work in the selected taluks and working out an alternative methodology to complete the Resurvey work.
- Completing pending settlement work in Town Survey in a time-bound manner.
- Taking steps to establish all the envisaged facilities in the established LRMCs for utilisation of the public.

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CHAPTER V

DATA SECURITY AND MONITORING

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CHAPTER V

DATA SECURITY AND MONITORING

5.1 Misuse of login credentials resulted in illegal transfer of Government lands to individuals

The e-Security Policy of Tamil Nadu, 2010 envisages safeguards against IT related threats and vulnerabilities in the IT System. During scrutiny of files relating to *TamilNilam* (Urban), Audit noticed that the Additional Chief Secretary sought (September 2019) action taken report from the DoSS on the incident of misuse of official key password and illegal transfer of Government *Poromboke* lands to individuals by Revenue officials in Dindigul district. In the incident, four Revenue officials misused the key password assigned to RDO, Kodaikanal and transferred, through the online system, 32 Hectares (79.0737 acres) of Government lands (103 Sub-divisions in Kodaikanal town) between October 2018 and 04 June 2019[1]. The DoSS, in turn sought (September 2019) from the ADSLR, Dindigul the manuscript data and computerised data for the town Survey numbers involved and requested the District Collector, Dindigul to take necessary action against the officials involved.

Later (December 2019) DoSS provided the details about *Anadheenam* lands in Kodaikanal to NIC for blocking them from online land transactions. Based on the request of DoSS, NIC blocked all transactions (December 2019) for 'Government assessed and non-assessed wastelands' in Kodaikanal town. DoSS also asked NIC to block all Government assessed and unassessed wastelands of Udhagamandalam, Coonoor, Yercaud and Yelagiri Taluks from land transactions in *TamilNilam* (Urban & Rural). In response NIC blocked (December 2019) 1,839 TSLRs in *TamilNilam* (Urban).

To an Audit enquiry, DoSS replied that the incident in Kodaikanal which involved land classification change from 'Government' to 'Private' requires the workflow up to District Collector's level for appropriate orders. But by-passing this work, the 'Additions and Corrections' modules which goes upto the RDO level was utilised for fraudulently changing the land classification. The Department stated that the classification of the lands involved have been restored to original classification *viz.*, 'Government' and that these lands were blocked for further land transactions and the *pattas* issued were revoked. However, Audit verified (October 2021) the 103 Sub-divisions in the Department's web-portal and found that in one instance the land parcel was not blocked and in three[2] instances though the land parcels were blocked, the name of the individual to whom the lands were transferred illegally continued to be displayed. This is indicative of incomplete action taken by the Department.

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1 The RDO was working from 04/09/2017 to 16/10/2018 and on transfer to Madurai handed over the key password to the Revenue Inspector. He retired on 31/07/2019.

2 Survey No.7/2 under Ward D, Block 19 (not blocked). Survey Nos. No.5/40 under Ward A, Block 5 and Survey Nos.1/2D and 55/7A under Ward C, Block 2 (blocked but name displayed).

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Further, during examination of the urban database of Tiruvallur and Mambalam Taluks, Audit came across 73 cases (5 in Tiruvallur and 68 in Mambalam) where the ownership of Government assessed waste lands was in the name of individuals. It is suggested that the Department rectifies the above issues and conduct a similar exercise in respect of such lands across the State.

5.2 Delay in implementation of Disaster Recovery Plan

As per e-Security Policy of Tamil Nadu 2010, any disruption of operation of information systems of critical infrastructure would have a devastating effect on citizens, the economy and Government services. In view of the potential impact, protection of critical information infrastructure was essential to ensure that disruptions are of minimal duration, manageable and cause the least damage possible. All Departments should develop and implement an IT Disaster Recovery (DR) Plan for critical IT Systems and review for relevance annually. Contingency planning along with a standard response chart was required to prevent interruptions to normal operations for critical Government processes and procedures. Backups of all configurations on devices as per required frequency were to be taken, documented and verified by restoring backups as per criticality of devices.

In the absence of a disaster recovery system in place, due to power outage, all servers of *TamilNilam* came to halt on 19/05/2018 and 02/06/2018. Similarly disruption in services also took place between 29/04/2020 (2:17 pm) and 01/05/2020 (2:00 pm). In reply (November 2020), DoSS stated that the servers for the Disaster Recovery System has been installed at Tamil Nadu Data Recovery Centre, Trichy in July 2020 and NIC in its reply (December 2020) stated that DR is being set up and this would ensure un-interrupted services once it is in place. It was also stated that the replication of *TamilNilam* (Rural) data to DR site is currently under progress and on its completion, *TamilNilam* (Urban) and FMB will be replicated to DR.

NIC informed (October 2021) that the offsite backup storage was now ready at Trichy. The installation of the offsite backup storage alone does not fulfil the requirement for DR and would not assure business continuity without loss of time in the event of disruptions.

5.3 Non-commencement of Aadhaar seeding of land records in *TamilNilam*

DILRMP guidelines states that Aadhaar integration is vital to check *benami*/ fraudulent transactions of land and also essential to promote Direct Benefit Transfer (DBT) to the beneficiaries. GoTN directed (November 2016) DoSS to take necessary steps to enter the Aadhaar number in a phased manner in the *TamilNilam* database against the land owners.

To an Audit query, the Department replied (October 2021) that Aadhaar seeding of land record database has not yet commenced in the State. As Aadhaar authentication is not mandatory after the Hon'ble Supreme Court Order (September 2018), the Department has requested GoTN to issue orders

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to obtain Aadhaar numbers from land owners with their informed consent to avail the web services of the land records. Alternatively, acceptance of voter ID for identification of land owners was proposed and orders from GoTN in this regard were awaited.

Though the Department has taken steps, in the absence of necessary Government Orders, the land record database still does not have a provision to uniquely identify land owners.

5.4 Security Audit Certificate

The e-security policy of Government of Tamil Nadu 2010, also states that third-party IT Security Assessments of all IT devices, applications and assets shall be done annually. The details of such security assessment has been dealt under Para 2.4.2 of the e-Security Policy.

Scrutiny of records indicated that Security Audit Certificates obtained for *TamilNilam* (Rural) and (Urban) had expired on 13 December 2019, 31 March 2020 and 09 June 2020. It was seen from the files produced to Audit that no web applications of the Department were covered by security audit.

In the exit meeting, DoSS and NIC stated (October 2021) that all applications under *TamilNilam* have now been covered under Security Audit. The final reply with supporting document is awaited.

5.5 Non-implementation of Local Government Directory codes

The Ministry of Rural Development, Department of Land Resources (MoRD) envisaged (November 2017) the use of the MIS data for monitoring the progress of DILRMP and the DILRMP-MIS database had to be Local Government Directory (LGD) compliant as the use of LGD codes would help in inter-operability of data among Ministries/Departments in the State. The Ministry of Panchayati Raj maintains the LGD application, which is a standard location directory of all administrative units *viz.* district, block, gram panchayat, village, urban local bodies, etc. The application also has an online updating mechanism. The State was also advised to co-ordinate with NIC to expedite the updation and validation of LGD before 31 December 2019.

At present, the DILRMP-MIS database remains LGD non-compliant in the State. The DoSS replied (January 2021) that LGD codes were yet to be brought into the online land records and that currently Revenue village codes were being used instead. He further stated that the vast difference between the two codes necessitated reconciliation and action would be taken in this regard in consultation with NIC, CLA, CRA and other line departments. Thus, non-adoption of LGD codes restrict the inter-operability among the Central and State Governments.

5.6 Lack of monitoring by Programme Management Unit

The DILRMP guidelines provides for monitoring of scheme implementation by the Programme Management Unit (PMU). PMU is a two-tiered structure at the State level consisting of (i) the State Level Monitoring Committee of

NLRMP (SLMC) headed by the Principal Secretary, Revenue Department and (ii) the NLRMP Implementation Society of Tamil Nadu (NIST) headed by the Principal Secretary/Commissioner of Survey and Settlement and at the district level, a District Level Monitoring and Review Committee (DLMRC) headed by the District Collector.

(a) The SLMC was to meet every quarter to monitor the progress of implementation of NLRMP. However, Audit noticed that the SLMC of NLRMP had convened only thrice (27/06/2012, 21/06/2017 and 05/07/2019) since its constitution (May 2012). Considering the delay in implementation in many of the sub-components of the programme, non-convening the SLMC at regular intervals i.e. once in a quarter, contributed to the deficient monitoring.

(b) NIST was constituted to take care of the ground level activities of the programme and to manage the funds sanctioned under the programme. It was observed from records produced to Audit that the NIST had convened on seven occasions[3]. These meetings mostly dealt with approval of annual accounts and other routine matters and saw minimal discussions on factors/challenges in the progress of the program.

(c) DLMRC was ordered to be constituted (April 2015) for monitoring the implementation of the DILRM Programme at the district level. Monthly meetings were to be conducted and the minutes intimated to DoSS. Audit noticed in the eight sampled districts that district level meetings were not conducted periodically. In three districts no meeting was conducted and in the remaining five districts the meetings were conducted only for one to six times till date. Further frequent transfer[4] of Tahsildars impacted continuous and effective monitoring.

To an Audit enquiry, DoSS replied (December 2020) that progress of each and every component of the DILRMP was discussed in the SLMC meeting conducted atleast once in a year based on need and also the progress of various schemes was reviewed frequently by the SLMC. He also added that the progress of the scheme were elaborately discussed in the NIST meeting and discussions and meeting were conducted frequently in this regard. Regarding DLRMC, it was stated that details would be furnished on receipt of information called from ADSLRs. It was, however, seen that the implementation of DILRMP suffered mainly due to poor monitoring at State, District and Taluk level.

5.7 Conclusion

Deficiencies in data security resulted in transfer/classification of Government land as private land. The Department does not have a Disaster Recovery system in place to safe guard the critical data of *TamilNilam*. In the absence of Aadhaar seeding in land records database, the system does not have a

[3] Dates of Meeting: 04/01/2013, 17/10/2014, 17/02/2016, 20/04/2017, 28/05/2018, 29/07/2019 and 07/01/2021.

[4] During the period 2016-21, transfer of Tahsildar in a taluk occurred 8 to 14 times in 9 out of 18 sampled taluks.

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provision to uniquely identify land owners. Monitoring at all levels, especially at the district level, were deficient. In the three sampled districts, the monitoring committees did not meet even once.

5.8 Recommendations

Government may consider:

- Following MeitY guidelines on security architecture to ensure IT security process with proper viewing/editing rights etc., based on segregation of duties and need-to-know basis so that the sensitive data cannot be accessed by unauthorised users.
- Checking and rectifying the defects, pointed out by Audit in the sampled taluks, across all the Taluks in the State.
- Directing NIC to incorporate necessary input controls and validation checks in the software applications to ensure correct and complete capture of data.
- Speeding up Aadhaar seeding of land records to avoid multiple *patta* numbers for the same *pattadhar* and facilitate consolidation of land holdings of individual owners.
- Holding State and District level meetings periodically and use the MIS reports available in *TamilNilam* for effective monitoring of the system.

(R. AMBALAVANAN)
Principal Accountant General (Audit-I),
Tamil Nadu

Chennai
The 08 June 2022

Countersigned

(GIRISH CHANDRA MURMU)
Comptroller and Auditor General of India

New Delhi
The 20 June 2022

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APPENDICES

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Appendix 2.1

(Reference: Paragraph 2.2.1; Page 9)

Details of differences in village extent between manual and computerised A-Registers

Sl. No.	Taluk	Total number of Villages	Villages test-checked	Details of Villages where there were differences in land extent			
				No. of villages	Total extent as per manual A-Register (Ha. Are. SqM.)	Total extent as per computerised A-Register (Ha. Are. SqM.)	Differences (+/-) (Ha. Are. SqM.)
1	Agastheeswaram	36	10	10	6718.49.98	6852.91.97	(-) 134.41.99
2	Alandur	10	5	5	1288.97.00	1314.27.55	(-) 025.30.55
3	Avadi	54	10	10	4149.36.40	4130.52.00	(+) 018.84.36
4	Avinashi	41	41	41	44745.23.00	45239.25.96	(-) 494.02.96
5	Gummidipoondi	90	10	9	3331.01.50	3418.04.63	(-) 087.03.13
6	Kothagiri	15	10	10	13109.58.50	32181.36.01	(-) 19071.77.51
7	Madurai East	106	106	87	19999.66.00	21120.43.03	(-) 1120.77.03
8	Madurai North	82	10	10	2209.80.00	2206.10.85	(+) 3.69.15
9	Papanasam	120	10	9	3280.92.00	3287.83.07	(-) 6.91.07
10	Perambalur	27	10	10	11130.91.50	11650.99.84	(-) 520.08.34
11	Thiruvaiyaru	56	10	8	2689.25.00	2675.99.80	(+) 013.25.20
12	Thiruvidaimaruthur	89	10	10	3401.95.00	3404.57.33	(-) 002.62.33
13	Tiruppur North	7	7	7	8914.48.50	7261.93.10	(+) 1652.55.40
14	Tiruvallur	165	165	11	3798.43.00	3909.56.20	(-) 111.13.20
15	Tirupparankundram	27	10	9	6084.56.00	6098.03.37	(-) 13.47.37
16	Udhagamandalam	12	10	9	35397.87.50	35496.08.78	(-) 98.21.28
17	Uthukuli	49	10	8	3253.63.50	3251.84.03	(+) 1.79.47
18	Veppanthattai	39	10	10	13883.91.00	13991.56.33	(-) 107.65.33
19	Vilavancode	27	9	9	8326.74.80	8330.66.57	(-) 003.91.77
Total		**1,052**	**463**	**282**			

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Appendix 2.1 (a)
(Reference: Paragraph 2.2.1; Page 9)

Cases of difference in land extent in Kattanagaram village of Tiruvidaimarudhur Taluk in Thanjavur District

Sl. No.	Survey number	As per manual A-register (in Ares)	As per computerised A-register (in Ares)	Difference (in Ares)	Reasons for difference
1	77	160.00	151.00	(-) 9.00	The error occurred due to incorrect totalling which is wrongly exhibited in the UDR A-Register.
2	124	173.00	170.00	(-) 3.00	Due to omission during computerisation - 3 Ares under sub-division 124/7 and 1.5 Ares under sub-division 127/1B2 and 3.5 Ares under sub-division 146/3C2 in the UDR A-register not captured.
3	127	141.00	139.50	(-) 1.50	
4	146	169.00	165.50	(-) 3.50	
5	71	213.50	213.75	(+) 0.25	Due to data entry error during computerisation the 2.75 Ares of sub-division 71/7A captured as 3 Ares.
	Total	**856.50**	**839.75**	**(-) 16.75**	

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Appendix 2.2

(Reference: Paragraph 2.2.2 (i); Page 10)

Illustrative cases of incomplete capture of legacy information

Sl. No.	Taluk	Village	Survey number	Reasons for the gap
1	Avadi	Pammathukulam	15 to 29, 47, 95-114, 181-338, 340, 346-352, 353-360, 371-399, 407-417, 421, 422, 444, 445, 447-454 and 456-466	Stated to be clubbed with Puzhal Lake in manual A-Register but this information not brought into computerised A-Register
2	Gummidipoondi	Siruvada	225	Omitted during computerisation of A-Register.
3	Madurai East	Kodikulam Part 2	198 and 212	
4	Madurai East	Perakkur	7, 9, 15 and 30	
5	Madurai North	Kadavur	111	
6	Tiruvallur	Ayathur	61 to 64, 310, 311, 313, 315, 317, 322 to 327, 329 to 350, 353, 354, 356, 359-361 and 363-374	Stated to be clubbed with Survey No.312 in manual A-Register but this information not brought into computerized A-Register
7	Tiruvallur	Valasvettikadu	169	Omitted during computerisation of A-Register

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Appendix 2.3

(Reference: Paragraph 2.2.2 (ii); Page 10)

Details of discrepancies in capture of old Survey numbers in computerised records

Sl. No.	Taluk	Number of Records	Old Survey number captured correctly	Old Survey number not captured correctly
1	Agastheeswaram	1,82,560	15,568	179
2	Alandur	13,952	5,693	6,200
3	Avadi	1,08,428	90,428	16,731
4	Avinashi	1,02,518	1,02,505	13
5	Gummidipoondi	2,23,117	2,21,493	898
6	Kothagiri	64,184	8,728	55,314
7	Madhavaram	39,545	31,770	6,924
8	Madurai East	1,12,895	77,343	35,389
9	Madurai North	1,00,331	77,661	22,644
10	Papanasam	1,91,644	1,83,389	7,728
11	Perambalur	1,19,227	91,572	27,390
12	Thirupparankundram	64,048	26,818	37,038
13	Thiruvaiyaru	75,537	71,943	3,586
14	Thiruvidaimarudhur	1,28,438	1,25,735	2,696
15	Tiruppur North	25,767	21,747	4,019
16	Tiruvallur	3,94,310	2,14,041	1,48,926
17	Udhagamandalam	53,346	4,655	48,617
18	Uthukkuli	59,298	8,887	50,369
19	Veppanthattai	1,48,688	1,16,823	31,741
20	Vilavancode	1,16,785	6,626	116
	Total	**23,24,618**	**15,03,425**	**5,06,518**

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Appendix 2.4 (a)

(Reference: Paragraph 2.2.2 (iii); Page 11)

Special characters in Survey numbers/Sub-division numbers in rural taluks

Sl. No.	Taluk	Number of records with special characters in Survey numbers	Number of records with special characters in Sub-division numbers
1	Gummidipoondi	0	59
2	Madhavaram	0	3
3	Perambalur	3	29
4	Tiruvallur	0	93
5	Thiruvaiyaru	1	19
6	Veppanthattai	0	1
Total		**4**	**204**

Appendix 2.4 (b)

(Reference: Paragraph 2.2.2 (iii); Page 11)

Special characters in Survey numbers/Sub-division numbers in urban taluks

Sl. No.	Taluk	Number of records with special characters in Survey numbers	Number of records with special characters in Sub-division numbers
1	Alandur	25	773
2	Avadi	90	169
3	Madhavaram	68	11
4	Madurai North	23	1
5	Thirupparankundram	0	4
6	Tiruvallur	2	14
7	Udhagamandalam	0	2
8	Vilavancode	0	104
Total		**208**	**1,078**

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Appendix 2.5

(Reference: Paragraph 2.2.3; Page 11)

Details of instances where the length of Sub-division number exceeded four digits/characters

Sl. No.	Taluk	Total number of Villages	Total Sub-divisions	Number of instances where the length of Sub-division number exceeded four digits/characters	
				Total number of cases	Number of cases after implementation of OPT
1	Agastheeswaram	36	1,82,560	1,675	1,323
2	Alandur	5	13,952	617	573
3	Avadi	21	1,08,428	7,548	4,823
4	Avinashi	41	1,02,518	1,284	1,242
5	Gummidipoondi	90	2,23,117	4,708	2,604
6	Kothagiri	23	64,184	586	553
7	Madhavaram	11	39,545	4,729	2,517
8	Madurai East	106	1,12,895	3,070	1,846
9	Madurai North	75	1,00,331	3,919	2,692
10	Papanasam	119	1,91,644	1,088	829
11	Perambalur	27	1,19,227	2,975	2,577
12	Thirupparankundram	26	64,048	2,346	1,643
13	Thiruvaiyaru	56	75,537	387	303
14	Thiruvidaimarudhur	89	1,28,438	829	534
15	Tiruppur North	7	25,767	733	713
16	Tiruvallur	165	3,94,310	15,054	8,185
17	Udhagamandalam	17	53,346	289	289
18	Uthukkuli	49	59,298	326	308
19	Veppanthattai	39	1,48,688	912	674
20	Vilavancode	27	1,16,785	636	428
Total		**1,029**	**23,24,618**	**53,711**	**34,656**

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Appendix 2.6

(Reference: Paragraph 2.2.3; Page 11)

Taluk-wise details of non-adherence of notation rules while sub-dividing land parcels

Sl. No.	Taluk	Number of Sub-divisions (ISD transactions)
1	Agastheeswaram	12,520
2	Alandur	1,935
3	Avadi	30,305
4	Avinashi	9,517
5	Gummidipoondi	24,744
6	Kothagiri	5,759
7	Madhavaram	8,536
8	Madurai East	22,958
9	Madurai North	28,243
10	Papanasam	6,052
11	Perambalur	15,850
12	Thirupparankundram	13,599
13	Thiruvaiyaru	3,075
14	Thiruvidaimarudhur	4,040
15	Tiruppur North	5,706
16	Tiruvallur	52,668
17	Udhagamandalam	3,397
18	Uthukkuli	5,895
19	Veppanthattai	10,554
20	Vilavancode	5,339
	Total	**2,70,692**

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Appendix 2.7 (a)

(Reference: Paragraph 2.2.5 (i); Page 13)

Details of multiple *Patta* numbers assigned to single *Pattadhar* in a village

Sl. No.	Taluk	Total number of cases	Number of cases after implementation of OPT
1	Agastheeswaram	18,501	5,729
2	Alandur	692	213
3	Avadi	4,242	2,024
4	Avinashi	8,372	3,595
5	Gummidipoondi	7,934	2,509
6	Kothagiri	4,972	2,284
7	Madhavaram	1,806	787
8	Madurai East	4,362	1,666
9	Madurai North	4,330	2,903
10	Papanasam	8,935	2,408
11	Perambalur	10,417	3,627
12	Thirupparankundram	3,588	1,100
13	Thiruvaiyaru	4,273	977
14	Thiruvidaimarudhur	6,845	1,569
15	Tiruppur North	2,894	1,603
16	Tiruvallur	16,560	4,743
17	Udhagamandalam	3,126	1,378
18	Uthukkuli	5,768	3,535
19	Veppanthattai	13,417	3,633
20	Vilavancode	12,774	4,270
Total		**1,43,808**	**50,553**

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Appendix 2.7 (b)

(Reference: Paragraph 2.2.5 (i); Page 13)

Details of multiple *Patta* Numbers assigned to single *Pattadhar* in urban taluks

Sl. No.	Taluk	Total number of cases	Number of cases after implementation of OPT
1	Alandur	757	5
2	Avadi	3,955	820
3	Madhavaram	887	174
4	Madurai North	2,671	312
5	Mambalam	797	355
6	Thirupparankundram	1,380	261
7	Tiruppur North	10,160	10,160
8	Tiruvallur	1,274	160
9	Udhagamandalam	1,539	1,116
10	Velachery	1,079	317
11	Vilavancode	4,629	2,057
Total		**29,128**	**15,737**

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Appendix 2.8 (a)

(Reference: Paragraph 2.2.5 (ii); Page 14)

Discrepancies found in computerised *Chitta* (ownership details) in sampled rural taluks

Sl. No.	Taluk	Private lands without ownership information	Owner Name/ Relative Name not available	Duplication in owner name	Incorrect spelling of owner/relative name (Tamil) during Unicode conversion
1	Agastheeswaram	0	6,100	4,134	705
2	Alandur	0	151	14	12
3	Avadi	653	2,406	79	717
4	Avinashi	1,297	41,773	2,247	220
5	Kothagiri	0	4,66,810	17	458
6	Gummidipoondi	7	8,228	10	3,615
7	Madhavaram	0	268	52	248
8	Madurai East	0	8,244	61	213
9	Madurai North	0	10,163	18	108
10	Papanasam	0	339	1,448	152
11	Perambalur	4	6,468	873	2,248
12	Thirupparankundram	216	6,385	44	18
13	Thiruvaiyaru	0	6,982	194	36
14	Thiruvidaimarudhur	0	23,180	220	452
15	Tiruppur North	3,278	17,945	1,798	80
16	Tiruvallur	57	19,587	61	4,877
17	Udhagamandalam	0	1,84,555	222	2,334
18	Uthukkuli	6,495	54,031	1,237	92
19	Veppanthattai	118	3,872	397	86
20	Vilavancode	0	149	4,553	22,190
Total		**12,125**	**8,67,636**	**17,679**	**38,861**

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Appendix 2.8 (b)

(Reference: Paragraph 2.2.5 (ii); Page 14)

Discrepancies found in computerised *Chitta* (ownership details) in sampled urban taluks

Sl. No.	Taluk	Private lands without ownership information	Owner name/ Relative name not available	Duplication in owner name	Incorrect spelling of owner/relative name (Tamil) during unicode conversion
1	Alandur	0	0	6	336
2	Avadi	808	292	22	1,419
3	Madhavaram	108	10	96	1,149
4	Madurai North	66	147	207	33
5	Mambalam	193	1	106	385
6	Thirupparankundram	2	18	6	20
7	Tiruppur North	0	11	129	10
8	Tiruvallur	50	6	50	157
9	Udhagamandalam	3	0	716	36
10	Velachery	4	12	170	531
11	Vilavancode	0	7	187	259
Total		**1,234**	**504**	**1,695**	**4,335**

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Appendix 2.9 (a)

(Reference: Paragraph 2.2.5 (iii); Page 14)

Redundant *patta* numbers in computerised *Chitta* in rural taluks

Sl. No.	Taluk	Number of Patta numbers in *Chitta* and in A-Register	Number of Patta numbers in *Chitta* but not in A-Register
1	Agastheeswaram	1,45,151	3,645
2	Alandur	10,268	3,059
3	Avadi	78,833	18,732
4	Avinashi	56,460	12,414
5	Gummidipoondi	84,277	26,178
6	Kothagiri	36,955	3,725
7	Madhavaram	29,707	13,542
8	Madurai East	65,514	19,536
9	Madurai North	66,017	18,289
10	Papanasam	74,479	21,247
11	Perambalur	63,164	17,028
12	Thirupparankundram	37,048	10,313
13	Thiruvaiyaru	32,539	10,833
14	Thiruvidaimarudhur	50,321	13,560
15	Tiruppur North	17,298	2,841
16	Tiruvallur	2,27,800	54,520
17	Udhagamandalam	24,481	2,191
18	Uthukkuli	31,703	3,927
19	Veppanthattai	70,131	32,337
20	Vilavancode	97,858	2,986
Total		**13,00,004**	**2,90,903**

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Appendix 2.9 (b)

(Reference: Paragraph 2.2.5 (iii); Page 14)

Redundant *patta* numbers in computerised *Chitta* in urban taluks

Sl. No.	Taluk	Number of *Patta* numbers in *Chitta* and in A-Register	Number of *Patta* numbers in *Chitta* but not in A-Register
1	Alandur	16,876	5
2	Avadi	58,936	2,719
3	Madhavaram	28,690	26
4	Madurai North	36,106	20
5	Mambalam	40,478	129
6	Thirupparankundram	21,686	793
7	Tiruppur North	38,306	20
8	Tiruvallur	18,765	522
9	Udhagamandalam	9,780	461
10	Velachery	40,533	0
11	Vilavancode	5,815	182
Total		**3,15,971**	**4,877**

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Appendix 2.10

(Reference: Paragraph 2.2.7; Page 16)

Details of gaps noticed in Sub-division numbers

Sl. No.	Taluk	Number of missing Sub-divisions	Number of Survey numbers involved
1	Alandur	564	119
2	Avadi	2,547	117
3	Madhavaram	845	90
4	Madurai North	393	139
5	Mambalam	454	76
6	Thirupparankundram	392	58
7	Tiruppur North	1	1
8	Tiruvallur	1,088	94
9	Udhagamandalam	849	128
10	Velachery	3,316	56
11	Vilavancode	143	100
Total		**10,592**	**978**

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Appendix 2.11

(Reference: Paragraph 2.3.1; Page 18)

Survey numbers with textual records but without spatial records

Sl. No.	Taluk	Number of villages	Survey numbers in A-Register	Survey numbers without FMS	Number of Sub-divisions for the Survey numbers in Col. (5)
(1)	(2)	(3)	(4)	(5)	(6)
1	Agastheeswaram	36	14,778	2,614	35,624
2	Alandur	5	1,292	54	163
3	Avadi	21	5,561	137	1,697
4	Avinashi	41	19,216	41	309
5	Gummidipoondi	90	25,208	876	8,673
6	Kothagiri	23	7,892	1,801	13,959
7	Madhavaram	11	2,012	35	332
8	Madurai East	106	9,774	45	475
9	Madurai North	75	6,954	4	41
10	Papanasam	119	26,278	3,430	37,482
11	Perambalur	27	10,361	128	1,468
12	Thiruvaiyaru	56	11,049	603	3,302
13	Thiruvidaimarudhur	89	19,722	669	5,354
14	Tirupparankundram	26	3,772	4	45
15	Tiruppur North	7	3,188	0	0
16	Tiruvallur	165	46,315	3,233	44,747
17	Udhagamandalam	17	10,031	340	1,165
18	Uthukuli	49	9,658	22	156
19	Veppanthattai	39	17,261	72	515
20	Vilavancode	27	8,339	6,571	94,261
Total		**1,029**	**2,58,661**	**20,679**	**2,49,768**

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Appendix 2.12

(Reference: Paragraph 2.3.1; Page 18)

Sub-divisions with textual records but without spatial records

Sl. No.	Taluk	Number of villages	Sub-divisions in A-Register	Sub-divisions without FMS
1	Agastheeswaram	36	1,82,560	40,609
2	Alandur	5	13,952	4,670
3	Avadi	21	1,08,428	54,873
4	Avinashi	41	1,02,518	5,594
5	Gummidipoondi	90	2,23,117	44,156
6	Kothagiri	23	64,184	22,863
7	Madhavaram	11	39,545	15,925
8	Madurai East	106	1,12,895	32,284
9	Madurai North	75	1,00,331	26,537
10	Papanasam	119	1,91,644	46,839
11	Perambalur	27	1,19,227	15,861
12	Thirupurankundram	26	64,048	12,013
13	Thiruvaiyaru	56	75,537	7,163
14	Thiruvidaimarudhur	89	1,28,438	14,625
15	Tiruppur North	7	25,767	3,112
16	Tiruvallur	165	3,94,310	1,54,346
17	Udhagamandalam	17	53,346	3,094
18	Uthukuli	49	59,298	3,327
19	Veppanthattai	39	1,48,688	12,160
20	Vilavancode	27	1,16,785	1,05,172
Total		**1,029**	**23,24,618**	**6,25,223**

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Appendix 2.13
(Reference: Paragraph 2.3.2; Page 18)
Textual area from A-Register captured wrongly in spatial (FMS) data

Sl.No.	Taluk	Number of villages	Survey numbers		Sub-division numbers	
			Total	Instances where land area was captured wrongly	Total	Instances where land area was captured wrongly
1	Agastheeswaram	36	12,164	1,754	1,38,853	3,624
2	Alandur	5	1,238	372	8,784	5,433
3	Avadi	21	5,424	1,275	52,305	11,958
4	Avinashi	41	19,175	1,183	92,504	2,948
5	Gummidipoondi	90	24,332	2,199	1,72,273	9,952
6	Kothagiri	23	6,091	1,042	39,053	3,155
7	Madhavaram	11	1,977	666	23,061	7,176
8	Madurai East	106	9,729	2,668	79,011	15,460
9	Madurai North	75	6,950	1,842	72,633	7,663
10	Papanasam	119	22,848	3,119	1,38,788	69,398
11	Perambalur	27	10,233	2,689	82,476	14,655
12	Thiruvaiyaru	56	10,446	1,846	66,644	9,591
13	Thiruvidaimarudhur	89	19,053	3,445	1,10,306	15,067
14	Tirupparankundram	26	3,768	1,047	51,485	8,367
15	Tiruppur North	7	3,188	437	21,966	2,051
16	Tiruvallur	165	43,082	179	1,95,270	11,372
17	Udhagamandalam	17	9,691	990	46,821	2,509
18	Uthukuli	49	9,636	682	53,514	4,187
19	Veppanthattai	39	17,189	3,155	1,32,383	16,829
20	Vilavancode	27	1,768	1,530	10,434	6,064
Total		**1,029**	**2,37,982**	**32,120**	**15,88,564**	**2,27,459**

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Appendix 2.14
(Reference: Paragraph 2.3.3; Page 19)
Percentage of variation between textual area as per A-Register and calculated area as per CollabLand

(In numbers)

Sl. No.	Taluk	Range of variation with number of records						
		0 *per cent*	Between 1 and 5 *per cent*	Between 6 and 25 *per cent*	Between 26 and 50 *per cent*	Between 51 and 75 *per cent*	Between 76 and 100 *per cent*	More than 100 *per cent*
1	Agastheeswaram	31	10,510	1,346	191	50	26	10
2	Alandur	0	934	252	28	11	8	5
3	Avadi	9	4,461	822	81	25	10	15
4	Avinashi	60	17,319	1,298	137	36	28	295
5	Gummidipoondi	45	20,465	3,222	362	106	72	60
6	Kothagiri	11	4,664	1,224	105	26	25	36
7	Madhavaram	6	1,538	366	46	12	7	2
8	Madurai East	32	8,361	1,002	105	30	22	177
9	Madurai North	10	5,929	784	73	19	18	117
10	Papanasam	65	20,541	1,707	214	109	110	102
11	Perambalur	27	9,416	687	44	18	17	24
12	Thiruvaiyaru	28	9,193	650	198	174	133	69
13	Thiruvidaimarudhur	65	16,698	1,493	280	179	274	62
14	Tirupparankundram	13	3,356	271	22	9	5	92
15	Tiruppur North	12	2,911	185	11	8	8	52
16	Tiruvallur	7,929	29,135	5,174	553	131	65	95
17	Udhagamandalam	13	7,202	2,128	208	58	38	43
18	Uthukuli	24	8,474	872	57	28	45	136
19	Veppanthattai	56	15,979	851	65	36	30	172
20	Vilavancode	0	309	212	269	246	239	493
Total		**8,436**	**1,97,395**	**24,546**	**3,049**	**1,311**	**1,180**	**2,057**

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Appendix 2.15

(Reference: Paragraph 2.3.4; Page 19)

Sub-division information erroneously captured in spatial (FMS) data

Sl. No.	Taluk	Number of Sub-divisions	Sub-divisions with erroneous numbering
1	Agastheeswaram	1,38,853	325
2	Alandur	14,494	2,378
3	Avadi	77,579	3,558
4	Avinashi	1,32,422	1,733
5	Gummidipoondi	2,29,234	2,210
6	Kothagiri	39,053	495
7	Madhavaram	33,628	1,045
8	Madurai East	1,24,537	3,179
9	Madurai North	1,07,867	1,999
10	Papanasam	1,38,788	7,800
11	Perambalur	82,476	1,108
12	Thiruvaiyaru	99,205	876
13	Thiruvidaimarudhur	1,53,501	2,556
14	Tiruppur North	33,585	915
15	Tiruvallur	3,34,706	5,891
16	Tirupparankundram	76,178	1,374
17	Udhagamandalam	58,973	1,151
18	Uthukuli	77,806	597
19	Veppanthattai	1,58,935	15,283
20	Vilavancode	1,14,681	913
Total		**22,26,501**	**55,386**

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Appendix 2.16

(Reference: Paragraph 2.3.5; Page 20)

Incorrect capture of adjacency details in spatial (FMS) data

Sl. No.	Taluk	Total Survey numbers	Survey numbers with adjacency errors
1	Agastheeswaram	12,157	69
2	Alandur	8,649	10
3	Avadi	37,463	46
4	Avinashi	22,149	181
5	Gummidipoondi	1,59,436	182
6	Kothagiri	1,860	53
7	Madhavaram	13,897	6
8	Madurai East	11,193	30
9	Madurai North	46,798	76
10	Papanasam	0	0
11	Perambalur	4,450	12
12	Thiruvaiyaru	64,956	58
13	Thiruvidaimarudhur	1,13,726	172
14	Tirupparankundram	27,531	54
15	Tiruppur North	22,002	26
16	Tiruvallur	50,287	14
17	Udhagamandalam	54,771	80
18	Uthukuli	61,171	72
19	Veppanthattai	1,20,751	196
20	Vilavancode	49,730	74
Total		**8,82,977**	**1,411**

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Appendix 2.17

(Reference: Paragraph 2.3.6; Page 21)

Status of delay in updation of spatial (FMS) records in taluk server and central server

Sl. No.	Taluk	Number of cases checked	Number of cases updated in taluk server	Number of cases not updated in taluk server	Percentage of non-updation	Number of updated cases available in e-Services
1	Agastheeswaram	50	50	0	*0*	48
2	Avadi	50	31	19	*38*	0
3	Avinashi	50	38	12	*24*	26
4	Gummidipoondi	50	21	29	*58*	0
5	Kothagiri	50	47	3	*6*	28
6	Madhavaram	30	4	26	*87*	0
7	Madurai East	50	47	3	*06*	38
8	Madurai North	50	34	16	*32*	34
9	Papanasam	48	25	23	*48*	1
10	Perambalur	49	44	5	*10*	0
11	Thiruvaiyaru	50	0	50	*100*	0
12	Thiruvidaimaruthur	50	38	12	*24*	0
13	Tiruppur North	50	48	2	*4*	42
14	Tiruvallur	44	25	19	*43*	0
15	Tirupparankundram	50	49	01	*2*	47
16	Udhagamandalam	44	44	0	*0*	34
17	Uthukuli	50	47	03	*06*	38
18	Veppanthattai	50	47	3	*6*	19
19	Vilavancode	50	0	50	*100*	0
Total		**915**	**639**	**276**		**355**

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Appendix 2.18

(Reference: Paragraph 2.4.1; Page 23)

Natham land parcels without ownership details in computerised *chitta*

Sl. No.	Taluk	Total land parcels	Private land parcels as per *Natham* A-Register	Private land parcels with no corresponding entry in ownership table (*Chitta*)
1	Agastheeswaram	970	578	0
2	Alandur	5,641	3,508	96
3	Avadi	10,566	6,809	173
4	Avinashi	42,685	27,899	374
5	Gummidipoondi	37,776	29,244	474
6	Kothagiri	6,627	4,252	67
7	Madhavaram	6,378	3,422	9
8	Madurai North	67,634	46,285	1,050
9	Papanasam	65,264	52,271	273
10	Perambalur	40,595	34,951	47
11	Thiruvaiyaru	33,858	27,757	210
12	Thiruvidaimarudhur	56,742	49,605	441
13	Tiruppur North	13,993	10,947	158
14	Tiruvallur	1,02,755	68,998	9,612
15	Udhagamandalam	13,605	8,104	154
16	Uthukkuli	29,005	19,460	1,073
17	Veppanthattai	43,101	34,565	389
18	Vilavancode	1,448	644	4
Total		**5,78,643**	**4,29,299**	**14,604**

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Appendix 2.19

(Reference: Paragraph 2.4.2; Page 23)

Redundant *patta* numbers in computerised *Natham chitta*

Sl. No.	Taluk	*Patta* numbers as per *Natham* A-Register	Excess *Patta* numbers in ownership table (*Chitta*)
1	Agastheeswaram	578	0
2	Alandur	3,412	22
3	Avadi	6,636	2,995
4	Avinashi	27,525	2,448
5	Gummidipoondi	28,770	995
6	Kothagiri	4,185	124
7	Madhavaram	3,413	147
8	Madurai North	45,235	2,117
9	Papanasam	51,998	366
10	Perambalur	34,904	347
11	Thiruvaiyaru	27,547	228
12	Thiruvidaimarudhur	49,164	329
13	Tiruppur North	10,789	422
14	Tiruvallur	59,386	5,934
15	Udhagamandalam	7,950	985
16	Uthukkuli	18,387	1,873
17	Veppanthattai	34,176	314
18	Vilavancode	640	0
Total		**4,14,695**	**19,646**

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Appendix 2.20

(Reference: Paragraph 2.4.3; Page 23)

Deficiencies in computerised *Natham chitta*

Sl. No.	Taluk	Owner name missing	Relative name missing
1	Agastheeswaram	0	0
2	Alandur	5	1
3	Avadi	4	2
4	Avinashi	4	41
5	Gummidipoondi	26	5
6	Kothagiri	11	3
7	Madhavaram	2	1
8	Madurai North	56	3
9	Papanasam	25	13
10	Perambalur	2	1
11	Thiruvaiyaru	29	9
12	Thiruvidaimarudhur	15	8
13	Tiruppur North	11	9
14	Tiruvallur	20	1
15	Udhagamandalam	1	2
16	Uthukkuli	38	12
17	Veppanthattai	44	217
18	Vilavancode	0	0
	Total	**293**	**328**

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Appendix 2.21

(Reference: Paragraph 2.7.1; Page 30)

Deficiencies in codification of Government land

Sl. No.	Taluk	Number of rejected STR-OPT applications involving Government land sub categories	
		ISD	NISD
1	Agastheeswaram	1	16
2	Alandur	0	0
3	Avadi	4	13
4	Avinashi	8	13
5	Gummidipoondi	31	6
6	Kothagiri	0	0
7	Madhavaram	3	1
8	Madurai East	15	3
9	Madurai North	162	6
10	Papanasam	13	15
11	Perambalur	129	40
12	Thirupparankundram	171	2
13	Thiruvaiyaru	0	2
14	Thiruvidaimarudhur	0	2
15	Tiruppur North	12	0
16	Tiruvallur	22	7
17	Udhagamandalam	1	0
18	Uthukkuli	2	10
19	Veppanthattai	9	27
20	Vilavancode	10	0
	Total	**593**	**163**

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Appendix 2.22

(Reference: Paragraph 2.7.2; Page 30)

Ineffective use of provisions available in integration module for STR applications

Sl. No.	Taluk	ISD applications		NISD applications	
		Total rejected	Rejected despite provision of mandatory document links under Integration Module	Total rejected	Rejected despite provision of mandatory document links under Integration Module
1	Agastheeswaram	75,577	170	16,001	372
2	Alandur	16,134	155	7,315	586
3	Avadi	27,821	1,445	5,437	733
4	Avinashi	1,17,938	1,373	15,119	630
5	Gummidipoondi	30,147	965	12,692	378
6	Kothagiri	5,968	33	155	2
7	Madhavaram	12,999	618	4,344	361
8	Madurai East	93,434	1,311	10,252	406
9	Madurai North	1,06,833	6,984	11,400	762
10	Papanasam	12,141	268	9,966	1,156
11	Perambalur	38,314	229	5,800	91
12	Thirupparankundram	42,470	1,148	4,004	467
13	Thiruvaiyaru	5,192	17	3,779	293
14	Thiruvidaimarudhur	8,353	258	6,465	535
15	Tiruppur North	37,494	124	4,421	61
16	Tiruvallur	48,215	2,091	12,862	1,493
17	Udhagamandalam	4,672	10	488	0
18	Uthukkuli	77,628	27	7,190	814
19	Veppanthattai	35,899	69	6,822	233
20	Vilavancode	57,918	2,546	19,072	1,267
	Total	**8,55,147**	**19,841**	**1,63,584**	**10,640**

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Appendix 3.1

(Reference: Paragraph 3.1.1 (a); Page 35)

Delays in approving NISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	41,035 out of 66,126 cases (62 *per cent* delay)	From 16 to 258 days
2	Alandur	533 out of 1,300 cases (41 *per cent* delay)	From 16 to 440 days
3	Avadi	2,383 out of 10,614 cases (22 *per cent* delay)	From 16 to 176 days
4	Avinashi	24,510 out of 42,829 cases (57 *per cent* delay)	From 16 to 470 days
5	Gummidipoondi	4,866 out of 14,047 cases (35 *per cent* delay)	From 16 to 287 days
6	Kothagiri	2,767 out of 14,734 cases (19 *per cent* delay)	From 16 to 212 days
7	Madhavaram	2,182 out of 5,421 cases (40 *per cent* delay)	From 16 to 424 days
8	Madurai East	2,920 out of 8,339 cases (35 *per cent* delay)	From 16 to 375 days
9	Madurai North	2,903 out of 8,206 cases (35 *per cent* delay)	From 16 to 377 days
10	Papanasam	9,453 out of 20,748 cases (46 *per cent* delay)	From 16 to 519 days
11	Perambalur	18,073 out of 37,891 cases (48 *per cent* delay)	From 16 to 469 days
12	Thirupparankundram	960 out of 4,438 cases (22 *per cent* delay)	From 16 to 375 days
13	Thiruvaiyaru	3,977 out of 8,165 cases (49 *per cent* delay)	From 16 to 361 days
14	Thiruvidaimarudhur	6,424 out of 12,844 cases (50 *per cent* delay)	From 16 to 383 days
15	Tiruppur North	12,113 out of 25,248 cases (48 *per cent* delay)	From 16 to 445 days
16	Tiruvallur	6,875 out of 23,217 cases (30 *per cent* delay)	From 16 to 247 days
17	Udhagamandalam	2,316 out of 8,890 cases (26 *per cent* delay)	From 16 to 219 days
18	Uthukkuli	8,859 out of 17,205 cases (51 *per cent* delay)	From 16 to 338 days
19	Veppanthattai	7,139 out of 25,311 cases (28 *per cent* delay)	From 16 to 383 days
20	Vilavancode	13,279 out of 49,454 cases (27 *per cent* delay)	From 16 to 246 days
		1,73,567 out of 4,05,027 cases (43 *per cent* delay)	**From 16 to 519 days**

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Appendix 3.2

(Reference: Paragraph 3.1.1 (a); Page 35)

Delays in rejecting NISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	24,352 out of 29,842 cases (82 *per cent* delay)	From 16 to 395 days
2	Alandur	1,279 out of 1,364 cases (94 *per cent* delay)	From 16 to 802 days
3	Avadi	3,241 out of 4,222 cases (77 *per cent* delay)	From 16 to 387 days
4	Avinashi	11,009 out of 12,783 cases (86 *per cent* delay)	From 16 to 482 days
5	Gummidipoondi	5,585 out of 7,718 cases (72 *per cent* delay)	From 16 to 358 days
6	Kothagiri	976 out of 1,742 cases (56 *per cent* delay)	From 16 to 207 days
7	Madhavaram	2,465 out of 2,765 cases (89 *per cent* delay)	From 16 to 522 days
8	Madurai East	4,093 out of 4,524 cases (90 *per cent* delay)	From 16 to 590 days
9	Madurai North	4,614 out of 5,452 cases (85 *per cent* delay)	From 16 to 799 days
10	Papanasam	7,607 out of 9,254 cases (82 *per cent* delay)	From 16 to 535 days
11	Perambalur	9,334 out of 13,609 cases (69 *per cent* delay)	From 16 to 669 days
12	Thirupparankundram	1,503 out of 2,009 cases (75 *per cent* delay)	From 16 to 1,206 days
13	Thiruvaiyaru	3,415 out of 3,894 cases (88 *per cent* delay)	From 16 to 427 days
14	Thiruvidaimarudhur	6,248 out of 7,932 cases (79 *per cent* delay)	From 16 to 419 days
15	Tiruppur North	5,880 out of 7,085 cases (83 *per cent* delay)	From 16 to 445 days
16	Tiruvallur	8,196 out of 10,528 cases (78 *per cent* delay)	From 16 to 346 days
17	Udhagamandalam	1,239 out of 2,060 cases (60 *per cent* delay)	From 16 to 304 days
18	Uthukkuli	4,833 out of 5,363 cases (90 *per cent* delay)	From 16 to 394 days
19	Veppanthattai	4,592 out of 7,737 cases (59 *per cent* delay)	From 16 to 773 days
20	Vilavancode	12,600 out of 16,471 cases (76 *per cent* delay)	From 16 to 235 days
		1,23,061 out of 1,56,354 cases (79 *per cent* delay)	**From 16 to 1,206 days**

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Appendix 3.3

(Reference: Paragraph 3.1.1 (a); Page 35)

Delays in processing pending NISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	2,626 out of 3,596 cases (73 *per cent* delay)	From 16 to 221 days
2	Alandur	89 out of 142 cases (63 *per cent* delay)	From 16 to 98 days
3	Avadi	116 out of 234 cases (50 *per cent* delay)	From 16 to 43 days
4	Avinashi	358 out of 962 cases (37 *per cent* delay)	From 16 to 29 days
5	Gummidipoondi	178 out of 324 cases (55 *per cent* delay)	From 18 to 48 days
6	Kothagiri	8 out of 68 cases (12 *per cent* delay)	From 16 to 32 days
7	Madhavaram	160 out of 238 cases (67 *per cent* delay)	From 17 to 343 days
8	Madurai East	141 out of 288 cases (49 *per cent* delay)	From 16 to 286 days
9	Madurai North	115 out of 206 cases (56 *per cent* delay)	From 16 to 346 days
10	Papanasam	353 out of 500 cases (71 *per cent* delay)	From 16 to 289 days
11	Perambalur	102 out of 311 cases (33 *per cent* delay)	From 16 to 1,379 days
12	Thirupparankundram	60 out of 93 cases (65 *per cent* delay)	From 16 to 318 days
13	Thiruvaiyaru	52 out of 100 cases (52 *per cent* delay)	From 16 to 337 days
14	Thiruvidaimarudhur	75 out of 141 cases (53 *per cent* delay)	From 16 to 335 days
15	Tiruppur North	162 out of 371 cases (44 *per cent* delay)	From 17 to 33 days
16	Tiruvallur	621 out of 864 cases (72 *per cent* delay)	From 16 to 138 days
17	Udhagamandalam	6 out of 64 cases (51 *per cent* delay)	From 16 to 34 days
18	Uthukkuli	165 out of 429 cases (38 *per cent* delay)	From 17 to 50 days
19	Veppanthattai	18 out of 115 cases (16 *per cent* delay)	From 16 to 45 days
20	Vilavancode	727 out of 1,180 cases (62 *per cent* delay)	From 16 to 326 days
		6,132 out of 10,226 cases (60 *per cent* delay)	**From 16 to 1,379 days**

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Appendix 3.4

(Reference: Paragraph 3.1.1 (b); Page 35)

Delays in approving ISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	4,928 out of 7,578 cases (65 *per cent* delay)	From 31 to 449 days
2	Alandur	552 out of 1,330 cases (42 *per cent* delay)	From 31 to 524 days
3	Avadi	9,215 out of 17,128 cases (54 *per cent* delay)	From 31 to 427 days
4	Avinashi	5,912 out of 7,373 cases (80 *per cent* delay)	From 31 to 569 days
5	Gummidipoondi	4,950 out of 10,854 cases (46 *per cent* delay)	From 31 to 423 days
6	Kothagiri	1,327 out of 3,091 cases (43 *per cent* delay)	From 31 to 230 days
7	Madhavaram	1,848 out of 5,287 cases (35 *per cent* delay)	From 31 to 381 days
8	Madurai East	7,425 out of 14,542 cases (51 *per cent* delay)	From 31 to 447 days
9	Madurai North	10,390 out of 17,473 cases (59 *per cent* delay)	From 31 to 437 days
10	Papanasam	2,416 out of 3,928 cases (62 *per cent* delay)	From 31 to 425 days
11	Perambalur	4,984 out of 11,088 cases (45 *per cent* delay)	From 31 to 651 days
12	Thirupparankundram	3,305 out of 8,339 cases (40 *per cent* delay)	From 31 to 458 days
13	Thiruvaiyaru	1,174 out of 2,306 cases (51 *per cent* delay)	From 31 to 311 days
14	Thiruvidaimarudhur	1,592 out of 2,831 cases (56 *per cent* delay)	From 31 to 335 days
15	Tiruppur North	3,043 out of 4,194 cases (73 *per cent* delay)	From 31 to 584 days
16	Tiruvallur	14,534 out of 25,669 cases (57 *per cent* delay)	From 31 to 326 days
17	Udhagamandalam	686 out of 1,639 cases (42 *per cent* delay)	From 31 to 233 days
18	Uthukkuli	2,388 out of 3,717 cases (64 *per cent* delay)	From 31 to 480 days
19	Veppanthattai	2,746 out of 8,235 cases (33 *per cent* delay)	From 31 to 544 days
20	Vilavancode	1,733 out of 3,446 cases (50 *per cent* delay)	From 31 to 328 days
		85,148 out of 1,60,048 cases (53 *per cent* delay)	**From 31 to 651 days**

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Appendix 3.5

(Reference: Paragraph 3.1.1 (b); Page 35)

Delays in rejecting ISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	24,324 out of 28,724 cases (85 *per cent* delay)	From 31 to 555 days
2	Alandur	1,860 out of 2,172 cases (86 *per cent* delay)	From 31 to 866 days
3	Avadi	15,870 out of 17,117 cases (93 *per cent* delay)	From 31 to 444 days
4	Avinashi	9,804 out of 10,208 cases (96 *per cent* delay)	From 31 to 587 days
5	Gummidipoondi	9,895 out of 10,608 cases (93 *per cent* delay)	From 31 to 367 days
6	Kothagiri	1,439 out of 1,652 cases (87 *per cent* delay)	From 31 to 290 days
7	Madhavaram	4,847 out of 5,718 cases (85 *per cent* delay)	From 31 to 425 days
8	Madurai East	23,517 out of 24,249 cases (97 *per cent* delay)	From 31 to 459 days
9	Madurai North	26,796 out of 27,214 cases (98 *per cent* delay)	From 31 to 525 days
10	Papanasam	3,540 out of 4,363 cases (81 *per cent* delay)	From 31 to 433 days
11	Perambalur	12,930 out of 13,614 cases (95 *per cent* delay)	From 31 to 764 days
12	Thirupparankundram	10,696 out of 11,006 cases (97 *per cent* delay)	From 31 to 571 days
13	Thiruvaiyaru	2,427 out of 2,826 cases (86 *per cent* delay)	From 31 to 335 days
14	Thiruvidaimarudhur	2,576 out of 3,211 cases (80 *per cent* delay)	From 31 to 408 days
15	Tiruppur North	3,820 out of 3,906 cases (98 *per cent* delay)	From 31 to 595 days
16	Tiruvallur	20,210 out of 21,465 cases (94 *per cent* delay)	From 31 to 478 days
17	Udhagamandalam	1,018 out of 1,270 cases (80 *per cent* delay)	From 31 to 318 days
18	Uthukkuli	5,469 out of 5,674 cases (96 *per cent* delay)	From 31 to 496 days
19	Veppanthattai	9,788 out of 10,099 cases (97 *per cent* delay)	From 31 to 692 days
20	Vilavancode	15,063 out of 15,577 cases (97 *per cent* delay)	From 31 to 405 days
		2,05,889 out of 2,20,673 cases (93 *per cent* delay)	**From 31 to 866 days**

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Appendix 3.6

(Reference: Paragraph 3.1.1 (b); Page 35)

Delays in processing pending ISD-OPT applications

Sl. No.	Taluk	Number of applications where delay was noticed	Delay range in number of days
1	Agastheeswaram	3,574 out of 5,013 cases (71 *per cent* delay)	From 31 to 223 days
2	Alandur	37 out of 79 cases (47 *per cent* delay)	From 33 to 107 days
3	Avadi	1,319 out of 2,315 cases (57 *per cent* delay)	From 31 to 196 days
4	Avinashi	1,986 out of 2,668 cases (74 *per cent* delay)	From 31 to 206 days
5	Gummidipoondi	1,313 out of 1,789 cases (73 *per cent* delay)	From 31 to 201 days
6	Kothagiri	87 out of 226 cases (38 *per cent* delay)	From 33 to 93 days
7	Madhavaram	71 out of 252 cases (28 *per cent* delay)	From 33 to 103 days
8	Madurai East	3,056 out of 4,560 cases (67 *per cent* delay)	From 32 to 162 days
9	Madurai North	4,744 out of 6,083 cases (78 *per cent* delay)	From 31 to 311 days
10	Papanasam	631 out of 962 cases (66 *per cent* delay)	From 31 to 174 days
11	Perambalur	1,412 out of 2,020 cases (70 *per cent* delay)	From 31 to 206 days
12	Thirupparankundram	1,385 out of 1,877 cases (74 *per cent* delay)	From 31 to 306 days
13	Thiruvaiyaru	329 out of 427 cases (77 *per cent* delay)	From 33 to 285 days
14	Thiruvidaimarudhur	480 out of 603 cases (80 *per cent* delay)	From 31 to 315 days
15	Tiruppur North	599 out of 806 cases (74 *per cent* delay)	From 32 to 200 days
16	Tiruvallur	3,018 out of 4,066 cases (74 *per cent* delay)	From 31 to 147 days
17	Udhagamandalam	63 out of 151 cases (42 *per cent* delay)	From 31 to 77 days
18	Uthukkuli	737 out of 1,037 cases (71 *per cent* delay)	From 31 to 209 days
19	Veppanthattai	885 out of 1,233 cases (72 *per cent* delay)	From 31 to 202 days
20	Vilavancode	3,918 out of 4,488 cases (87 *per cent* delay)	From 31 to 321 days
		29,644 out of 40,655 cases (73 *per cent* delay)	**From 31 to 321 days**

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Appendix 3.7 (a)

(Reference: Paragraph 3.1.1 (d); Page 37)

Details of delays in processing applications relating to addition/deletion of land records

Sl. No.	Taluk	Applications relating to addition/deletion of land records								
		Total number of applications	Pending action			Approved belatedly			Rejected belatedly		
			Number	Percentage	Pending range (in days)	Number	Percentage	Delay range (in days)	Number	Percentage	Delay range (in days)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Agastheeswaram	4,336	315	*7.3*	214 to 642	405	*9.3*	1 to 523	393	*9.1*	2 to 474
2	Alandur	80	0	-	-	10	*12.5*	1 to 559	6	*7.5*	7 to 54
3	Avadi	20	0	-	-	3	*15.0*	24 to 135	1	*5.0*	36
4	Avinashi	742	16	*2.2*	1 to 1,388	39	*5.3*	5 to 796	83	*11.2*	17 to 953
5	Gummidipoondi	163	5	*3.1*	18 to 67	26	*16.0*	1 to 270	4	*2.5*	5 to 292
6	Kothagiri	262	3	*1.1*	323 to 799	41	*15.6*	1 to 581	2	*0.8*	44 to 84
7	Madhavaram	169	2	*1.2*	642 to 1,768	29	*17.2*	8 to 291	4	*2.4*	7 to 973
8	Madurai East	422	4	*0.9*	289 to 1,398	39	*9.2*	7 to 219	10	*2.4*	63 to 594
9	Madurai North	472	16	*3.4*	8 to 307	70	*14.8*	2 to 501	6	*1.3*	5 to 273
10	Papanasam	356	7	*2.0*	26 to 189	40	*11.2*	2 to 786	26	*7.3*	34 to 1,252
11	Perambalur	45	0	-	-	8	*17.8*	1 to 73	1	*2.2*	22
12	Thirupparankundram	130	0	-	-	24	*18.5*	1 to 545	1	*0.8*	240
13	Thiruvaiyaru	31	1	*3.2*	764	6	*19.4*	5 to 657	0	-	-
14	Thiruvidaimarudhur	176	5	2.8	95 to 1,038	23	*13.1*	8 to 547	9	*5.1*	27 to 429
15	Tiruppur North	1,261	271	*21.5*	1,557 to 1,559	10	*0.8*	1 to 296	181	*14.4*	9 to 1,081
16	Tiruvallur	210	5	*2.4*	308 to 1,209	28	*13.3*	1 to 152	2	*1.0*	7 to 57
17	Udhagamandalam	218	2	*0.9*	62	21	*9.6*	3 to 582	5	*2.3*	2 to 171
18	Uthukkuli	260	0	-	-	26	*10.0*	1 to 453	11	*4.2*	65 to 955
19	Veppanthattai	170	6	*3.5*	41 to 74	20	*11.8*	2 to 1,014	6	*3.5*	2 to 98
20	Vilavancode	6,577	26	*0.4*	18 to 816	1,228	*18.7*	2 to 540	58	*0.9*	1 to 530
	Total	**16,100**	**684**	***4.2***		**2,096**	***13.0***		**809**	***5.0***	

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Appendix 3.7 (b)

(Reference: Paragraph 3.1.1 (d); Page 37)

Details of delays in processing applications relating to correction of land records

Sl. No.	Taluk	Applications relating to correction of land records									
		Total number of applications	Pending action			Approved belatedly			Rejected belatedly		
			Number	Percentage	Pending range (in days)	Number	Percentage	Delay range (in days)	Number	Percentage	Delay range (in days)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Agastheeswaram	364	99	*27.20*	1 to 630	45	*12.36*	2 to 175	5	*1.37*	6 to 38
2	Alandur	238	3	*1.26*	237 to 1,316	26	*10.92*	1 to 49	11	*4.62*	1 to 30
3	Avadi	55	1	*1.82*	238	8	*14.55*	2 to 23	1	*1.82*	2
4	Avinashi	3,102	42	*1.35*	99 to 1,346	165	*5.32*	1 to 380	428	*13.80*	6 to 961
5	Gummidipoondi	204	23	*11.27*	7 to 689	27	*13.24*	1 to 295	1	*0.49*	138
6	Kothagiri	1,504	210	*13.96*	349 to 405	74	*4.92*	1 to 581	0	-	-
7	Madhavaram	1,303	119	*9.13*	1,415 to 1,739	161	*12.36*	1 to 343	1	*0.08*	695
8	Madurai East	192	2	*1.04*	7 to 19	11	*5.73*	1 to 92	7	*3.65*	41
9	Madurai North	1,007	19	*1.89*	5 to 431	177	*17.58*	1 to 418	4	*0.40*	5 to 393
10	Papanasaam	107	3	*2.80*	97 to 935	19	*17.76*	1 to 1,267	0	-	-
11	Perambalur	72	0	-	-	10	*13.89*	2 to 73	4	*5.56*	20 to 1,086
12	Thirupparankundram	851	2	*0.24*	31 to 630	137	*16.10*	1 to 623	10	*1.18*	20 to 704
13	Thiruvaiyaru	46	5	*10.87*	308 to 1,195	6	*13.04*	14 to 1,111	1	*2.17*	739
14	Thiruvidaimarudhur	123	5	*4.07*	5 to 1,258	11	*8.94*	1 to 267	9	*7.32*	35 to 878
15	Tiruppur North	3,081	89	*2.89*	1,552 to 1,576	121	*3.93*	3 to 1,020	460	*14.93*	9 to 1,548
16	Tiruvallur	796	1	*0.13*	196	137	*17.21*	1 to 152	9	*1.13*	1 to 64
17	Udhagamandalam	428	2	*0.47*	62 to 98	72	*16.82*	1 to 411	2	*0.47*	349 to 353
18	Uthukkuli	982	1	*0.10*	1,568	150	*15.27*	1 to 258	35	*3.56*	3 to 980
19	Veppanthattai	417	2	*0.48*	34 to 1,673	42	*10.07*	1 to 410	9	*2.16*	2 to 31
20	Vilavancode	4,093	2	*0.05*	18 to 1,414	781	*19.08*	1 to 1,341	32	*0.78*	14 to 491
	Total	**18,965**	**630**	***3.32***		**2,180**	***11.49***		**1,029**	***5.43***	

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Appendix 3.8

(Reference: Paragraph 3.1.2; Page 37)

High percentage of rejection of OPT applications received from Sub Registrar Offices

Sl. No.	Taluk	RTR (Common Service Centres)						STR (Sub Registrar Office)					
		NISD			ISD			NISD			ISD		
		Approved	Rejected	Rejection (*per cent*)	Approved	Rejected	Rejection (*per cent*)	Approved	Rejected	Rejection (*per cent*)	Approved	Rejected	Rejection (*per cent*)
1	Agastheeswaram	55,558	26,212	*32*	12,165	4,773	*28*	7,242	17,153	*70*	686	12,944	*95*
2	Alandur	1,249	562	*31*	148	904	*86*	1,256	855	*41*	87	1,337	*94*
3	Avadi	9,950	3,086	*24*	17,695	19,317	*52*	1,121	1,363	*55*	652	4,765	*88*
4	Avinashi	34,130	10,314	*23*	1,638	1,383	*46*	9,531	3,082	*24*	5,828	11,448	*66*
5	Gummidipoondi	11,632	6,501	*36*	9,442	10,075	*52*	3,932	1,892	*32*	1,836	4,240	*70*
6	Kothagiri	13,139	1,799	*12*	2,125	44	*2*	1,989	1,070	*35*	1,161	652	*36*
7	Madhavaram	4,724	1,692	*26*	5,097	4,070	*44*	1,028	1,133	*52*	424	2,230	*84*
8	Madurai East	7,153	2,371	*25*	11,522	9,055	*44*	1,708	2,337	*58*	3,268	18,045	*85*
9	Madurai North	7,018	2,890	*29*	13,840	11,439	*45*	2,039	2,734	*57*	4,075	20,113	*83*
10	Papanasam	18,473	6,883	*27*	3,039	2,719	*47*	2,689	2,689	*50*	1,382	1,966	*59*
11	Perambalur	34,613	12,610	*27*	3,948	1,263	*24*	9,619	8,865	*48*	1,681	5,143	*75*
12	Tiruvallur	21,517	8,466	*28*	26,112	24,324	*48*	2,328	2,632	*53*	1,353	7,382	*85*
13	Thirupparankundram	3,896	1,395	*26*	7,415	5,787	*44*	928	897	*49*	1,100	7,854	*88*
14	Thiruvaiyaru	7,455	2,901	*28*	1,068	1,092	*51*	1,746	1,956	*53*	613	923	*60*
15	Thiruvidaimarudhur	11,470	6,736	*37*	2,084	1,576	*43*	2,204	1,875	*46*	707	1,380	*66*
16	Tiruppur North	22,068	6,706	*23*	1,217	847	*41*	3,795	1,005	*21*	3,067	4,766	*61*
17	Udhagamandalam	8,121	2,046	*20*	1,035	137	*12*	1,014	818	*45*	666	510	*43*
18	Uthukkuli	14,612	4,570	*24*	1,115	614	*36*	3,521	1,697	*33*	2,629	5,257	*67*
19	Veppanthattai	21,937	6,606	*23*	3,994	1,274	*24*	7,273	5,763	*44*	1,047	4,571	*81*
20	Vilavancode	45,568	11,197	*20*	5,160	5,884	*53*	2,911	5,199	*64*	613	11,062	*95*
Total		**3,54,283**	**1,25,543**	*26*	**1,29,859**	**1,06,577**	*45*	**67,874**	**65,015**	*49*	**32,875**	**1,26,588**	*79*

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Appendix 3.9

(Reference: Paragraph 3.1.3; Page 37)

Details of ISD-OPT applications where seniority principle was not followed in scheduling

Sl. No.	Taluk/Village name	Number of ISD applications pending scheduling	Period during which the applications in Col. (3) were received		Date of receipt of last scheduled application
			From	To	
(1)	(2)	(3)	(4)	(5)	(6)
1	Agastheeswaram	398	05/02/2021	17/09/2021	27/09/2021
2	Avadi	442	19/03/2021	23/07/2021	23/07/2021
3	Avinashi	51	15/02/2021	04/05/2021	10/05/2021
4	Gummidipoondi	19	26/04/2021	26/07/2021	26/07/2021
5	Kothagiri	05	09/09/2021	20/09/2021	22/09/2021
6	Madhavaram	02	02/02/2021	15/02/2021	22/02/2021
7	Madurai East	145	09/06/2021	23/09/2021	23/09/2021
8	Madurai North	160	12/04/2021	07/09/2021	07/09/2021
9	Papanasam	03	11/06/2021	01/07/2021	14/07/2021
10	Perambalur	102	01/03/2021	04/08/2021	04/08/2021
11	Thiruvidaimaruthur	03	19/03/2021	20/04/2021	07/07/2021
12	Tiruppur North	639	02/03/2021	25/08/2021	25/08/2021
13	Tiruvallur	76	06/03/2021	12/07/2021	13/07/2021
14	Tirupparankundram	557	10/06/2021	24/09/2021	25/09/2021
15	Uthukuli	15	11/04/2021	16/08/2021	25/08/2021
Total		**2,617**			

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Appendix 3.10

(Reference: Paragraph 3.1.3; Page 37)

Details of NISD-OPT applications where seniority principle was not followed in scheduling

Sl. No.	Taluk/Village name	Number of NISD applications pending scheduling	Period during which the applications in Col. (3) were received		Date of receipt of last scheduled application
			From	To	
(1)	(2)	(3)	(4)	(5)	(6)
1	Agastheeswaram	297	05/07/2021	30/09/2021	01/10/2021
2	Avadi	15	05/07/2021	19/07/2021	21/07/2021
3	Avinashi	18	16/08/2021	08/09/2021	08/09/2021
4	Kothagiri	01	23/09/2021	23/09/2021	24/09/2021
5	Madhavaram	219	01/06/2020	23/02/2021	24/02/2021
6	Madurai East	02	21/09/2021	28/09/2021	29/09/2021
7	Madurai North	02	09/08/2021	18/08/2021	23/08/2021
8	Papanasam	03	30/07/2021	05/08/2021	31/08/2021
9	Tiruppur North	143	23/07/2021	26/08/2021	26/08/2021
Total		**700**			

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Appendix 3.11

(Reference: Paragraph 3.1.4; Page 38)

Non-use of codified reasons for rejection of OPT applications

Sl. No.	Taluk	Applications		
		Total	Applications with contradictory recommendations	Applications rejected without specific remarks
1	Agastheeswaram	78,747	778	3,157
2	Alandur	3,658	2	3,419
3	Avadi	28,531	24	1,789
4	Avinashi	26,227	147	7,157
5	Gummidipoondi	22,708	67	9,855
6	Kothagiri	6,563	24	1,148
7	Madhavaram	9,125	19	2,027
8	Madurai East	31,808	65	6,683
9	Madurai North	37,176	23	1,415
10	Papanasam	21,746	55	2,824
11	Perambalur	48,327	184	306
12	Thirupparankundram	15,934	39	145
13	Thiruvaiyaru	6,872	0	406
14	Thiruvidaimarudhur	27,501	68	601
15	Tiruppur North	13,325	63	3,530
16	Tiruvallur	42,804	269	15,090
17	Udhagamandalam	3,511	26	2,240
18	Uthukkuli	12,138	122	12,944
19	Veppanthattai	18,214	47	2,045
20	Vilavancode	33,342	112	6,129
	Total	**4,88,258**	**2,134**	**82,910**

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Appendix 3.12

(Reference: Paragraph 3.1.5; Page 39)

Details of OPT applications verified by Audit

Taluk	Source and Type	Number of approved applications			Number of rejected applications		
		Checked	Procedural lapse	Incorrect processing	Checked	Procedural lapse	Incorrect Processing
Agastheeswaram	RTR-ISD	3	2	0	2	2	0
Agastheeswaram	RTR-NISD	3	2	1	2	2	0
Agastheeswaram	STR-ISD	3	3	0	2	2	0
Agastheeswaram	STR-NISD	3	1	0	2	0	0
Alandur	RTR-ISD	0	0	0	3	0	0
Avadi	RTR-ISD	3	3	0	2	0	2
Avadi	RTR-NISD	3	3	0	2	1	1
Avadi	STR-ISD	2	0	0	3	0	3
Avadi	STR-NISD	2	0	0	3	0	3
Avinashi	RTR-ISD	3	2	0	2	0	3
Avinashi	RTR-NISD	2	1	0	2	1	0
Avinashi	STR-ISD	2	1	0	3	2	0
Avinashi	STR-NISD	3	0	0	3	2	0
Gummidipoondi	RTR-ISD	4	3	1	2	1	1
Gummidipoondi	RTR-NISD	3	3	0	2	0	2
Gummidipoondi	STR-ISD	2	0	0	3	1	1
Gummidipoondi	STR-NISD	2	1	0	3	0	3
Kothagiri	RTR-ISD	3	2	0	2	2	0
Kothagiri	RTR-NISD	3	0	0	2	2	0
Kothagiri	STR-ISD	3	2	0	2	1	1
Kothagiri	STR-NISD	3	0	0	2	1	1
Madhavaram	RTR-ISD	10	10	0	7	6	1
Madhavaram	STR-ISD	0	0	0	3	3	0
Mambalam	RTR-ISD	7	6	0	3	3	0
Mambalam	RTR-NISD	13	8	2	1	1	0
Madurai East	RTR-ISD	3	2	1	2	2	0
Madurai East	RTR-NISD	3	3	0	2	2	0
Madurai East	STR-ISD	2	1	0	3	0	3
Madurai East	STR-NISD	2	0	0	3	0	3
Madurai North	RTR-ISD	3	2	0	2	0	2
Madurai North	RTR-NISD	3	2	1	2	0	2
Madurai North	STR-ISD	2	0	0	3	0	3
Madurai North	STR-NISD	2	0	0	3	0	3

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Taluk	Source and Type	Number of approved applications			Number of rejected applications		
		Checked	Procedural lapse	Incorrect processing	Checked	Procedural lapse	Incorrect Processing
Papanasam	RTR-ISD	3	2	0	2	1	0
Papanasam	RTR-NISD	3	2	1	3	2	1
Papanasam	STR-ISD	3	2	0	2	2	0
Papanasam	STR-NISD	1	0	0	3	1	1
Perambalur	RTR-ISD	3	3	0	2	2	0
Perambalur	RTR-NISD	2	0	0	3	2	0
Perambalur	STR-ISD	3	3	0	2	1	0
Perambalur	STR-NISD	2	0	0	3	2	0
Thiruvaiyaru	RTR-ISD	2	2	0	3	3	0
Thiruvaiyaru	RTR-NISD	2	1	0	3	2	0
Thiruvaiyaru	STR-ISD	2	2	0	3	3	0
Thiruvaiyaru	STR-NISD	2	1	0	3	0	1
Thiruvidaimarudhur	RTR-ISD	3	3	0	2	2	0
Thiruvidaimarudhur	RTR-NISD	3	2	0	2	1	0
Thiruvidaimarudhur	STR-ISD	3	2	1	2	1	1
Thiruvidaimarudhur	STR-NISD	3	0	0	3	1	2
Tirupparankundram	RTR-ISD	2	2	0	3	0	3
Tirupparankundram	RTR-NISD	2	2	0	2	0	2
Tirupparankundram	STR-ISD	3	0	2	2	0	2
Tirupparankundram	STR-NISD	3	0	0	3	0	3
Tiruppur North	RTR-ISD	3	1	0	2	2	0
Tiruppur North	RTR-NISD	3	3	0	2	2	0
Tiruppur North	STR-ISD	2	0	0	3	0	3
Tiruppur North	STR-NISD	2	1	0	3	1	2
Tiruvallur	RTR-ISD	8	6	0	5	1	2
Tiruvallur	RTR-NISD	6	5	0	1	1	0
Tiruvallur	STR-ISD	1	0	0	1	1	0
Tiruvallur	STR-NISD	2	0	0	3	3	0
Udhagamandalam	RTR-ISD	3	1	1	2	2	0
Udhagamandalam	RTR-NISD	3	0	0	2	0	1
Udhagamandalam	STR-ISD	3	0	0	2	2	0
Udhagamandalam	STR-NISD	3	0	0	2	0	1
Uthukkuli	RTR-ISD	3	3	0	2	0	2
Uthukkuli	RTR-NISD	3	2	0	2	0	2
Uthukkuli	STR-ISD	2	0	2	3	0	3
Uthukkuli	STR-NISD	2	1	0	3	0	3
Velachery	RTR-ISD	4	4	0	0	0	0
Velachery	RTR-NISD	6	5	0	0	0	0

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Taluk	Source and Type	Number of approved applications			Number of rejected applications		
		Checked	Procedural lapse	Incorrect processing	Checked	Procedural lapse	Incorrect Processing
Veppanthattai	RTR-ISD	3	3	0	2	1	1
Veppanthattai	RTR-NISD	3	2	0	3	0	0
Veppanthattai	STR-ISD	4	4	0	2	2	0
Veppanthattai	STR-NISD	2	1	0	3	0	2
Vilavancode	RTR-ISD	3	2	1	2	2	0
Vilavancode	RTR-NISD	3	2	0	2	0	1
Vilavancode	STR-ISD	3	2	0	2	1	1
Vilavancode	STR-NISD	3	2	0	2	2	0
Total		**238**	**142**	**14**	**190**	**86**	**78**

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Appendix 3.13

(Reference: Paragraph 3.1.6 (i); Page 40)

Delay in transfer of incorrectly classified applications

Sl. No.	Taluk	NISD to ISD transfer	ISD to NISD transfer
1	Agastheeswaram	1,622	12,785
2	Alandur	25	213
3	Avadi	699	330
4	Avinashi	100	8,932
5	Gummidipoondi	339	214
6	Kothagiri	67	1,399
7	Madhavaram	288	442
8	Madurai East	504	943
9	Madurai North	550	1,254
10	Papanasam	68	2,123
11	Perambalur	167	1,739
12	Thirupparankundram	174	372
13	Thiruvaiyaru	38	990
14	Thiruvidaimarudhur	358	1,719
15	Tiruppur North	80	3,554
16	Tiruvallur	906	585
17	Udhagamandalam	28	829
18	Uthukkuli	26	3,994
19	Veppanthattai	70	604
20	Vilavancode	1,332	8,424
Total		**7,441**	**51,445**

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Appendix 3.14

(Reference: Paragraph 3.1.6 (ii); Page 41)

Delay in rejection of incorrectly classified applications

Sl. No.	Taluk	NISD		ISD	
		Total rejected	Rejected for being ISD	Total rejected	Rejected for being NISD
1	Agastheeswaram	30,985	83	30,097	615
2	Alandur	1,299	30	2,174	2
3	Avadi	4,234	440	23,478	153
4	Avinashi	11,432	22	12,762	196
5	Gummidipoondi	8,276	186	14,032	245
6	Kothagiri	1,843	3	1,722	183
7	Madhavaram	2,580	134	6,056	240
8	Madurai East	4,041	55	26,672	418
9	Madurai North	4,620	562	31,101	707
10	Papanasam	9,602	29	4,580	91
11	Perambalur	13,873	31	14,008	216
12	Thirupparankundram	2,058	258	13,536	269
13	Thiruvaiyaru	3,255	0	2,848	2
14	Thiruvidaimarudhur	14,156	476	31,392	501
15	Tiruppur North	7,052	8	5,546	9
16	Tiruvallur	10,678	582	31,045	251
17	Udhagamandalam	1,952	1	1,305	11
18	Uthukkuli	4,938	4	5,880	11
19	Veppanthattai	7,683	23	10,276	39
20	Vilavancode	12,606	79	15,025	104
Total		**1,57,163**	**3,006**	**2,83,535**	**4,263**

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Glossary of abbreviations

Abbreviations	Full Form
ADSLR	Assistant Directors of Survey and Land Records
CAN	Citizen Access Number
CLR	Computerisation of Land Records
CORS	Continuously Operating Reference Stations
CSC	Common Service Centre
DBT	Direct Benefit Transfer
DGPS	Differential Global Positioning System
DILRMP	Digital India Land Records Modernisation Programme
DIS	Deputy Inspector of Survey
DLMRC	District Level Monitoring and Review Committee
DoSS	Director of Survey and Settlement
DR	Disaster Recovery
DSC	Digital Signature Certificate
EC	Encumbrance Certificate
ETS	Electronic Total Station
FMB	Field Measurement Book
FMS	Field Measurement Sketch
GIS	Geographical Information System
GoI	Government of India
GoTN	Government of Tamil Nadu
HDC	Hardware Disposal Committee

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Abbreviations	Full Form
HR&CE	Hindu Religious and Charitable Endowments
ISD	Involving Sub Division
IT	Information Technology
LGD	Local Government Directory
LRD	Land Record Draughtsman
LRMCs	Land Record Management Centres
MIS	Management Information System
MoRD	Ministry of Rural Development
NIC	National Informatics Centre
NISD	Not Involving Sub-division
NIST	NLRMP Implementation Society of Tamil Nadu
NLRMP	National Land Records Modernisation Programme
OPT	Online Patta Transfer
PA	Performance Audit
PMU	Programme Management Unit
RDO	Revenue Divisional Officer
R&DMD	Revenue and Disaster Management Department
RoRs	Record of Rights
RTR	Revenue Transfer Registry
SIS	Sub Inspector of Survey
SLMC	State Level Monitoring Committee

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Abbreviations	Full Form
SRA&ULR	Strengthening of Revenue Administration and Updating of Land Records
SRO	Sub Registrar Office
SRS	System Requirement Specifications
STI	Survey Training Institute
STR	Sub-Registrar Office Transfer Registry
TamilNilam	Tamil Nadu Information System on Land Administration and Management
TNeGA	Tamil Nadu e-Governance Agency
TSLR	Town Survey Land Register
UAT	User Acceptance Testing
UDR	Updating of Registry
VAO	Village Administrative Officer
ZDT	Zonal Deputy Tahsildar

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