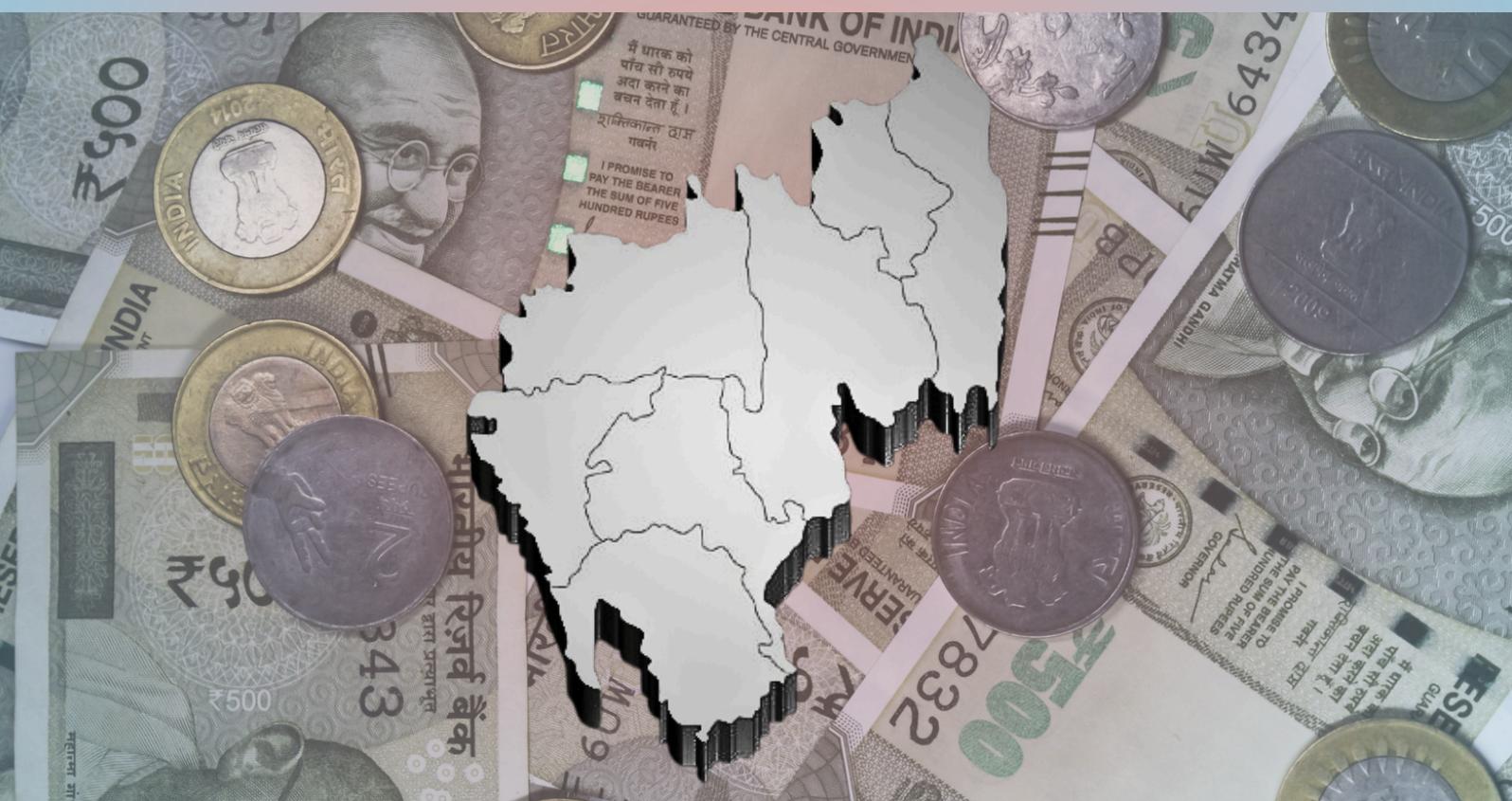


Evaluation of Finances of State of Tripura



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(A Central University)**

Evaluation of Finances of State of Tripura

**A Report Submitted
to
Sixteenth Finance Commission
Government of India**



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Evaluation of Finances of State of Tripura

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Preface

Tripura is the third smallest state (10491.69 sq. Km) of India situated in the Southern part of the Sub-Himalayan region in the North-east India and sharing 856km long international border. The state is rich in environmental resources and medicinal plants due to dense and picturesque forest area (more than 60 percent out of the total geographical area) of the state. There are 19 endogenous tribes belongs to the state which constitutes 31.8 percent of the total tribal population. The state has maintained the legacy of varied and rich tribal culture and heritage in the field of weaving, handicrafts, health care and culture due to this large number of endogenous tribes. The economy of Tripura is based on the agriculture but it comprises only 27 percent of the total geographical area of the state. The base of industrialization is very poor in the state, though there is a large number of educated youths and potential manpower. The state is facing some problems such as high rate of unemployment, poor performance of public sector enterprises; lack of sufficient infrastructure etc. The state is also facing some challenges such as communication bottleneck and geographical isolation from the main parts of the country which put the state into the cost dis-advantageous position for any economic production. Nonetheless, the state is maintaining the lower debt burden, lower capital expenditure-debt ratio, lower revenue-debt ratio and lower fiscal deficit in order to maintain better fiscal health of the state.

The study titled “Evaluation of Finances of the State of Tripura” is undertaken for the evaluation of the fiscal health of the state during last five years as per the terms of references given by the Sixteenth Finance Commission. However, the study has been conducted using the data of last twenty years taking from 2004-05 to 2023-24 in order to check the long term impact and sustainability. Based on the evaluation, the study finally recommends the projected revenue receipt, expenditure and pre-devolution revenue deficit for the period of 2026-31. The study also identifies some potential thrust areas and suggests the necessary recommendations for the improvement of better fiscal health at length.

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List of Abbreviations

ABT	Availability Based Tariff
AMC	Agartala Municipal Corporation
ANOVA	Analysis of Variance
ASHA	Accredited Social Health Activist
BAC	Block Advisory Committee
BCG	Bacille Calmette-Guérin
BDO	Block Development Officer
BE	Budget Estimates
CAG	Comptroller and Auditor General
CAGR	Compound Annual Growth Rate
CAP	Common Alerting Protocol
Capex	Capital Expenditure
CGST	Central Goods and Services Tax
CNG	Compressed Natural Gas
CSS/CS	Centrally Sponsored Schemes/Central Sector
CWC	Central Water Commission
DA	Dearness Allowance
DDMA	District Disaster Management Authority
DEA	Data Envelopment Analysis
DEOC	District Emergency Operation Centre
DG NDRF	Director General, National Disaster Response Force
DIT	Directorate of Information Technology
DM	Disaster Management
DMCGs	District Crisis Management Groups
DPT	Diphtheria, Pertussis, Tetanus
DSS	Decision Support System
DT	Diphtheria-Tetanus
EHV	Extra High Voltage
EOC	Emergency Operation Centre
ERSS	Emergency Response Support System
FC	Finance Commission
FIs	Financial Institutions
FPO	Farmer Producer Organization
FRBM	Fiscal Responsibility and Budget Management
FY	Financial Year
GAIL	Gas Authority of India Limited
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GOT	Government of Tripura
GP	Gram Panchayat
GSDP	Gross State Domestic Product
GST	Goods and Services Tax

GSVA	Gross State Value Added
Ha	Hectares
HDI	Human Development Index
IAY	Indira Awaas Yojana
ICAR	Indian Council of Agricultural Research
ICDS	Integrated Child Development Services
IDP	Integrated Power Development Scheme
IFA	Iron and Folic Acid
IGST	Integrated Goods and Services Tax
IMD	Indian Meteorological Department
INDC	Intended Nationally Determined Contributions
IPDS	Integrated Power Development Scheme
KV	Kilovolt
LCS	Land Customs Station
LIC	Life Insurance Corporation
LIC	Life Insurance Corporation
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MI	Malmquist Index
MSE	Mean Squared Error
MT	Metric Ton
MTFPS	Medium Term Fiscal Policy Statement
MW	Megawatt
NA	Not Available
NABARD	National Bank for Agriculture and Rural Development
NAPCC	National Action Plan on Climate Change
NDRF	National Disaster Response Force
NEC	North Eastern Council
NEGDC	North East Gas Distribution Company Limited
NESIDS	North East Special Infrastructure Development Scheme
NSSF	National Small Savings Fund
NSSF	National Small Savings Fund
NTR	Non-Tax Revenue
Obj.	Objectives
ONTR	Other Non-Tax Revenue
OPV	Oral Polio Vaccine
OTPC	ONGC Tripura Power Company Limited
OTR	Own Tax Revenue
PLF	Plant Load Factor
PMAY	Pradhan Mantri Awas Yojana
PRIs	Panchayati Raj Institutions
PS	Primary Sector
PWD	Public Works Department
QRT	Quick Response Team

RBI	Reserve Bank of India
RD	Rural Development
RKVY	Rashtriya Krishi Vikas Yojana
RLBs	Rural Local Bodies
Rs	Rupees
SAFED	Skill Development and Training Program
SAPCC	State Action Plans on Climate Change
SCMG	State Crisis Management Group
SDGs	Sustainable Development Goals
SDL	State Development Loan
SDMA	State Disaster Management Authority
SDMF	State Disaster Mitigation Fund
SDRF	State Disaster Response Fund
SEC	State Executive Committee
SeMTS	State e-Mission Teams
SEOC	State Emergency Operation Centre
SFC	State Finance Commission
SGST	State Goods and Services Tax
SIPARD	State Institute of Public Administration and Rural Development
SOPs	Standard Operating Procedures
SOR	State's Own Revenue
SS	Secondary Sector
TBM	Tripura Bamboo Mission
T&D	Transmission and Distribution
TDMA	Tripura Disaster Management Authority
TFP	Total Factor Productivity
TIT	Tripura Institute of Technology
TNGCL	Tripura natural Gas Company Limited
TR	Total Revenue
TRC	Tax Revenue from the Centre
TRLM	Tripura Rural Livelihood Mission
TS	Tertiary Sector
TSECL	Tripura State Electricity Corporation Limited
TSICL	Tripura Small Industries Corporation Limited
TT	Tetanus Toxoid
TTAADC	Tripura Tribal Areas Autonomous District Council
ULB	Urban Local Body
UNDP	United Nations Development Programme
VC	Village Committee
XV FC	15th Finance Commission
XVI FC	16th Finance Commission
ZP	ZillaParishad

Executive Summary

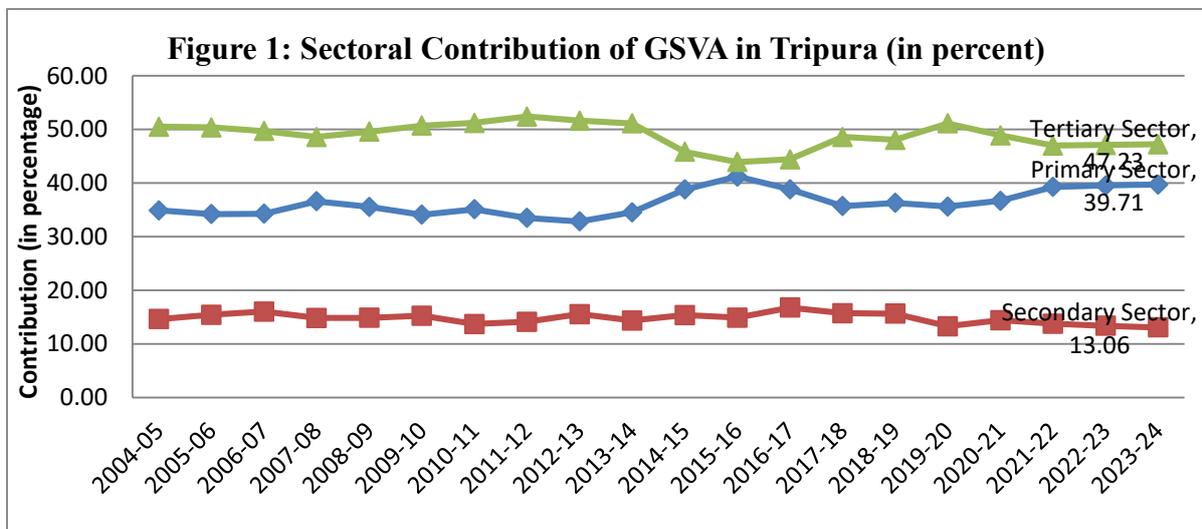
1. Brief Profile of the State

The state Tripura is the third smallest state situated in the southern part of sub-Himalayan Mountain region in the North-East India, which lies to the South East of Assam and to the East of Bangladesh. It is located between 22°56' and 24°32' north latitudes and between 90°09' and 92°20' east latitudes. Topographically, the state is divided into seven distinguishable features viz; hill range, hillock (tilla), valley, low lying areas between the hillocks (lunga), flat land, river and lake. About 60 per cent of the total geographical area consists of hills, hillocks and hilly terrains. Tripura is geo-environmentally unique compare to other Himalayan states for its excellent scenic beauty. As per the assessment of the Bureau of Indian Standards, the state is located in the highly sensitive seismic zone V and with a "very high damage risk" from wind and cyclones.

As per the Census 2011, the population of Tripura is 3,671,032 out of which 1,871,867 are males and 1,799,165 are females. The sex ratio of the state is 961 per 1000 male which is higher than national average. There are 19 indigenous tribes belongs to the state which constitutes 31.8 percent of the total tribal population. Out of that, 87.55 percent of Tripura's total indigenous population lives in the Tripura Tribal Areas Autonomous District Council (TTAADC), which is constituted under the Sixth schedule of the Indian Constitution. Reang communities are the only Particularly Vulnerable Tribal Groups (PVTGs) among these 19 tribes. Presently the estimated population of Tripura is 4.13 million (Source: Economic Review, 2022-23).

2. Economic Profile of the State

The economy of Tripura is mainly based on primary sector and tertiary sector. The contribution of secondary sector is very poor due to poor performance of manufacturing sector. Manufacturing, construction, and industry are all included in the secondary sector, which is shrinking gradually. The trade balance is negative with the neighbouring country Bangladesh. The sectoral contribution of Tripura is given in the following Figure 1.

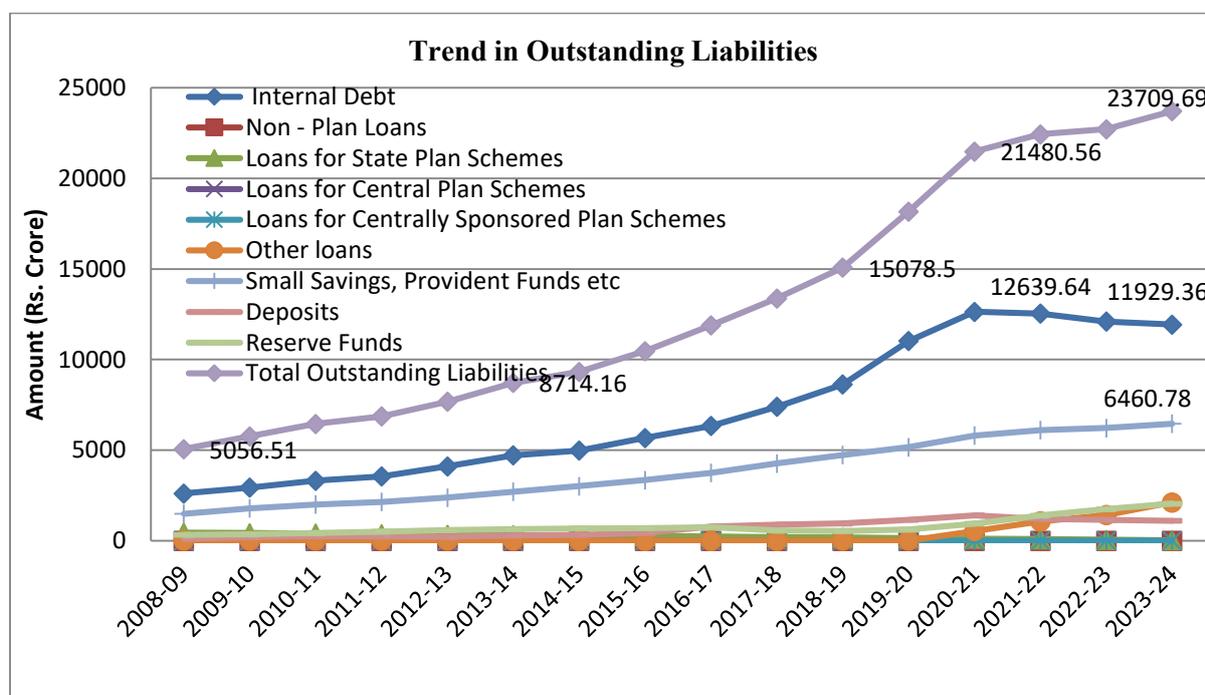


Source: Calculated from RBI Handbook of Statistics of Indian States

3. Outstanding Liability of the State

Figure 2 reveals the trends in outstanding liabilities of the state during 2004-05 to 2023-24. Total outstanding liabilities are the summation of public debt, liabilities on public account and maintain corpus fund. Public debt is divided into two parts viz. internal debt and loans and advances taken from the central government. Loans and advances from the central government are categorized into five parts viz. non-plan loans, loans for state plan, loans for central plan schemes, loans for centrally sponsored schemes and other loans. It is observed that the internal debt of the state increases from Rs.2615.64 crore in 2008-09 to Rs.11929.36 crore in 2023-24. It is found that the major liability on public account is provident fund and it is increasing gradually. During 2023-24, the liability of the state on public account is Rs.6460.78 crore. The reserve fund of the state is increased to Rs.2046.46 crore during 2023-24 from Rs329.79 crore in 2008-09. Presently, out of the total liability of the state Rs.23703.69 crore, about 50 percent is the amount of loan taken from the internal debt (Rs.11929.36 crore).

Figure 2: Trends in Outstanding Liabilities of the State during 2004-05 to 2023-24



Source: <https://cag.gov.in/ae/tripura/en>

4. Overview of the State Finances

The state generates revenue from two sources viz; tax revenue and non-tax revenue. Tax revenue is generated from two sources viz. state's own tax revenue and shared tax-revenue received from the centre. The state generates non-tax revenue from interest, dividend, general services, social services, economic services and from other including fiscal services. Apart from that a sizable amount of revenue receipt of the state comes from the centre as grants. The revenue of the state is given in Table 1.

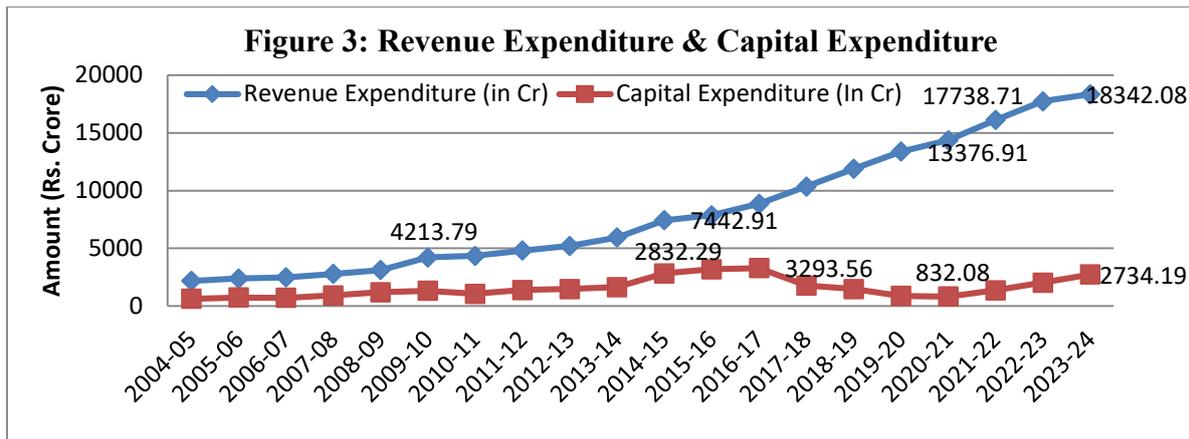
Table 1: Revenue of the State of Tripura from 2004-05 to 2023-24

Year	Own Tax Revenue	Shared Tax Revenue from Centre	Total Tax Revenue (2+3)	Non Tax Revenue	States Own Revenue (2+5)	Grants from Centre	Total Revenue (4+5+7)
1	2	3	4	5	6	7	8
2004-05	239.63	383.12	622.75	177	416.63	1777.30	2577.05
2005-06	296.09	404.38	700.47	64	360.09	2260.03	3024.50
2006-07	341.55	515.78	857.33	95	436.55	2381.60	3333.93
2007-08	370.70	650.62	1021.62	115	485.70	2561.61	3697.93
2008-09	442.50	686.52	1129.52	149	591.50	2798.72	4077.24
2009-10	527.01	706.34	1233.34	125	652.01	3042.60	4400.94
2010-11	622.34	1122.36	1744.70	131.79	754.13	3292.11	5168.6
2011-12	858.02	1307.56	2165.58	214.23	1072.25	4097.1	6476.91
2012-13	1004.65	1493.18	2497.83	178.75	1183.4	4373.72	7050.3
2013-14	1073.91	1630.25	2704.16	246.52	1320.43	4699.5	7650.18
2014-15	1174.26	1730.13	2904.39	195.64	1369.9	6139.7	9239.73
2015-16	1332.25	3266.02	4598.27	262.61	1594.86	4565.87	9426.75
2016-17	1422.01	3909.12	5331.13	218.85	1640.86	4095.48	9645.46
2017-18	1422.02	4322.08	5744.1	493.49	1915.51	3830.37	10067.96
2018-19	1765.91	4888.95	6654.86	372.2	2138.11	5003.84	12030.90
2019-20	2101.80	4211.78	6313.58	271.65	2373.45	4416.37	11001.60
2020-21	2332.44	4218.45	6550.89	285.49	2617.93	6456.02	13292.40
2021-22	2616.31	6077.52	8693.83	274.11	2890.42	8646.01	17613.95
2022-23	2999.68	6724.23	9723.91	402.35	3402.03	8182.75	18309.01
2023-24	3287.41	7996.82	11284.23	420.51	3707.79	8833.26	20538.60

Source: <https://cag.gov.in/ae/tripura/en>

5. Revenue Expenditure & Capital Expenditure

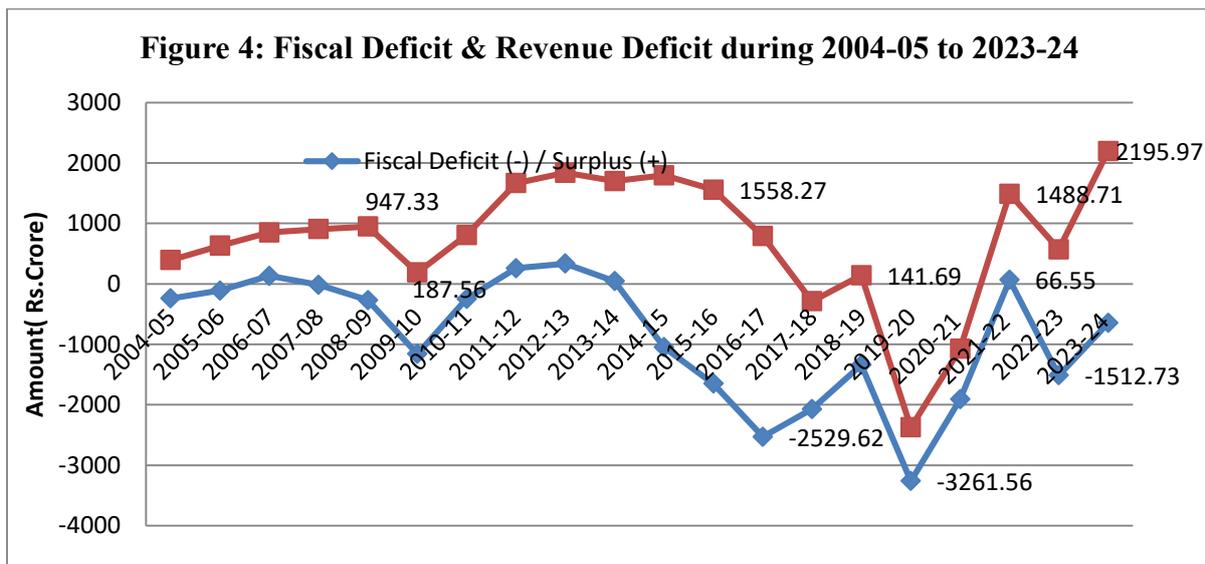
Figure 3 shows the revenue expenditure and capital expenditure. It is observed that revenue expenditure is very high compare to its capital expenditure. Due to decrease in capital expenditure and increase in revenue expenditure simultaneously, the gap between revenue expenditure and capital expenditure is found significantly high. Under the revenue expenditure, the state government spends mainly on salary and wages head, pension head, on interest and payment and other miscellaneous revenue expenditure. It is observed that the state government spends a sizable amount on the salary and wages wage head which is followed by interest payment and pension. These are the major liabilities of the state in the revenue expenditure account. Out of the total capital expenditure, the state government spends major amount on economic service head, followed by social service and general service heads including interest payment.



Source: Based on the data collected from <https://cag.gov.in/ae/tripura/en>

6. Fiscal Deficit & Revenue Deficit

Figure 4 shows the trend line of fiscal deficit and revenue deficit during 2004-05 to 2023-24. It is found that fiscal deficit of the state is more than the revenue deficit during all the time periods. There is a fiscal surplus only in five financial years, otherwise there is a fiscal deficit found in Tripura.



Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * Collected from the Ministry of Finance, Govt. of Tripura

During last two financial years the state has faced fiscal deficit. During 2009-10, there is huge fiscal deficit which is 7.52 percent of the state GSDP though there is a revenue surplus of 1.22 percent of the state GSDP. During the last year there is small fiscal deficit which is 0.78 percent of the state GSDP though there is a revenue surplus of 2.66 percent of the state GSDP. In the present year budget analysis, Rs.4255 crore has been estimated as the targeted fiscal deficit during 2024-25. During this period, the state Govt. has estimated the net expenditure of Rs.27238 crore and net receipt (excluding borrowing) of Rs.22983 crore. The state has faced a huge amount of committed expenditure in terms of payments on salary,

pension and interest. In 2024-25, Tripura is estimated to spend Rs.12466 crore on committed expenditure, which is 54 percent of its estimated revenue receipts.

7. Projected Revenue Receipts and Revenue Expenditure

7.1 Revenue Capacity Estimation

To measure the revenue productivity, the following functional form can be considered.

Revenue productivity

$$\frac{TR_t}{GSDP_t} = \alpha + \beta_1 \frac{Capex_t}{GSDP_t} + \beta_2 \frac{PS_t}{GSVA_t} + \beta_3 \frac{SS_t}{GSVA_t} + \beta_4 \frac{TS_t}{GSVA_t} + \beta_5 \frac{SL_t}{GSDP_t} + u_t \dots\dots\dots(2)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component.

Where; TR = Total Revenue

GSDP = Gross State Domestic Product

PS = Contribution of Primary Sector

SS = Contribution of Secondary Sector

TS = Contribution of Tertiary Sector

Capex = Capital Expenditure

From the estimated regression, it is observed that capital expenditure-GSDP ratio has a positive and significant influence on the revenue capacity of the state. It is also observed that the secondary sector and tertiary sector has a significant and positive effect on the revenue capacity of the state. However, the impact of the secondary sector on the revenue capacity estimation is more than the tertiary sector. The primary sector has no significant impact on the revenue capacity of the state.

7.2 Estimation of Tax Buoyancy

Tax buoyancy is an indicator to measure efficiency and responsiveness of revenue mobilization in response to growth in the gross state domestic product. Table 2 shows the estimated total tax buoyancy of the state.

Table 2: Estimation of Total Tax Buoyancy in Tripura

Intr	Coefficient	Std. Error	t-value	Prob.	R-squared
lngsdp	1.303741	0.029981	43.49	0.000	0.9972
Constant	-5.342662	0.3066785	-17.42	0.000	

Source: Author's estimation

It is found that the value of own tax buoyancy is 1.303 which is statistically significant at less than one percent level of significance. This indicates that one percent growth of the state economy or state domestic product causes only 1.303 percent growth of total tax revenue. So, total tax buoyancy in the state is impressive. In an another estimation, it is found that tax revenue buoyancy is 0.64 which is statistically significant at less than one percent level of significance and it is not impressive.

7.3 Overall Projected Revenue Receipts and Expenditure and Pre-Devolution Deficit (2026-27 to 2030-31)

Table 3 shows the projected revenue receipts and expenditure and pre-devolution revenue deficit of the state during the period 2026-27 to 2030-31. The estimated growth rate is based on the natural logarithmic formula. After that compound growth rate is used for the projection of revenue receipts and expenditure and pre-devolution revenue deficit.

Table 3: Overall Projected Revenue Receipts and Expenditure and Pre-Devolution Revenue Deficit for the 16th Finance Commission during the Period 2026-31(Based on Natural Logarithmic Growth)

Sl.	Particulars	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
1	Total Revenue Receipts	5344.67	6040.56	6828.69	7721.44	8732.84	34668.20
1.1	State's Own Tax Revenue	4819.35	5474.79	6219.36	7065.19	8026.06	31604.74
1.2	State's Own Non Tax Revenue	525.32	565.77	609.33	656.25	706.78	3063.46
2	Total Revenue Expenditure	29764.84	34688.89	40459.64	47227.43	55170.05	207310.86
2.1	Salary & Wages	11328.41	13299.56	15613.68	18330.46	21519.96	80092.08
2.2	Pension	5807.19	7055.73	8572.72	10415.85	12655.26	44506.75
2.3	Interest Payments	1693.76	1834.34	1986.59	2151.48	2330.05	9996.24
2.4	Other Revenue Expenditure	10935.48	12499.25	14286.65	16329.64	18664.77	72715.79
3	Pre Devolution Revenue Deficit (2-1)	24420.17	28648.33	33630.95	39505.99	46437.21	172642.66

Source: Author's estimation

In order to meet the gap between the Central Government employees' DA and State employees' DA (currently, DA given by the State Govt. is 30 percent, whereas DA for the Central Govt. employee is 57 percent at present), the salary and wage calculation is done by increasing 30 percent boost up during 2026-27 (expecting Central Govt. DA will increase to 60 percent up to 2025-26) based on the 2025-26. The projected expenditure on salary and wages from 2025-26 is calculated using the Natural Logarithmic Growth method, as others head for the period of 20 years (2004-2005 to 2023-24). Thereafter, another 7 percent DA is added annually including the usual 10.4 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

For pension expenditure, an expenditure of the budget estimate of the state for 2024-25 is taken and added it to the yearly expenditure of 2025-26. With the said expenditure, a boost of 30 percent has been added with 2025-26 for 2026-27, to equate the DA of the state government employees at par with central government employees (presently State Govt. DA is 30 percent whereas, Central Govt. employee DA 57 percent at present). Thereafter, another 7 percent DA is added annually including the usual 14.5 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

8. Implementation of FRBM Act and Commitment towards Targets

The Fiscal Responsibility of Budget Management (FRBM) Act, 2005 was implemented in Tripura on October 4, 2006 to ensure fiscal discipline and manage the state finances effectively. It aims to improve coordination between fiscal and monetary policy, and increase transparency in fiscal operations of the state. This act requires progressive elimination of revenue deficit, reduction of fiscal deficit, management of debt cautiously, conduct fiscal policy in a mid-term framework and preparation of Medium Term Fiscal Policy Statement (MTFPS). In order to manage the FRBM Act, the state aims to reduce its fiscal deficit to 2.7 percent of its GSDP.

During 2022-23 the state has maintained the permissible fiscal deficit as per the FRBM Act. During 2015-16 to 2020-21 the state has faced very high fiscal deficit. The scenario of the revenue deficit is remarkable; here the data reveals that there is a revenue surplus in the state which is a very good sign for the state.

Table 4: Achievement vis-a-vis MTFP Target during 2018-19 to 2022-23

Year	Revenue Deficit(-)/Surplus(+) as percentage of GSDP		Fiscal Deficit(-)/Surplus(+) as percentage of GSDP		Total outstanding liabilities as percentage of GSDP		Own tax revenue as percentage of GSDP	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2018-19	0	0.28	(-)3.25	(-)2.69	34.33	29.66	6.21	3.54
2019-20	0	(-)4.39	(-)3.25	(-)6.02	34.16	32.96	6.52	3.88
2020-21	0	(-)2.01	(-)5.00	(-)3.57	36.30	38.98	3.60	4.36
2021-22	0	2.38	(-)4.50	0.11	34.90	33.74	3.60	4.18
2022-23	0	0.78	(-)4.00	(-)2.08	35.10	28.99	3.70	4.13

Source: www.cag.gov.in

It is observed that the state has also maintained the total outstanding liabilities as a percentage of GSDP below its target level. It is also noticed that the state has performed a revenue surplus in three financial years viz. 2018-19, 2021-22 and 2022-23.

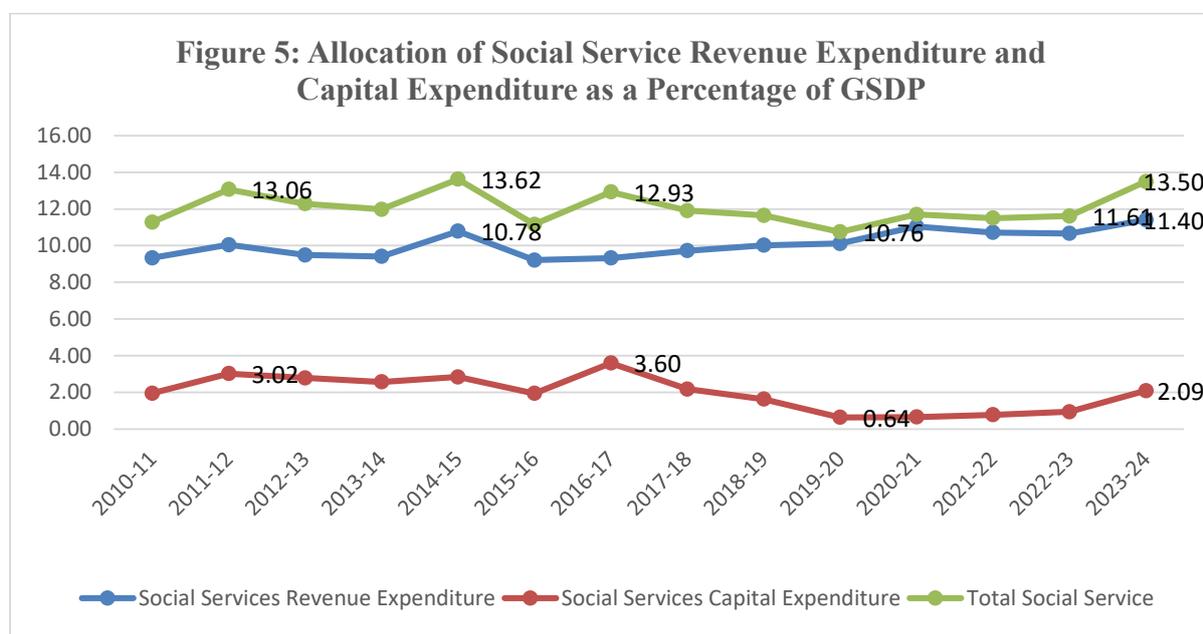
9. Measurement of Efficiency of Public Spending

The Malmquist Index (MI) is a widely used measure of total factor productivity (TFP) growth, which is a key indicator of economic performance. The Malmquist index is a productivity index that measures the change in TFP over time. It's a ratio of the current period's TFP to the previous period's TFP, adjusted for changes in technology and technical efficiency. MI can measure productivity changes over time, presenting the shifts in terms of efficiency change (TE) and technological change or technological progress (TP).

The mean total factor productivity for the school education department is 0.923. Whereas for the health and PWD the total factor productivity are 1.030 and 1.070. The total factor productivity is greater than one which indicates that these departments are producing more output with the same or fewer inputs.

In order to measure the allocative efficiency, expenditure ratio is taken for the study. Expenditure ratio compares the proportion of public spending allocated to different sectors

like health, education etc., to assess if the allocation is in line with national priorities. Figure 5 shows the trend of fund allocation on social service during 2010-11 to 2023-24. It is observed that percentage of allocation of fund out of GSDP for the social service is maximum (13.62 percent) during 2014-15 though in the following the percentage of allocation of fund for the social service is decreased.



Source: Computed from <https://ecostat.tripura.gov.in> and Ministry of Finance, Govt. of Tripura

It is observed that allocative efficiency is better in education sector compare to national average, but it is observed the trend of allocation of fund as percentage of GSDP is decreasing from 2017-18. The allocation of fund on health is just at par with national average which is also not sufficient for the state which is situated at the remote corner of the country.

10. Fiscal Deficit & Revenue Deficit

Table 4 shows the projected revenue deficit and fiscal deficit using natural logarithmic growth with taking 19 years data set. It is observed that the projected revenue surplus and fiscal deficit during this the forthcoming period 2026-27 to 2030-31 will be Rs.4709.82 crore and Rs.13674.44 crore respectively.

Table 4: Projected Revenue Deficit and Fiscal Deficit

Year	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
Revenue Deficit (+) / Surplus (-) (Rs. crore)	-793.27	-861.49	-935.58	-1016.04	-1103.42	-4709.82
Fiscal Deficit (+) / Surplus (-) (Rs. crore)	2230.94	2458.50	2709.26	2985.61	3290.14	13674.44
GSDP(Rs. Crore)	91119.73	98318.19	106085.32	114466.06	123508.88	533498.19
Revenue Deficit (as % of GSDP)	-0.87	-0.88	-0.88	-0.89	-0.89	-0.88
Fiscal Deficit (as % of GSDP)	2.45	2.50	2.55	2.61	2.66	2.56

Source: Author's Estimation

It is observed that the projected revenue deficit less than 1 percent whereas, the projected fiscal deficit is about 3 percent which implies that the state will achieve and follow the FRBM Act.

11. Devolution of Share of Central Taxes and Revenue Deficits Grants

For the vertical devolution, it is recommended that the central share should be 45% of the total divisible pool.

Table 5: Horizontal Distribution of Finance Commissions

Criteria	Weight (%)					Proposed
	XI	XII	XIII	XIV	XV	
Population	10.00	25.00	25.00	17.50	15.00	10.00
Area	7.50	10.00	10.00	15.00	15.00	10.00
Forest & Ecology	-	-	-	-	10.00	20.00
Forest Cover	-	-	-	7.50	-	-
Income distance	62.50	50.00	-	50.00	45.00	40.00
Fiscal Capacity Distance	-	-	47.50	-	-	-
Fiscal Discipline	7.50	7.50	17.50	-	-	-
Tax & fiscal efforts	5.00	7.50	-	-	2.50	2.50
Demographic performance	-	-	-	-	12.50	10.00
Demographic changes	-	-	-	10.00	-	-
Index of Infrastructure	7.50	-	-	-	-	7.50
Total	100.0	100.00	100.00	100.0	100.00	100.00

Source: Compiled from previous Finance Commissions and author's compilation.

The weight for geographical areas should be reduced otherwise the smaller states will be deprived. Productive geographical area is more important compared to total geographical area.

Twenty percent weighting is advised in order to support and promote the pollution-free green GDP-based economy. The state governments would be more motivated to enhance carbon credits and environmental sustainability measures if forest cover and ecology were given more weight.

For income distance criteria 40 percent weightage is suggested in the current proposal. The rationale for lowering the weight is to promote the state's independence.

Infrastructure is a key determinant of development. Increasing its weight (beyond 7.5 percent) can incentivize states to invest in long-term growth and economic competitiveness. The North-eastern states especially Tripura is facing cost-disadvantages situation due to its remote location and diverse topography. Here, 7.5 percent weightage is suggested in order to improve the infrastructure of these states situated in the remote location of the country.

12. Impact of State Public Enterprises on the State's Financial Health

The performance of the public sector enterprises is not satisfactory; most of them are making losses and not contributing on the fiscal health of the state. It is recommended to merge Tripura Urban Transport Corporation Limited (TUTCL) and Tripura Road Transport Corporation (TRTC) into a single entity for better management and use of each other's

resources. After merging of these two can be more efficient and making profitable. Tripura Handloom & Handicrafts Development Corporation Limited (THHDCL) needs to expand its markets across India by distributing its product across all handicrafts shops in India and sell products through e-commerce. TJML (Tripura Jute Mill Ltd.) needs to be dissolved as quick as possible, and present manpower can be absorbed by any other PSU under the Directorate of Industries & Commerce, Govt. of Tripura, such as Tripura Industrial Development Corporation (TIDCL), and all physical assets can also be handed over to TIDCL.

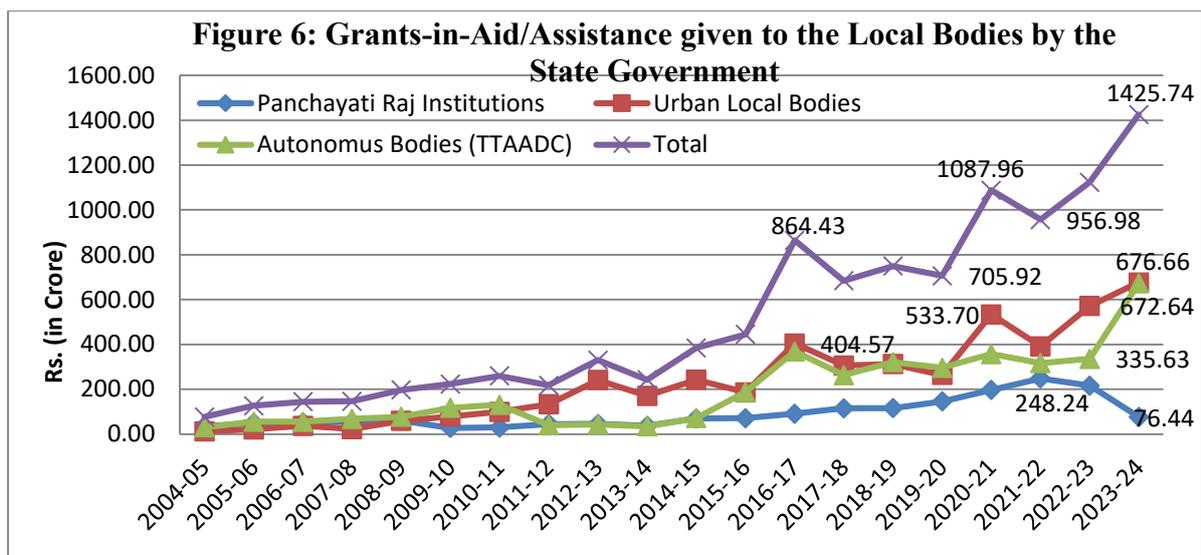
13. Power Sector Reforms

A total of 115 MW installed capacity of power generates from two sources viz. thermal and hydro-electric in Tripura. The state's enormous natural gas reserves increase its capacity to generate thermal electricity. Natural gas is abundant in the state, increasing the possibility of producing thermal power. Thermal power makes up 97.56 percent of the two major power-generating sources, with hydelectricity (specifically, the Gomati Power Project) providing the remaining 2.44 percent.

Tripura Electricity Corporation Limited (TSECL) is a nodal agency for generating and distribution of electricity in the state. They took over the existing network and assets of the Power Department to operate and maintain power supply in the state. The state has upgraded transmission infrastructure to minimize energy losses during transmission. The state has strengthened distribution networks to reduce power outages and losses. The present demand for energy consumption is more than double of its power generation capacity. To meet this additional demand TSECL purchases it from central grid OTPC, Palatana. The state needs to be self-solvent in the generation of power. The state should think about the power generation through using green energy system which would be more viable for sustainable environment.

14. Transfers of Fund to Local bodies and Major Initiatives taken

There are three local bodies in the state viz. Rural Local Bodies (RLBs), Urban Local Bodies (ULBs) and Autonomous Bodies (TTAADC). The TTAADC area, an autonomous zone recognized by the sixth schedule of the Indian Constitution, includes the bulk of Tripura. Figure 6 illustrates the shifting priorities of the state, showing brief increases in spending for rural and urban development as well as large resource infusions for independent enterprises.



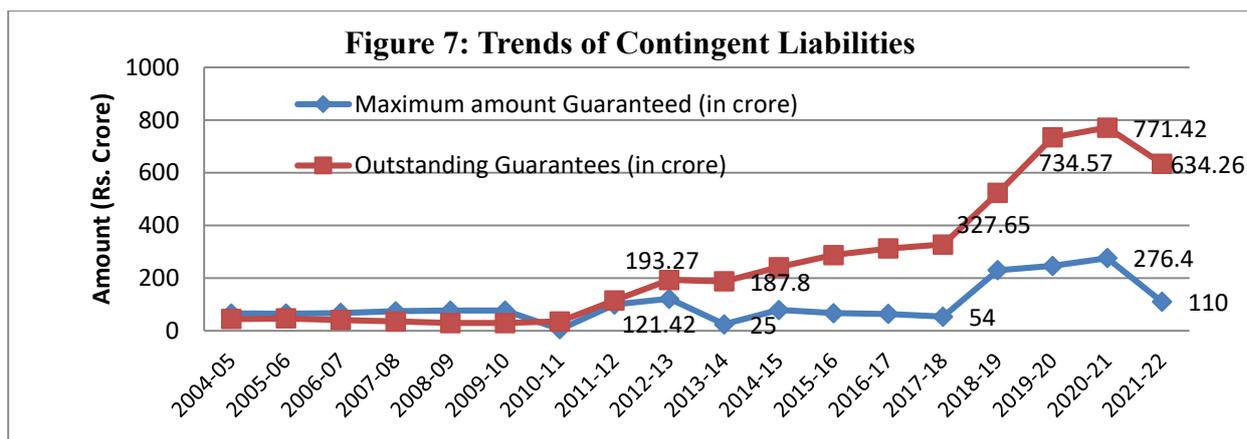
Source: Drawn from the compiled Annual Report of CAG

The financial performance highlights the developments in fiscal autonomy and resource use by concentrating on their sources of income and spending patterns. The Tripura ZillaParishads have a high reliance on grants, little control over their resources, and erratic spending patterns. To ensure their financial sustainability and developmental efficacy, these issues must be addressed through increased revenue production, judicious grant usage, and good fiscal administration. It is found that there is a modest increase of fund transfer to Panchayati Raj Institutions from Rs.34.02 crore in 2004-05 to Rs.248.24 crore in 2020-21, thereafter it is decreased to Rs.76.44 crore in 2023-24. In case of funding for ULBs shows consistency of increase in fund from Rs.11.65 crore in 2004-05 to a peak of Rs.533.7 crore in 2020-21 though it is declined in the next year. From 2021-22, a sharp increase of fund transfer is found to the ULBs.

For the development of urban local bodies Rs.907.98 crore is recommended for the period 2026-27 to 2030-31. Out of that Rs.361.42 crore is recommended for water supply, sanitation, sewage, drainage and solid waste management and Rs.241.31 crore is for construction of road, street light, cremation ground etc. Rs.305.25 crore is recommended for the state specific project for the urban area and for TTAADC area Rs.5745 crore is recommended for the development of the tribal people.

15. Contingent Liability of the State

The significant rise in outstanding guarantees and their proportion to revenue receipts in recent years highlights the need for prudent financial management, while the declining percentage of maximum guarantees suggests efforts to cap new liabilities, emphasizing the importance of monitoring contingent liabilities to avoid fiscal strain. The guarantees is escalated sharply in 2018-19 and 2019-20, before slightly reducing in 2021-22, though still higher than earlier years.



Source: Drawn from <https://cag.gov.in/ae/tripura/en>

16. Subsidies given by the States (other than central subsidies)

The state has provided subsidies in order to provide avoid the losses of its stakeholders though it is fluctuating in different years. The major subsidies are given to the agriculture however the performance of this sector is not satisfactory. Some suggestions are given below in order to improve the situation.

- It is important to establish robust mechanisms to evaluate the effectiveness of subsidy programs and their alignment with development goals. The enhanced revenue receipts through diversified economic activities to accommodate future subsidy is required without compromising fiscal stability.
- To maintain budgetary stability and promote the well-being of its community, the Government of Tripura must efficiently oversee the distribution of funds and make sure that development priorities are met. The rise in subsidy levels could indicate efforts to address developmental gaps or economic shocks during this period. While subsidies remain a critical component of fiscal policy, their proportion to revenue receipts and expenditure has decreased in recent years, suggesting improved fiscal discipline. Focuses on ensuring subsidies are directed to the most vulnerable sections of the population, maximizing their impact while minimizing fiscal strain.

17. Outcome Evaluation of State Finances in the context of recommendations of the 14th and 15th FC

The state has performed well in the context of previous Finance Commissions. Some of the measures are mentioned here briefly in the following.

The state has taken the efforts in expansion and deepening of Tax Net under GST through issuing notification of orders, amending GST rules and awareness programme to promote voluntary compliance and reduce tax evasion. The state is divided into 15 charges for efficient collection of taxes, including VAT/CST, GST, Tripura Road Development Cess, Profession Tax, and Agricultural Income Tax. These efforts demonstrate Tripura's commitment to expanding and deepening its tax net under GST, promoting economic growth and fiscal stability.

Tripura's progress toward replacement rate population growth is influenced by various factors, including education, family planning, and economic development. The total fertility rate is lower than the national average.

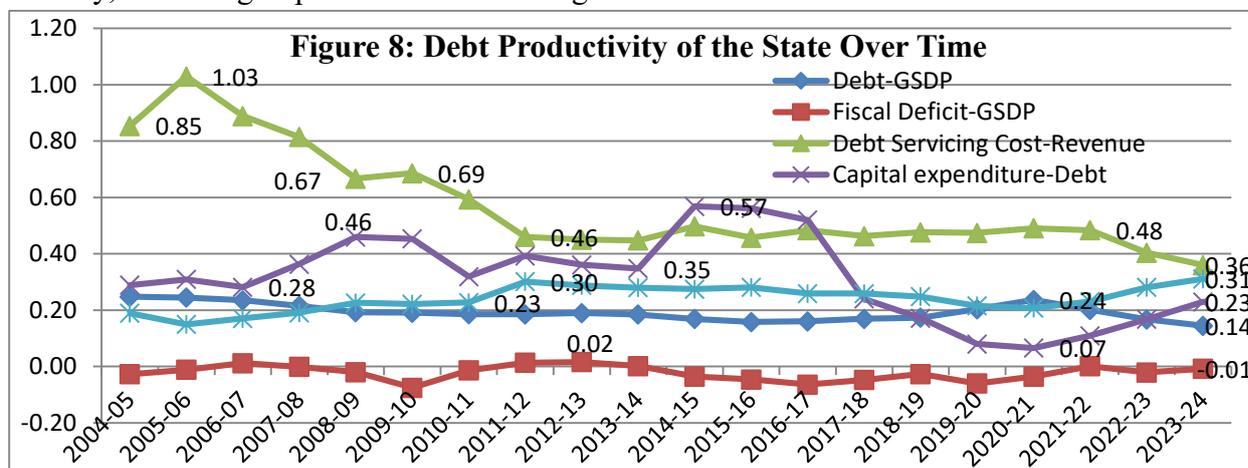
There is a significant progress in implementing flagship programmes of the Govt. of India in the state of Tripura. The major flagship programmes implemented in Tripura are Sarva Shikha Abhiyan, National Rural Livelihood Mission, Beti Bachao Beti Padoo, Pradhan Mantri Matru Vandana Yojana (PMMVY), Integrated Power Development Scheme (IPDS), Deendayal Upadhyaya Gram Jyoti Yojana (DDU-GJY) etc. Tripura has achieved 100% electrification of all willing un-electrified households, with 1,39,090 households electrified since the scheme's launch October, 2017 to March 31, 2019.

Tripura Govt. has implemented National Pension Scheme (NPS) for all appointments made to a regular pay scale post in State Government on or after 1st July, 2018.

18. Determination of a Sustainable Debt Road map for 2026-31

In determination of a sustainable debt roadmap for 2026-31, the factors considered are tax trend forecasts, Debt-to-GSDP Ratio, Fiscal Deficit, Debt Servicing Costs, Sustainable Debt Roadmap, Debt Reduction Targets, Fiscal Discipline, Debt Restructuring and Contingency Planning.

Figure 8 provides a comparative analysis of various debt-related productivity indicators over time. It is observed that there is a decrease in the DSC-Revenue ratio, which indicates lesser debt servicing burden. In comparison to debt levels, the revenue-debt ratio has improved recently, indicating improved revenue management.



Source: Drawn from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and Finance Account, Govt. of Tripura (<https://cag.gov.in/ae/tripura/en>) and Ministry of Finance, Govt. of Tripura

After estimation, it is observed the debt is productive though it is less elastic (0.37). The state can think about taking debt and it should be spent on capital expenditure which would be more beneficial in generating income of the state. It is also found that loan taken from SDL, NSSF, NABARD, and other financial institutions have a positive impact on tax income, so Tripura should prioritize strategic funding and borrowing. Careful allocation of state development loans, reexamination of LIC loans, and improved management of the National

Small Saving Fund can boost revenue and support long-term economic growth and infrastructure development of the state.

For improvement of the fiscal health of the state and sustainable development through exploring the employment opportunity and income generation, a proposal for development of five potential thrust areas are suggested. A sum of the projected Rs.1,500crore is recommended for the development of tourism, healthcare, green energy, medicinal research, and organic farming in Tripura. The highest priority is the establishment of AIIMS with Rs.850 crore, crucial for improving the state's healthcare sector. Tourism, contributing significantly to Tripura's revenue, will receive Rs.250 crore to boost infrastructure and create jobs. A total of Rs.100 crore allocation is recommended for a Medicinal Plants & Medicine Research Hub aims to foster innovation in health. Rs.150 crore is designated for green energy. For digital public infrastructure Rs.150 crore is recommended for betterment of the state. This affirmative action is necessary towards achieving the sustainable development of the state.

19. Recommendations:

Some important recommendations are mentioned in the following; however, the details are given as per Terms of References in Chapter 11 of the study.

- State can explore the newer tax base so that it can enhance the revenue capacity of the state. The state can also think about the increase of non-tax revenue through small hike of user fee; especially local bodies can think about that.
- The secondary sector and tertiary sector should be focused in order to enhance more revenue capacity. The impact of secondary sector is more than tertiary sector in generating the revenue.
- The state should increase capital expenditure in order to generate more revenue in future. The infrastructural development especially for the rural area is needed in this respect.
- Though the total tax buoyancy and own taxes of the state are elastic and impressive, however the state can take proper steps to increase tax responsiveness.
- The growth rate of non-tax revenue is smaller than state own tax revenue. The buoyancy of the non-tax revenue is not impressive. There is a scope of generating more non-tax revenue through enhancing user fee.
- For the projected revenue receipt and projected expenditure of the state during 2026-27 to 2030-31, natural logarithmic method is recommended as it captures year-on-year changes including long run aspects of revenue and expenditure of the state. The projected pre-devolution revenue deficit is estimated and recommended of Rs.172642.66 crore during 2026-31 period.
- The stamp duty and registration charges for purchasing a property in Tripura is presently 5 percent based on the valuation of property. The present duty for the same can be enhanced to 7.5 percent, so that the non-tax revenue of the state can be improved.
- In order to enhance the non-tax revenue, the state can think about the user charges from the stakeholders. There are different areas such as food storage and warehousing; road

and bridges; lodging and parking place; tourist spots; charges from auditorium and banquet hall etc. where the government can escalate some user charges.

- It is observed that the trend of non-committed (other) revenue expenditures has increased sharply after 2017-18. In order to maintain better financial health of the state, it is recommended to reduce non-committed expenditure of the different departments.
- The capital expenditure should be increased especially in the economic services. Enhancing capital expenditure can promote the development of the state in the long run. Special focus should be given to the infrastructure viz. non-conventional energy sources, telecommunications, road and transport service, tourism. Apart from that, some other areas should also be prioritized such as crop husbandry, Food, Storage & Warehousing, Agricultural Research and Education, rural activities through different government programmes, foreign trade as the amount of expenditures are very small. The amount of capital expenditure should be maintained in case of animal husbandry, fisheries, power project, and village small industries as per the spending made during 2022-23.
- The performance of the public sector enterprises is not satisfactory; most of them are making losses and not contributing to the fiscal health of the state. It is recommended that some of these enterprises like TRTC and TUTCL should be merged. Some of the public sector enterprises should be shut down as they are making losses continuously.
- Since Tripura's reliance on central sources has grown over the past year and its own power output has declined, TSECL needs to investigate other power-generating sources in the state, especially renewable sources. TSECL must implement prepaid meters throughout the state, even for supply to different government departments in order to reduce its losses and enhance its financial health. It must rely on its own resources in the long run for the expansion of machines and transmission lines.
- To avoid a potential debt trap, Tripura should ensure loans which could be productively used through proper monitoring. Focus should be given on using loans to boost state income and drive overall economic betterment.
- Capital expenditure plays a vital role in funding road construction projects in Tripura's villages, which can significantly boost the state's revenue. By investing in infrastructure, such as roads, the state can improve market access for farmers, reduce transportation costs, and attract businesses. This will improve tourism, and enhance social integration, all of which contribute to higher revenue and finally it will improve economic growth. Improved roads will also facilitate better healthcare and education access, empowering rural communities, reducing poverty, and fostering long-term development that supports overall state prosperity.
- In order to improve the fiscal health of the state, five potential areas such as establishment of AIIMS, tourism, medicinal research hub, development of green energy and digital public infrastructure are identified and recommended for special funding of Rs.1500 crore.

Based on the observation, finally a detail of pre-devolution fund and other grants-in-aid is recommended in the following Table 6.

Table 6: Final Recommendation for the State of Tripura

Sl.	Particulars	Amount (in Rs. Crore)
I.	Projected Pre-devolution Deficit	172642.66
II	Local Bodies	
	RLBs	1216
	ULBs	907.98
	TTAADC	5745
	Local Bodies	7868.98
III	Disaster Management	3750.00
IV	State Specific Projects	
	Social Welfare	190
	Industry Commerce	100
	Tourism	110
	UDD	200
	PWD	1335
	Agriculture	165
	Home	1236
	Tribal Welfare	22.93
	TTAADC	524.78
	Power	3899.39
	Disaster	3000
V	Total Amount for State Specific Projects	10783.1
VI	Potential Thrust Area Project	1500.00
	Total Recommended Amount	196544.74

Chapter-1

Introduction

1.1 Brief Profile of State:

Tripura is one of the smallest state belongs to the North-East India. With an estimated 4.13 million¹ residents, the state has the seventh-lowest population density in the country. It also has the third-smallest land area, covering 10,491 sq km (4,051 sq mi). Its boundaries are with Bangladesh on the east, Assam and Mizoram to the north, south, and west; the 856 km long international border makes up about 85 percent of the overall boundary. The state is connected to the rest of India by National Highway-8, which has been renovated to four lanes and connects Guwahati and Sabroom via Agartala. The state of Tripura is divided into eight districts and twenty-three sub-divisions. Agartala serves as the state capital and major metropolis. Tripura is home of nineteen distinct tribal communities. The state recognizes Bengali, English, and Kokborok as its three official languages.

1.2 Location & Topography:

The state Tripura is the third smallest state situated in the southern part of sub-Himalayan Mountain region in the North-East India, which lies to the South East of Assam and to the East of Bangladesh. It is located between 22°56' and 24°32' north latitudes and between 90°09' and 92°20' east latitudes.

Topographically, the state is divided into seven distinguishable features viz; hill range, hillock (tilla), valley, low lying areas between the hillocks (lunga), flat land, river and lake. About 60 per cent of the total geographical area consists of hills, hillocks and hilly terrains. Tripura is geo-environmentally unique compare to other Himalayan states for its excellent scenic beauty. The state's five anticline ranges of hills traverse through Atharamura, Longtharai, and Shakhan on their way from the east's Jampui Hills to the west's Baromura. The intervening synclines include the valleys of Agartala-Udaipur, Khowai-Teliamura, Kamalpur-Ambassa, Kailasahar-Manu, and Dharmanagar-Kanchanpur. At 939 meters (3,081 ft) above sea level, Betling Shib in the Jampui range is the highest peak in the state. Doóng/lungas are the narrow, fertile alluvial valleys that are mostly found in the west of the state, whereas tillas are the small, isolated hillocks that are dispersed across the state. Several rivers originated from the hills of Tripura and flow into

¹ Source: Economic Review of Tripura, 2022-23

Bangladesh. The Gomati River flows westward, the Muhuri and Feni River flows south-west, and the Khowai, Dhalai, Manu, Juri, and Longai River flows northward. The soil in the hills is porous red laterite. Flood plains and small valleys, most of which are in the West and South and are used for agriculture, are covered in alluvial soil. The Bureau of Indian Standards assesses earthquake sensitivity on a scale from I to V, and the state is located in seismic zone V.

1.3 Climate, Flora and Fauna:

The state is classified as having a tropical savanna climate by Köppen. The landscape's undulations, particularly in the hill ranges, lead to local differences. The four primary seasons are winter (December to February), monsoon (May to September), pre-monsoon (summer), which runs from March to April, and post-monsoon (October to November). Throughout the monsoon season, the south west monsoon brings with it severe rains that often cause floods. The annual rainfall varies from 1,979.6 mm to 2,745.9 mm. During the winter season, the temperature varies from 13°C to 27°C (55°F to 81°F) and eventually it varies from 24°C to 36°C (75°F to 97°F) in the summer season. According to UNDP report, the state is in a zone with a "very high damage risk" from wind and cyclones.

1.4 Demographic Profile of the State:

Tripura is the second most populous state in North East India, after Assam. As per the Census 2011, the population of Tripura is 3,671,032 out of which 1,871,867 are males and 1,799,165 are females. It represents roughly 0.3 percent of India's whole population. Presently the estimated population of Tripura is 4.13 million (Source: Economic Review, 2022-23). With 961 females for every 1,000 males, the state's sex ratio is higher than the national average. The population density is 350 people per square kilometer. Tripura had the country's third-highest literacy rate in 2011, at 87.75 percent, which was greater than the national average of 74.04 percent. According to the 2006 assessment by India's Ministry of Women and Child Development, Tripura ranked sixth among 35 Indian states and union territories in terms of Human Development Index (HDI); the HDI for Tripura was 0.663, higher than the all-India HDI of 0.605.

Prior to Indian independence, the state of Tripura was dominated by tribes. In 1941, native Tripuris constituted 62.06 percent of the total population of modern-day Tripura, with the other non-Tripurians, primarily Bengalis and non-Bengalis, accounting for the remaining percentage. Tripurism declined from 62.06 percent in 1941 (before to partition) to 48.65 percent in 1951 (post-partition) as a result of East Bengali refugees arriving from what is now East Pakistan or

Bangladesh. Since 1971, the native Tripuri population in Tripura has increased from 28.44 percent in 1981 to 31.05 percent in 2001. According to the 2011 census, indigenous Tripuri people account for 31.78 percent of the state's population, up from 31.05 percent in 2001. The TTAADC area, an autonomous zone recognized by the sixth schedule of the Indian Constitution, includes the bulk of Tripura. The TTAADC occupies around 7,132.56 km², which is approximately 68 percent of Tripura's total area (10,491 km²). It is a large but sparsely populated area of the state. The native Scheduled Tribe (Tripuris) makes up to 1,021,560 people out of the total population of 1,216,465 people in the TTAADC territory, which is 83.4 percent of the total population in that area. Although there are 2,457,452 people living in the General Ward area of Tripura, the General Region only makes up to 3,358.44 km², which is roughly 32 percent of the state's total area of 10,491 km². As per Census 2011, Scheduled Tribes comprises of 1,166,813 people (31.76 percent of the state population) out of the total population of 3,673,917 people. Thus, 87.55 percent of Tripura's total Indigenous population lives in the TTAADC area, which is home to the state's Scheduled Tribes. There are 19 endogenous tribes and out of that Reang communities are the only Particularly Vulnerable Tribal Groups (PVTGs).

1.5 Economic Profile of the State:

This section highlights the economic profile of the state. Table 1.1 reveals the gross state domestic product (GSDP) of the state Tripura at the constant price with the base year 2011-12. The changes in growth rate of GSDP over the last 20 years are also presented. It is observed that the gross state domestic product of Tripura has increased from Rs.11085.03 crore in 2004-05 to Rs.42757.66 crores in 2022-23 with a positive significant growth rate of 9.24 percent approximately. The changes in growth rate of GSDP were at a lower rate (single digit) before 2009-10. But from 2009-10, significant improvement is seen in the changes in growth rate and after 2012-13 the state has maintained a persistent change in rate of growth to 2015-16. Moreover, it is seen that the negative change in growth rate (-4.36 percent) in 2020-21 indicates towards the poor socio-economic condition of the state during the Covid pandemic period. Although, the state has recovered from the situation in 2021-22 with 8.54 percent. The advanced estimates of GSDP is Rs.46455.35 crore with 8.65 percent.

Table 1.1: GSDP at Constant Prices (Rs.in Crore) of Tripura during 2004-05 to 2023-24 (Base Year 2011-12)

Year	GSDP (Rs.in Crore) (Base year 2011-12)	Change in Growth rates (in %)
2004-05	11085.03	---
2005-06	11730.27	5.82
2006-07	12702.20	8.29
2007-08	13680.76	7.70
2008-09	14971.21	9.43
2009-10	16566.05	10.65
2010-11	17911.62	8.12
2011-12	19208.41	7.24
2012-13	20872.97	8.67
2013-14	22819.11	9.32
2014-15	26965.21	18.17
2015-16	26786.90	-0.66
2016-17	30537.59	14.00
2017-18	33092.78	8.37
2018-19	36753.96	11.06
2019-20	38063.35	3.56
2020-21	36403.86	-4.36
2021-22	39516.28	8.54
2022-23 (RE)	42757.66	8.20
2023-24 (Adv.)	46455.35	8.65

Source: <https://ecostat.tripura.gov.in>

Table 1.2 reveals the sector-wise gross state value added (GSVA) of the state of Tripura from 2004-05 to 2022-23. It is observed that contribution of secondary sector in the economy is least compared to other sectoral contribution through the time period. The major contributory sector is service sector, which is followed by primary sector and secondary sector. However, from the data set, it is observed that the tertiary sector grows at 8.55 percent, followed by primary sector and secondary sector which grows at 8.14 percent and 7.36 percent respectively. During 2023-24, total GSVA is Rs.44688.85 crore and out of that contribution of primary sector is Rs.17744.17 crore, and that of secondary and tertiary sectors are Rs.5837.61 crores and Rs.21107.07 crore respectively.

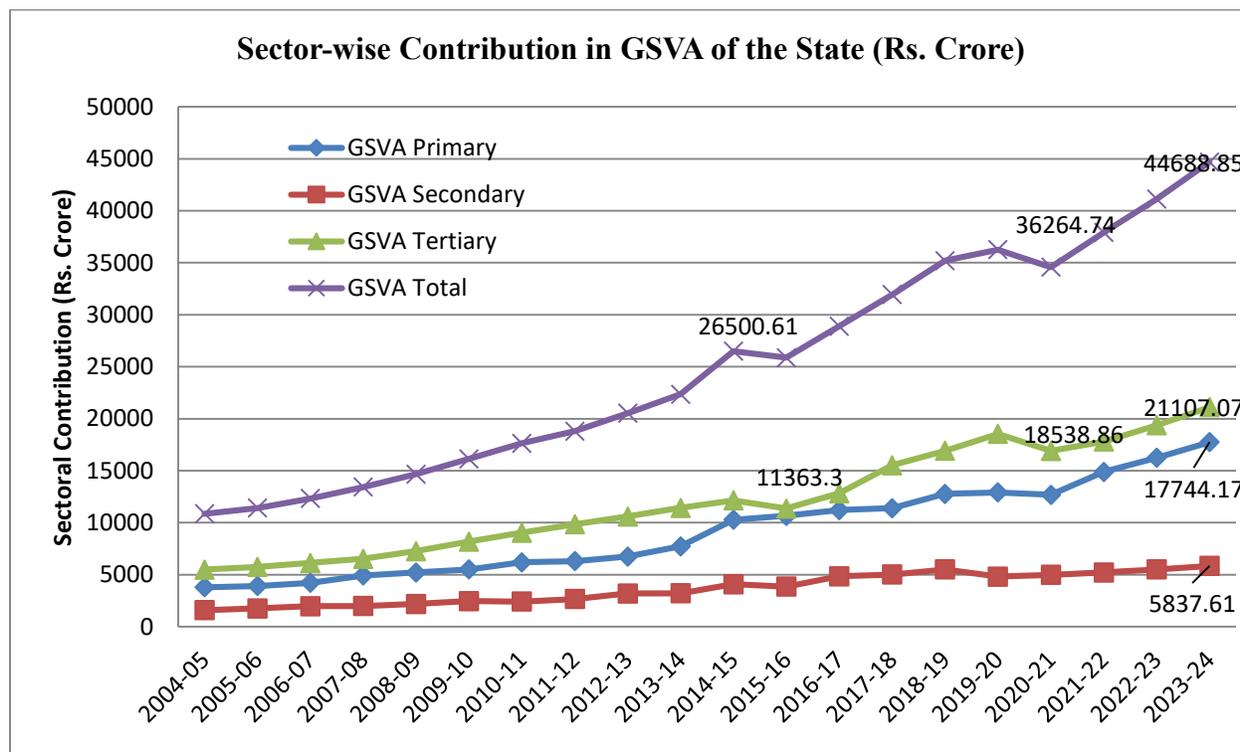
Table 1.2: Sector-wise GSVA (Rs.in Crore) at Constant Price during 2004-05 to 2023-24 (Base Year 2011-12)

Year	GSVA in Primary Sector	GSVA in Secondary Sector	GSVA in Tertiary Sector	GSVA Total
2004-05	3787.48	1585.38	5481.88	10854.74
2005-06	3906.76	1760.09	5749.32	11416.17
2006-07	4224.60	1973.76	6124.58	12322.94
2007-08	4917.29	1990.91	6528.36	13436.56
2008-09	5213.36	2179.84	7269.35	14662.55
2009-10	5497.59	2457.71	8177.90	16133.20
2010-11	6193.14	2414.12	9032.09	17639.35
2011-12	6293.24	2652.75	9849.54	18795.53
2012-13	6741.37	3190.46	10594.83	20526.66
2013-14	7715.27	3205.77	11424.85	22345.89
2014-15	10284.15	4075.19	12141.27	26500.61
2015-16	10660.55	3848.50	11363.30	25872.35
2016-17	11213.31	4842.10	12837.61	28893.02
2017-18	11401.62	5018.37	15522.35	31942.34
2018-19	12775.25	5506.70	16915.73	35197.68
2019-20	12909.48	4816.40	18538.86	36264.74
2020-21	12682.91	4986.94	16901.23	34571.08
2021-22	14884.32	5218.65	17805.75	37908.72
2022-23	16252.83	5497.22	19367.89	41117.94
2023-24	17744.17	5837.61	21107.07	44688.85

Source: <https://ecostat.tripura.gov.in>

Figure 1.1 shows the trends of sector-wise contribution in its GSVA of the state Tripura. From the Figure 1.1, it is observed that the trend of primary sector increases gradually up to year 2020-21 and after that the trend increases at a faster rate. The primary sector increases gradually up to 2014-15 and during 2015-16 there is small decline in trend. After 2016-17, the contribution of tertiary sector increases at a faster rate. The trend of the contribution of secondary sector increases gradually at a slower rate over time compared to other sector. The total contribution increases at 9.22 percent growth rate; where the tertiary sector contributes the major portion. It is also observed that total GSVA increases gradually, however during 2015-16 and 2020-21 total GSVA decreases due to decrease in contribution of tertiary sector mainly.

Figure 1.1: Trends of Sector-wise Contribution in GSVA of the State during 2004-05 to 2023-24 (Rs.in Crore)



Source: Calculated from <https://ecostat.tripura.gov.in>

Table 1.3 shows the sectoral contribution of Gross State Value Added (GSVA) in Tripura during 2004-05 to 2023-24. These data provide insights into fundamental changes in the state's economy over time. The primary sector, which includes agriculture, forestry, and fishing, has a varied trajectory. The secondary sector, which includes manufacturing, construction, and industry, has historically been in decline. The tertiary sector, which includes services like as trade, transportation, and communication, has historically had a dominant position. The tertiary sector contributed 50.69 percent in 2004-05, its proportion fluctuates somewhat but remains over 47 percent. Throughout history, the tertiary sector, which offers services such as trade, transportation, and communication, has remained dominant. It also highlights Tripura's rising reliance on services for economic growth. Despite a little dip in succeeding years, the tertiary sector continues to contribute more to GSDP than any other sector, emphasizing its importance in the state's economic structure. It is observed that tertiary sector has the highest contribution compared to primary sector and secondary sector. With a record proportion of 52.40 percent in 2011-12, this sector demonstrated the growing importance of services in Tripura's economy. Despite a little decline in

recent years, the tertiary sector continues to contribute more to GSDP than any other sector. The contribution of agricultural sector out of the total contribution lies below 40 percent and in between 34 to 39 percent more or less. The contribution of service sector is almost half in most of the years out of the total contribution of the economy.

Table 1.3: Sectoral Contribution of GSVA in Tripura during 2004-05 to 2023-24 (in percent)

Year	GSVA (in %) of Primary Sector	GSVA (in %) of Secondary Sector	GSVA (in %) of Tertiary Sector	Total GSVA (in %)
2004-05	34.89	14.61	50.50	100.00
2005-06	34.22	15.42	50.36	100.00
2006-07	34.28	16.02	49.70	100.00
2007-08	36.60	14.82	48.59	100.00
2008-09	35.56	14.87	49.58	100.00
2009-10	34.08	15.23	50.69	100.00
2010-11	35.11	13.69	51.20	100.00
2011-12	33.48	14.11	52.40	100.00
2012-13	32.84	15.54	51.61	100.00
2013-14	34.53	14.35	51.13	100.00
2014-15	38.81	15.38	45.82	100.00
2015-16	41.20	14.87	43.92	100.00
2016-17	38.81	16.76	44.43	100.00
2017-18	35.69	15.71	48.59	100.00
2018-19	36.30	15.65	48.06	100.00
2019-20	35.60	13.28	51.12	100.00
2020-21	36.69	14.43	48.89	100.00
2021-22	39.26	13.77	46.97	100.00
2022-23	39.53	13.37	47.10	100.00
2023-24	39.71	13.06	47.23	100.00

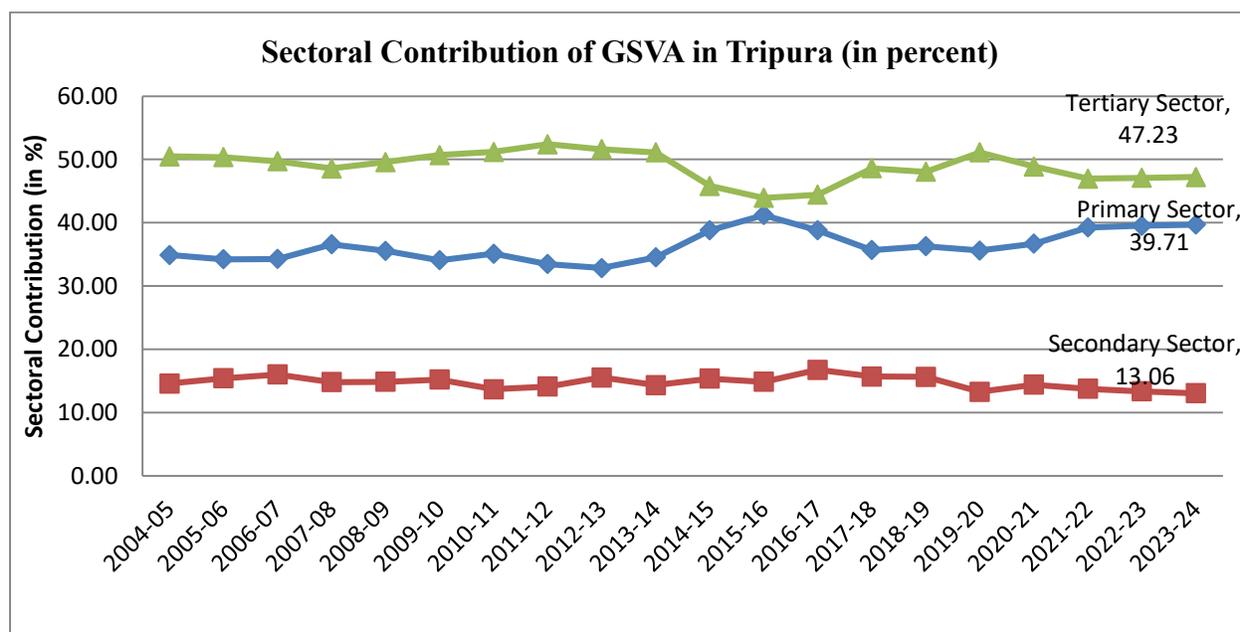
Source: Calculated from <https://ecostat.tripura.gov.in>

It is important to note that more than half of the workforce in the rural state of Tripura is employed in agriculture and other businesses. However, due to the amount of forest cover and the steep terrain, only 27 percent of the land can be used for farming. The primary crop, rice, occupies 91 percent of the agricultural land in the state. According to the Directorate of Economics & Statistics, Government of Tripura, the state's other principal crops in 2009-2010 were potatoes, sugarcane, mesta, legumes, and jute. Pineapple and jackfruit rank first among horticultural products. Historically, the jhum cultivation method has been used for farming by the vast majority of the indigenous population. The number of people who depend on jhum has declined over time.

Significant progress has been made in fish aquaculture throughout the state. Between the end of 2009 and 2010, the state produced an excess of 104.3 million fish seeds, primarily carp. Tea and rubber are two primary income generating crops of the state. The state's crafts are well-known, particularly the wooden sculptures, bamboo products, and hand-woven cotton fabrics. Fine woods including gamar, garjan, sal, and teak are abundant in Tripura's forests. An agreement to increase the state's dairy and fisheries output has been signed in July 2015 by the Government of Tripura and Tata Trusts.

Figure 1.2 shows the graphical presentation of sectoral contribution of GSDP during 2004-05 to 2022-23. It is noticed that Tripura's economic structure is also seen to be steadily changing, with the primary sector receiving more attention and the secondary sector becoming less significant, while the tertiary sector continues to hold a strong position. The poor contribution of secondary sector is only due to poor performance of manufacturing sector. Manufacturing, construction, and industry are all included in the secondary sector, which has been gradually shrinking.

Figure 1.2: Sectoral Contribution of GSVA in Tripura during 2004-05 to 2023-24 (in percent)



Source: Calculated from <https://ecostat.tripura.gov.in>

This decline is a result of either barriers to industrial expansion or a move away from manufacturing, which became particularly apparent after 2011-12, when the sector's share has decreased below 20 percent. It is also observed that the contribution of primary sector and tertiary sector is major though it is fluctuating. The gap between these two sectors is least during 2015-16.

Table 1.4 shows the Tripura's trade volume with the neighbouring country Bangladesh. It is observed that Tripura imports more from Bangladesh rather than its exports and the volume of trade increases over time. Among the imported items Tripura is importing hilsa fish, cement, food items, LPG and RFL plastics etc. As per the information of Agartala land customs station, 14 tradable items are allowed for trading through Agartala. It is found that total tradable volume in 2023-24 is Rs.715.98 crore and out of that state is earning revenue of Rs.12.31 crore whereas Rs.703.67 crore is spent for importing items. It is also found that during 2021-22 both import and export increases.

Table 1.4: Year-wise Tripura's Trade Volume with Bangladesh (Rs. in Crore)

Financial Year	Imports	Exports	Total Trade	Trade Balance
2006-07	48.69	0.87	49.56	-47.82
2007-08	84.15	1.51	85.66	-82.64
2008-09	125.94	0.26	126.2	-125.68
2009-10	162.88	0.42	163.3	-162.46
2010-11	255.88	1.71	257.59	-254.17
2011-12	329.05	1.55	330.6	-327.5
2012-13	342.65	0.41	343.06	-342.24
2013-14	229.89	0.41	230.3	-229.48
2014-15	357.65	1.02	358.67	-356.63
2015-16	381.76	1.96	383.72	-379.8
2016-17	300.23	4.6	304.83	-295.63
2017-18	384.22	6.46	390.68	-377.76
2018-19	522.42	14.66	537.08	-507.76
2019-20	644.78	30.34	675.12	-614.44
2020-21	716.87	16.39	733.26	-700.48
2021-22	767.00	241.4	1008.4	-525.6
2022-23	636.72	121.37	758.09	-515.35
2023-24	703.67	12.31	715.98	-691.36

Source: Directorate of Industries & Commerce, Govt. of Tripura

Table 1.5 shows the volume of trade through land customs stations. It is also observed that the tradable volume is mostly through the Agartala land customs station which is located at Akhaura road, Agartala. It is also observed that during 2021-22, the trade volume through Agartala land customs station is maximum.

Table 1.5: Volume of Trade (Rs.in Crore) through Land customs station (LCS)

Year	Agartala LCS			Others			Grand Total
	Export	Import	Total Trade by Agartala LCS	Export	Import	Total Trade by Other LCS	
2011-12	1.25	264.37	265.62	0.3	64.68	64.98	330.6
2012-13	0.07	245.07	245.14	0.16	97.58	97.74	342.88
2013-14	0.35	164.09	164.44	0.05	65.74	65.79	230.23
2014-15	0.71	265.43	266.14	0.31	92.22	92.53	358.67
2015-16	0.24	282.2	282.44	1.72	99.56	101.28	383.72
2016-17	0.64	189.66	190.3	3.91	110.57	114.48	304.78
2017-18	0.27	235.24	235.51	6.19	148.98	155.17	390.68
2018-19	0.57	355.1	355.67	14.09	167.32	181.41	537.08
2019-20	0.38	585.6	585.98	29.96	59.18	89.14	675.12
2020-21	1.46	580.17	581.63	14.93	136.7	151.63	733.26
2021-22	134.73	642.24	776.97	106.67	124.76	231.43	1008.4
2022-23	99.31	339.8	439.11	22.07	296.92	318.99	758.1
2023-24	4.23	331.55	335.78	8.08	372.12	380.2	715.98

Source: Directorate of Industries & Commerce, Govt. of Tripura

1.6 Asset and Liability of the State

This section highlights the strengths and weaknesses of the state in terms of the asset and liability of the state. The assets of the state is divided in three forms viz. cash, capital asset and other asset (including loan and advances given to different departments, remittance balances etc.); whereas the liabilities of the state is in the form of internal debt, loans and advances from the central government, maintaining corpus fund (contingency) and liabilities on public account (including small savings, deposits, reserve fund, cumulative excess etc.). A detail discussion of asset and liabilities of the state are given below.

Table 1.6 shows the asset position of the state. There are three types of assets viz cash, capital and others. Under the cash heads, the major asset of the state lies on the cash balance investment and investment from earmarked fund, departmental balances and others including cash in treasury and impress fund. It is found that the state has high volatility in holding cash balance investment. During 2008-09, the cash balance investment is Rs.744.35 crore and it fluctuates thereafter; it reaches at maximum in 2013-14 (Rs.3460.88 crore) and it is Rs.1346.36 crore in 2023-24. It is

also found that investment from earmarked fund fluctuates over time and in the last two financial years the earmarked fund is increasing heavily. During 2021-22, investment from earmarked fund is Rs.699.35 crore and Rs.1204.06 crore in 2023-24.

Under the capital heads, the state has huge capital assets of worth Rs.35704.61 crore in terms of investment in shares of companies and other capital assets in 2023-24. The investment in shares of companies has increased over time consistently. It is increased from Rs.641 crore in 2008-09 to Rs.1931.47 crore in 2023-24. However, the capital asset (in terms of other capital expenditure) increased from Rs.7735.77 crore in 2008-09 to Rs.33773.14 crore in 2023-24. Apart from these, the state has some assets in other miscellaneous heads which includes loan and advances given to the department and departmental officers, suspense and miscellaneous balances and remittance balances etc. The amount of loan and advances also has increased from Rs.70.56 crore in 2008-09 to Rs.408.80 crore in 2023-24.

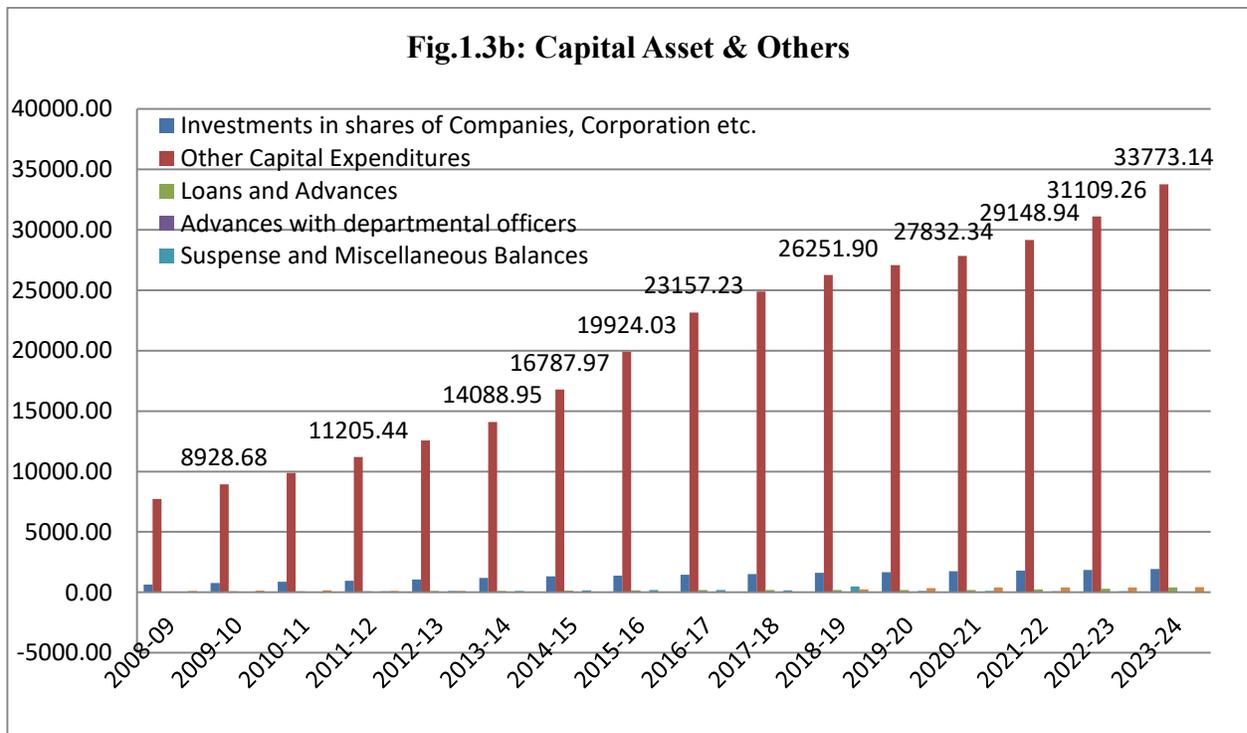
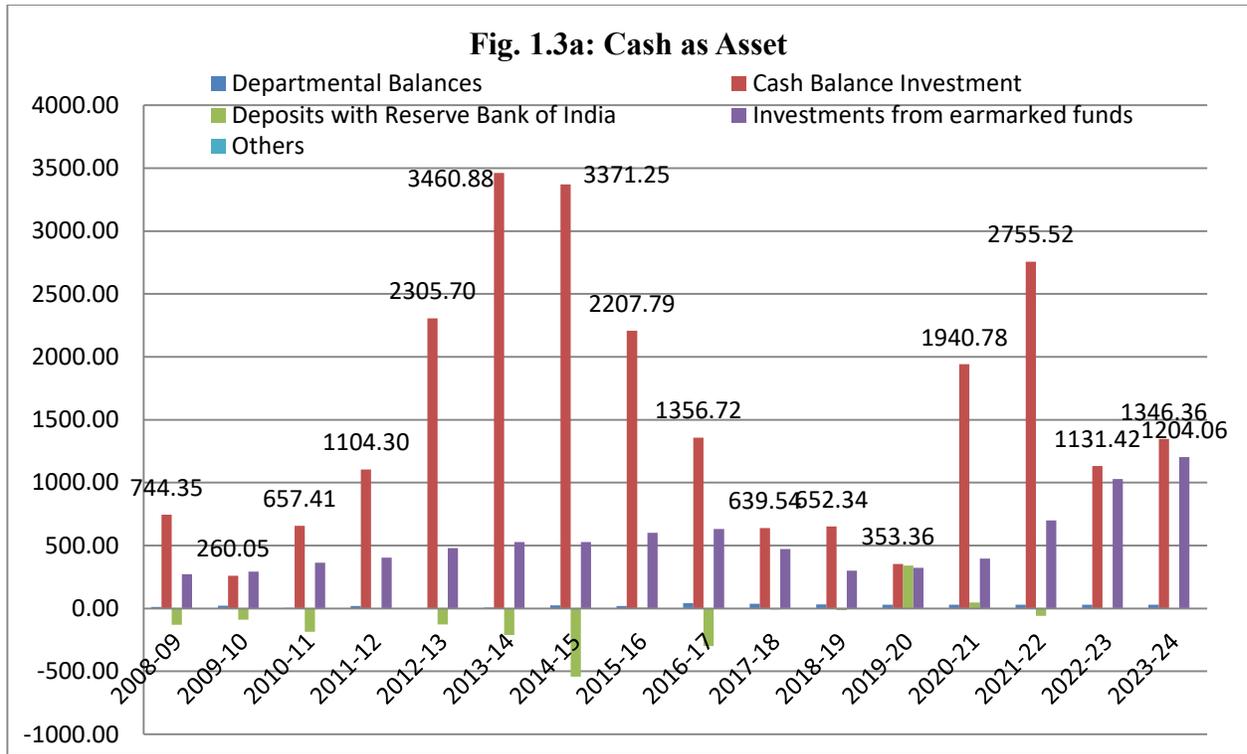
Figure 1.3 reveals the graphical presentation of the asset details during 2008-09 to 2023-24. It is found that the total asset of the state has increased from Rs.9530.08 crore in 2008-09 to Rs.39180.35 crore in 2023-24. The figure shows that capital asset is increasing consistently over the time period.

Table 1.6: Asset Details of the State during 2008-09 to 2023-24 (Rs.in Crore)

Year	Cash						Capital			Others				Total
	Departmental Balances	Cash Balance Investment	Deposits with Reserve Bank of India	Investments from earmarked funds	Others	Total	Investments in shares of Companies, Corporation etc	Other Capital Expenditures	Total	Loans and Advances	Advances with departmental officers	Suspense and Miscellaneous Balances	Remittance Balances	
2008-09	12.82	744.35	-130.07	273.78	-0.92	899.96	641.00	7735.77	8376.77	70.56	2.55	73.41	106.83	9530.08
2009-10	21.35	260.05	-88.15	293.03	-0.92	485.36	780.32	8928.68	9709.00	84.62	2.47	15.26	132.23	10428.94
2010-11	5.35	657.41	-186.04	363.74	-0.91	839.55	882.73	9884.59	10767.32	82.78	3.38	64.15	165.98	11923.16
2011-12	19.31	1104.30	-5.57	404.21	-0.91	1521.34	959.14	11205.44	12164.58	94.57	3.34	96.90	120.84	14001.57
2012-13	2.97	2305.70	-127.23	479.21	-1.19	2659.46	1075.42	12572.35	13647.77	112.24	2.19	116.23	110.54	16648.43
2013-14	7.98	3460.88	-209.71	529.21	-1.18	3787.18	1199.55	14088.95	15288.50	127.05	0.97	125.06	64.57	19393.33
2014-15	24.27	3371.25	-542.81	529.21	-1.18	3380.74	1333.72	16787.97	18121.69	140.60	1.11	161.34	-16.95	21788.53
2015-16	19.76	2207.79	6.76	602.21	-1.17	2835.35	1385.69	19924.03	21309.72	161.30	1.68	187.31	-5.60	24489.76
2016-17	41.63	1356.72	-299.87	631.92	-1.17	1729.23	1446.06	23157.23	24603.29	187.67	0.14	194.79	-12.02	26703.10
2017-18	37.87	639.54	-6.93	472.01	-1.12	1141.37	1503.88	24876.46	26380.34	192.99	0.57	163.87	19.89	27899.03
2018-19	32.02	652.34	-14.02	299.28	-1.10	968.52	1609.31	26251.90	27861.21	193.51	2.04	478.59	240.91	29744.78
2019-20	28.97	353.36	340.98	323.95	-1.09	1046.17	1678.64	27065.79	28744.43	196.53	0.87	111.82	360.80	30460.62
2020-21	28.95	1940.78	48.22	397.47	-0.91	2414.51	1744.17	27832.34	29576.51	198.17	0.07	113.84	393.14	32696.24
2021-22	29.55	2755.52	-58.92	699.35	-0.89	3424.61	1796.52	29148.94	30945.46	251.38	2.33	93.62	418.76	35136.16
2022-23	29.55	1131.42	1.06	1027.67	-0.86	2188.84	1861.17	31109.26	32970.43	309.44	2.33	99.79	418.59	35989.42
2023-24	29.55	1346.36	-2.37	1204.06	-0.85	2576.75	1931.47	33773.14	35704.61	408.80	2.33	68.88	418.98	39180.35

Source: <https://cag.gov.in/ae/tripura/en>

Figure 1.3: Asset Details of the State during 2008-09 to 2023-24 (Rs.in Crore)



Source: Figure drawn from the CAG data taken from <https://cag.gov.in/ae/tripura/en>

Table 1.7: Liabilities of the State Tripura during 2008-09 to 2023-24 (Rs.in Crore)

Year	Borrowings (Public Debt)						Contingen cy Fund (corpus)	Liabilities on Public Account (Rs.in Crore)			Total (Rs. in Crore)
	Internal Debt	Loans and Advances from Central Government (Rs.in Crore)						Small Savings, Provident Funds etc	Deposits	Reserve Funds	
		Non - Plan Loans	Loans for State Plan Schemes	Loans for Central Plan Schemes	Loans for Centrally Sponsored Plan Schemes	Other loans					
2008-09	2615.64	9.11	451.86	0.75	20.15	18.03	10	1496.89	114.29	329.79	5066.51
2009-10	2940.91	8.39	429.81	0.69	18.97	16.64	10	1795.99	195.88	360.52	5777.8
2010-11	3319.69	8.2	404.49	0.58	17.75	14.77	10	2002.95	253.87	430.6	6462.9
2011-12	3558.87	7.51	365.79	0.51	19.95	13.21	10	2146.3	244.75	506.74	6873.63
2012-13	4108.13	6.85	340.57	0.46	19.71	11.65	10	2385.57	217.57	582.56	7683.07
2013-14	4719.21	6.23	314.19		3.34	10.07	10	2712.56	297.03	651.53	8724.16
2014-15	4982.5	5.63	290.42		16.86	8.52	10	3014.96	326.78	679.57	9335.24
2015-16	5680.72	5.02	267.15		16.43	7.12	10	3355	438.73	698.03	10478.2
2016-17	6335.33	4.45	241.3		16	5.96	10	3751	791.47	745.37	11900.88
2017-18	7398.46	3.9	210.3		15.46	6.16	10	4271.75	897.53	571.18	13384.74
2018-19	8626.78	3.37	180.2		14.91	18.24	10	4734.22	955.87	544.91	15088.5
2019-20	11027.69	2.86	150.1		14.36	17.05	10	5169.23	1162.66	625.57	18179.52
2020-21	12639.64	2.37	119.96		13.36	543.83	10	5807.92	1404.48	949	21490.56
2021-22	12537.03	1.9	89.63		12.37	1068.98	10	6110.71	1212.41	1398.74	22441.77
2022-23	12097.7	1.46	59.17		11.37	1425.97	10	6220.68	1152.41	1745.97	22724.73
2023-24	11929.36	1.07	29.08		10.37	2122.2	10	6460.78	1110.37	2046.46	23719.69

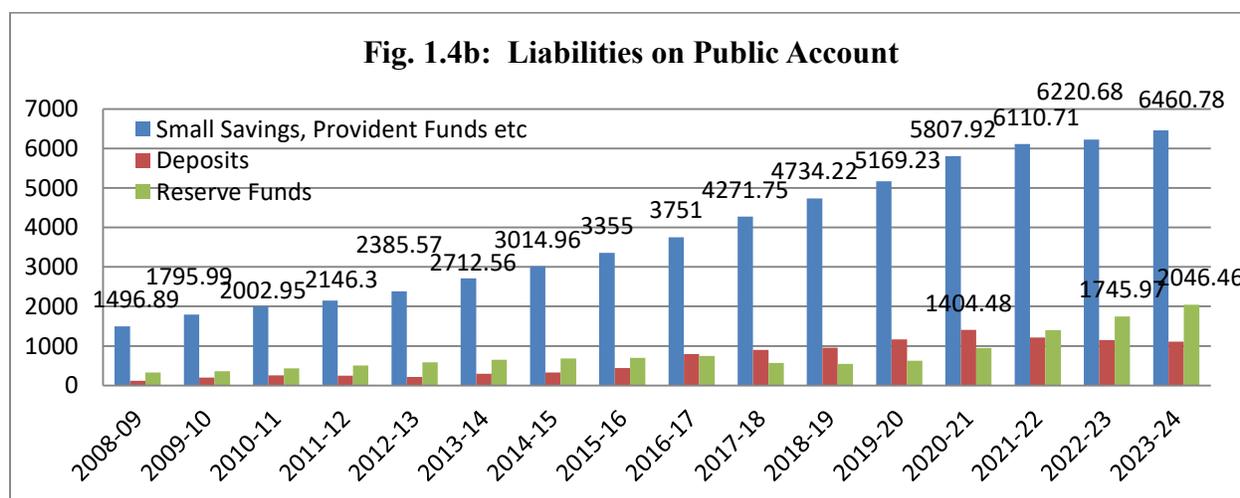
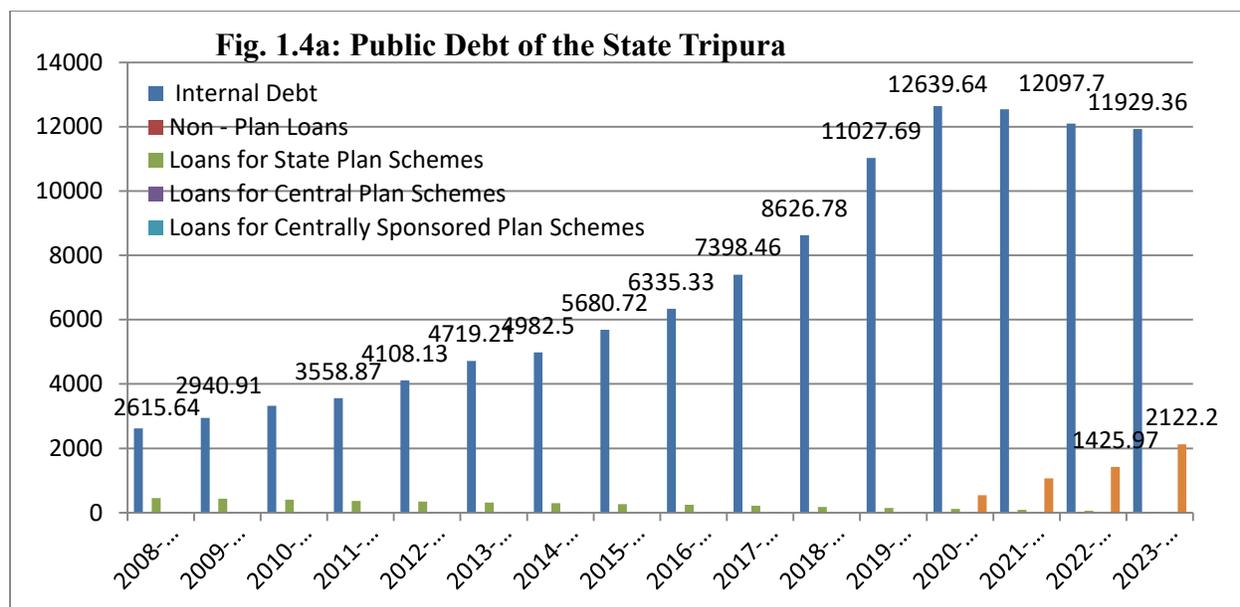
Source: <https://cag.gov.in/ac/tripura/en>

Total outstanding liabilities are the summation of public debt, liabilities on public account and corpus fund maintained by the state. Public debt is divided into two parts viz. internal debt and loans and advances taken from the central government. Loans and advances from the central government are categorized into five parts viz. non-plan loans, loans for state plan, loans for central plan schemes, loans for centrally sponsored schemes and other loans. Table 1.7 reveals the liabilities of the state during 2008-09 to 2023-24. It is observed that the state is facing outstanding liabilities due to internal debt, loans taken from the Centre, provident fund, reserve fund, deposits and advances, maintaining contingency fund (corpus fund). From Table 1.7, it is observed that the internal debt of the state has increased from Rs.2615.64 crore in 2008-09 to Rs.11929.36 crore in 2023-24.

It is also observed that the state has another major liability, i.e., providing provident fund to the employees, which is increasing throughout the time period. Loans from the centre is another liability of the state. In 2023-24, the state has taken a loan amount of Rs.2162.72 crore (including non-planned loans, loans for state planned schemes from the centre was, loans for centrally sponsored schemes and other loans etc.). The state bears a constant contingency fund of Rs.10 crore every year.

Figure 1.4 reveals the outstanding liabilities of the state during 2008-09 to 2023-24. Figure 1.4 is divided into two parts viz public debt of the state (Fig. 1.4a) and liabilities on public account (Fig. 1.4b). Fig. 1.4a shows that internal debt has increased gradually over the time period up to 2020-21 and after that it has decreased. It is also found that compared to internal debt other loans like non-plan loans, loan for centrally sponsored schemes are very smaller in amount. Fig. 1.4b shows that liabilities on public account. It is found that the major liability on public account is provident fund which has gradually increased to Rs.6460.78 crores in 2023-24. The state takes this fund as it is obligatory and beneficiary for the state govt employees. Provident fund is collected from the employee's salary and kept as reserved fund in the hands of the state in order to provide financial security at the time of the retirement of the employees. This is also useful for potential access as emergency fund. The state govt. also pays the interest for the loan taken from this fund. Further, it is also easily available without any restriction imposed. The reserve fund has increased to Rs.2046.46 crore during 2023-24 from Rs329.79 crore in 2008-09.

Figure 1.4: Outstanding Liabilities of the State during 2008-09 to 2023-24 (Rs.in Crore)

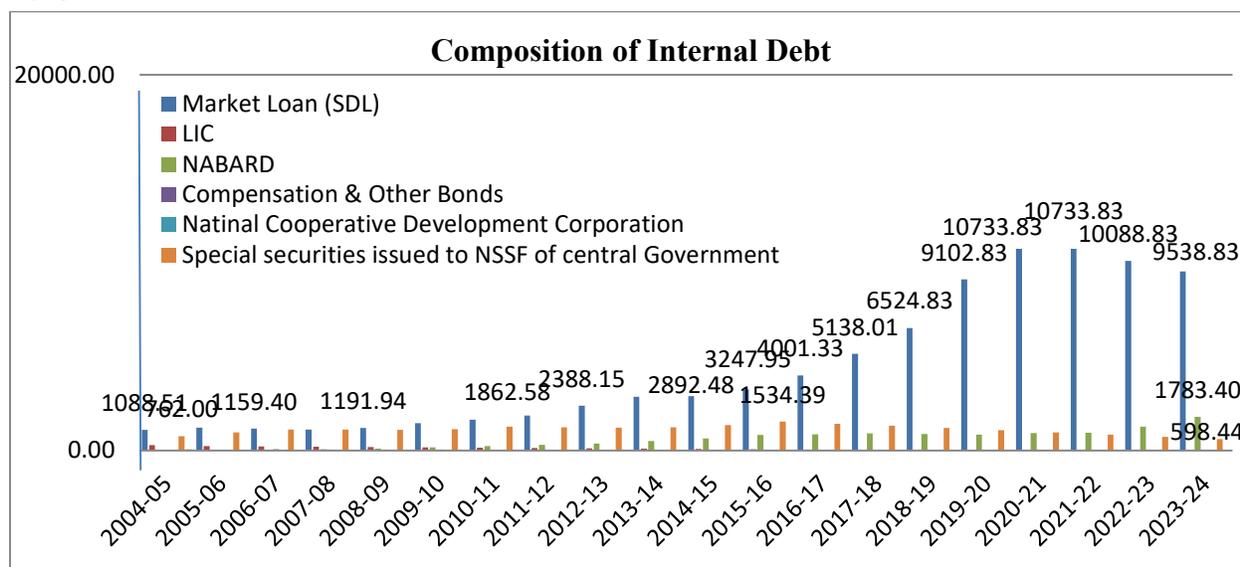


Source: <https://cag.gov.in/ae/tripura/en>

Figure 1.5 shows the year-wise bar-diagram which indicates the composition of internal debt taken by the state. The major sources of internal debt are state development loan (SDL) bond, compensation and other bonds, national small savings fund (NSSF), Life Insurance Corporation, National Bank for Agricultural & Rural Development (NABARD) and loan taken from the other financial institutions. It is observed that the spike for SDL in all years is highest which is followed by the spike for loan from NABARD. These spikes are higher than the spikes for loan from other sources. Out of the total internal debt major amount of debt is collected from SDL bond which is issued by the govt. to fund fiscal deficit. It is found that SDLs of the state has increased from Rs.1088.51 crore in 2004-05 to Rs.9538.80 crore in 2023-24. Loan from LIC has decreased from

2013-14 and presently the amount of loan from LIC is very small. From 2020-21, the state has taken more than Rs.10000 crore from SDLs source. Whereas, the loan taken by the state from NABARD crosses four digit land mark in 2022-23 with Rs.1272.75 crores and in 2023-24 with Rs.1783.40 crores.

Figure: 1.5: Composition of Internal Debt (Rs.in Crore) taken by the State from 2004-05 to 2023-24



Source: Figure drawn from the CAG data taken from <https://cag.gov.in/ac/tripura/en> and RBI Hand of Statistics on Indian States

1.7 Revenue Potential of the State

Tripura is very rich in natural resources which can be used as revenue potential of the state. Natural gas is the highest revenue earning natural resource in Tripura. This natural resource is served as backbone for surplus power generation. Tripura natural Gas Company Limited (TNGCL) and North East Gas Distribution Company Limited (NEGDCL) are engaged in the supply of piped line gas to domestic, commercial and compressed natural gas (CNG) for vehicles.

As on March 2024, a total number of 21710 CNG Vehicles are running on road. There are 04 CNG Mother Stations and 18 CNG Daughter Stations in the state. A total number of 60661 households are connected with domestic piped line gas connections in Agartala². The TNGCL supplies gas to industrial consumers in Bodhjung nagar Industrial Complex.

² Source: <https://industries.tripura.gov.in/natural-gas>

The state is endowed with rich and diverse resources of bamboo. There are 21 species available in the state out of 130 species in India. Out of the total forest area, approximately 31 percent of its area covered by bamboo forests. There is a steady demand for bamboo in the state, driven by various bamboo-based industries operated by local artisans. The state has launched Tripura Bamboo Mission (TBM) in PPP mode, for integrated development of Bamboo sector in the state. The Tripura State Bamboo Policy and the Tripura Bamboo Mission (TBM) aim to support bamboo cultivation, promote the production of bamboo as a raw material, improve resource management, and encourage the development of value-added bamboo products. Forest areas in More focus on bamboo cultivation and value added based production of it may be helpful to enhance forest-based income in the state.

Honey production through bee-keeping activities is another potential area for forest based income and revenue generation of the state. This can be achieved through a coordinated effort between the Forest Department and local beneficiaries under a Public-Private Partnership (PPP) model.

Moreover, Tripura's forests are rich in medicinal plants and bear various fruits, such as Chebulic Myrobalan (Haritaki) and Terminalia bellirica (Bahera). The Forest Department can collect and sell these fruits, which are in demand across various industries as raw materials. This would not only contribute to revenue generation but also promote sustainable forest management.

1.8 Challenges faced by the State

Due to its adverse geographical location in the remote corner of the country and also its diverse topographic conditions, the state faces always a cost disadvantageous situation compared to other North-eastern states. The state depends on the neighboring states especially on Assam, and uses Assam corridor for the transportation of goods to and fro other states. The state also faces cost disadvantages due to a sizable transportation cost for carrying of essential imported goods such as petroleum product, liquid petroleum gas, manufacturing, groceries items, agricultural goods, and raw materials etc. from the other states of India. Due to high transportation cost, the cost of production of the goods produced in the state increases and the cost of living is very high compared to many other states of India. Apart from that, state faces land sliding especially during rainy season and which leads to the problem of road block during this time; and as an outcome, the state faces a crucial problem of shortage of essential goods which leads to price hike in general.

Chapter 2

Methodology for Studies on Evaluation of Finances of State of Tripura

This chapter explains the research methodology for the studies on evaluation of finances of the state of Tripura. The methodologies are described in the following based on the Terms of Reference (ToR) given by the 16th Finance Commission.

1. Estimation of revenue capacities of State and Measures to improve the tax-GSDP ratio during last five years. Suggestions for enhancing the revenue productivity of the tax system in the State

i. To estimate the revenue capacity of the State of Tripura, sector-wise revenue of the State will be estimated separately during the last 20 years and prospective area will be identified in order to improve the tax-GSDP ratio. The secondary information will be collected from the different line departments of the State.

ii. To measure the revenue productivity, the following functional form can be considered. Revenue productivity

$$(TR/GSDP) = f(\text{Capex/GSDP}, PS/GSVA, SS/GSVA, TS/GSVA, SL/GSDP) \dots\dots\dots(1.1)$$

For enhancing revenue productivity, the above functional form is estimated using the following econometric specification:

$$\frac{TR_t}{GSDP_t} = \alpha + \beta_1 \frac{Capex_t}{GSDP_t} + \beta_2 \frac{PS_t}{GSVA_t} + \beta_3 \frac{SS_t}{GSVA_t} + \beta_4 \frac{TS_t}{GSVA_t} + \beta_5 \frac{SL_t}{GSDP_t} + u_t \dots\dots\dots(1.2)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component.

Where; TR = Total Revenue

GSDP = Gross State Domestic Product

PS = Contribution of Primary Sector

SS = Contribution of Secondary Sector

TS = Contribution of Tertiary Sector

Capex = Capital Expenditure

iii. To measure the tax Buoyancy the following specification is taken

$$\log(Tax)_t = \alpha + \beta \log(GSDP)_t + u_t \dots\dots\dots(1.3)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. Where;

$$\text{Tax Buoyancy} = \frac{d\log(\text{Tax})}{d\log(\text{GSDP})}$$

2. Analysis of the state’s own non-tax revenues and suggestion to enhance revenues from user charges and profits from departmental enterprises and dividends from non-departmental commercial enterprises.

- i. The information and sources of State own non tax revenue will be collected from the State Budget of Tripura over the last fifteen years. The pattern and composition of non-tax revenue will be shown graphically and analysis will be done accordingly.
- ii. Suggestions to enhance revenues from user charges will be given on the basis of recurring cost of the project especially variable cost of the project and demand for the user. Demand for the user will be checked through number of users and the revenue generated.
- iii. Profits or losses from departmental enterprises will be examined after collecting the information from the concerned departments.
- iv. Dividends from non-departmental commercial enterprise will be examined after collecting the necessary information from the secondary sources.

3. Expenditure pattern and trends separately for Revenue and Capital, and major components of expenditure there under. Measures to enhance allocative and technical efficiency in expenditures during the last 5 years. Suggestions for improving efficiency in public spending.

- i. Trends and pattern of Revenue Expenditure, Capital Expenditure and their different components will be shown graphically.

ii. Measuring Allocative and Technical Efficiency of expenditure

Allocative efficiency is a point where marginal benefit curve crosses the marginal supply curve. Here, marginal social benefit (MSB) equals to marginal social cost (MSC). There are some common methods for measuring allocative efficiency such as Expenditure Ratio, Cost-Benefit analysis, Data Envelopment Analysis etc. But, it is difficult in accessing reliable and comprehensive data on public spending and as a result its outcomes can be challenging due to inconsistencies in reporting and data quality. However, for this study, expenditure ratio is taken for measuring allocative efficiency. Expenditure ratio compares the proportion of public spending

allocated to different sectors like health, education, infrastructure, etc., to assess if the allocation is in line with national priorities.

Whereas, Technical efficiency means the maximum possible output produced with a given supply of resources. It is concerned with achieving maximum outputs with the least cost. Technical efficiency is defined as the distance from the observed input-output combinations to an “estimated” efficient frontier (Farell, 1957). There are multiple techniques to estimate the efficient frontier to examine the efficiency of public spending.

Both technical and allocative efficiency can be measured by the following two main approaches.

Input Approach: The input approach if one is considering the ability to avoid waste by producing as much output as input usage allows, i.e. evaluate the ability to minimize inputs keeping outputs fixed.

Output Approach: The output approach if one is considering the ability to avoid waste by using as little input as output production allows, i.e. evaluate the ability to maximize outputs keeping inputs fixed.

Methods of Efficiency Measurement: Non-Parametric Vs. Parametric

The efficiency measurement can be done using both non-parametric method and parametric method. Both non-parametric and parametric method will be used. However, there are two non-parametric methods viz; Data Envelopment Analysis (DEA) and Free Disposal Hull (FDH) Analysis. Data Envelopment Analysis (DEA) will be used. In case of parametric method Stochastic Frontier Analysis (SFA) can be used. But, in this study non-parametric analysis (DEA) will be used. The detail methodology of DEA is given in the following.

Data Envelopment Analysis (DEA):

DEA is the most common technique used in the analysis of efficiency of social sector. DEA assumes that linear combinations of the observed input-output bundles are feasible. It is a non-parametric mathematical programming method to estimate the inefficiency of outputs given inputs and vice versa. This method constructs an envelopment frontier over the data points such that all observed points lie on or below the production frontier (Coelli, 1996).

Charnes, Cooper and Rhodes (1978), developed a model that generalizes the single-input, single-output ratio measure of efficiency of a single Decision-Making Unit (DMU) in multiple inputs and outputs setting.

$$\text{Technical Efficiency} = \frac{\Sigma(\text{Weighted outputs})}{\Sigma(\text{Weighted inputs})}$$

A DMU is said to be efficient and operates on the frontier when it attains the maximum level of output or outputs with a given amount of inputs or resources, and the existing technology. When it produces less than what can be attained, the DMU is considered to be inefficient.

Let there be n number of DMUs (different sectors) using varying amount of inputs to produce outputs. There are s number of inputs x_i , $i = 1 \dots s$, and m number of outputs y_r , $r = 1 \dots m$. For each DMU_j, where $j = 1 \dots k, \dots, n$, the problem is to $Max. (h_j) = \frac{\Sigma_r u_{rj} y_{rj}}{\Sigma_i v_{ij} x_{rj}}$

Subject to $\Sigma_r u_{rj} y_{rj} / \Sigma_i v_{ij} x_{rj} \leq 1$ for $j=1, \dots, n$. and $u_r v_r \geq 0$

Where, u_{rj} is the weight assigned to each unit of output r from DMU_j and v_{ij} is the weight assigned to each unit of input i used by DMU_j. That is, solutions are sought to maximize the ratio of weighted output to weighted input for each DMU (the ratio of virtual output to virtual input). By normalization, the efficiency scores range from zero to one. The same weights (virtual multipliers) that maximize h_j for DMU_j are applied to the inputs and outputs of all DMUs as a solution to the problem for DMU_j. This process is repeated for each DMU. In this study, output oriented variable returns to scale (VRS) DEA model with the help of application of multiple outputs inputs approach.

Panel data DEA: The Slack-Based Malmquist Index

In case of Panel Data, linear programming DEA methodology allows calculation of (input-oriented or output-oriented) Malmquist Index (Caves, Christensen and Diewert, 1982), which helps to measure change in productivity growth of producing units and its sources. Due to the availability of a panel data set, we are not only interested in the relative performance of the different sectors in a particular year but also in how the efficiency of sectors has changed over time. Hence, in this study the Malmquist index, which is able to capture total productivity (TP), changes over time will be applied. The Malmquist index will be constructed in such a way that the radial distance of observed output and input vectors of the period t and (t+1), relative to a reference technology, can be measured. The output-oriented approach of the Malmquist index considers the maximum level of outputs with a given input vector and a given production technology relative to the observed outputs.

Considering there are n inputs to produce m output of the sectors. Denote $x \in R_+^n$ and $y \in R_+^m$ as, respectively, the input vector and output vector of those sectors. The set of production possibilities of a sector at time t can be written as:

$$S^t = \{(x^t, y^t) | x^t \text{ can produce } y^t\} \dots\dots\dots (3.1)$$

Fare et al. (1994) define the output distance function at time t as:

$$D_0^t(x^t, y^t) = \inf\{\theta | (x^t, y^t / \theta) \in S^t\} = (\sup\{\theta | (x^t, \theta y^t) \in S^t\})^{-1} \dots\dots\dots (3.2)$$

The subscript 0 is used to denote the output-based distance function. Note that, $D_0^t(x^t, y^t) \leq 1$ if and only if $(x^t, y^t) \in S^t$, and $D_0^t(x^t, y^t) = 1$ if and only if (x^t, y^t) is on the frontier of the technology. In the later case, Farrell (1957) argued that the sector is technically efficient.

To define the Malmquist index (MI), Fare et al. (1994) defined distance functions with respect to two different time periods:

$$D_0^t(x^{t+1}, y^{t+1}) = \inf\{\theta | (x^{t+1}, y^{t+1} / \theta) \in S^t\} \dots\dots\dots (3.3)$$

$$\text{and } D_0^{t+1}(x^t, y^t) = \inf\{\theta | (x^t, y^t / \theta) \in S^{t+1}\} \dots\dots\dots (3.4)$$

The distance function in (1.3) measures the maximal proportional change in output required to make (x^{t+1}, y^{t+1}) feasible in relation to technology at time t . Similarly, the distance function in (1.4) measures the maximal proportional change in output required to make (x^t, y^t) feasible in relation to technology at time $(t + 1)$. The output Malmquist productivity index can then be expressed as:

$$M_o(x^{t+1}, y^{t+1}, x^t, y^t) = \frac{D_0^{t+1}(x^{t+1}, y^{t+1})}{D_0^t(x^t, y^t)} \left[\frac{D_0^t(x^{t+1}, y^{t+1})}{D_0^{t+1}(x^{t+1}, y^{t+1})} \frac{D_0^t(x^t, y^t)}{D_0^{t+1}(x^t, y^t)} \right]^{\frac{1}{2}} \dots\dots\dots (3.5)$$

The term outside the brackets shows the change in technical efficiency while the geometric mean of the two ratios inside the brackets measures the shift in technology between the two periods t and $(t+1)$; this could be called technological progress. So,

$$\text{Efficiency change (E)} = \frac{D_0^{t+1}(x^{t+1}, y^{t+1})}{D_0^t(x^t, y^t)} \dots\dots\dots (3.6)$$

$$\text{Technical change (P)} = \left[\frac{D_o^t(x^{t+1}, y^{t+1})}{D_o^{t+1}(x^{t+1}, y^{t+1})} \frac{D_o^t(x^t, y^t)}{D_o^{t+1}(x^t, y^t)} \right]^{\frac{1}{2}} \dots\dots\dots (3.7)$$

In each of the above formulas, a value greater than one indicates an improvement and a value smaller than one presents deteriorations in performance over time. Thus, if MI >1 shows the improvements of technical efficiency; MI = 1 signifies no change in production technology and MI < 1 shows a gain in production technology. This approach can be extended by decomposing the constant returns-to-scale technical efficiency change into scale efficiency and pure technical efficiency components. By running different linear programs with the same data under a constant returns-to-scale (without convexity constraint) and variable returns to scale (with convexity constraint), measures of overall technical efficiency (TE) and ‘pure’ technical efficiency (PT) are obtained. Dividing overall technical efficiency (TE) by pure technical efficiency then yields a measure of scale efficiency (SE). Using these models, it is thus possible to provide five efficiency / productivity indices for each college and a measure of technical progress over time. These are (i) technical efficiency (TE) change (i.e. relative to a constant returns-to-scale technology); (ii) technological change (TP); (iii) pure technical efficiency change (PT) (i.e. relative to a variable returns-to-scale technology); (iv) scale efficiency (SE) change; and (v) total productivity change. Regarding changes in efficiency, technical efficiency increases (decreases) if and only if TE is greater (less) than one. An interpretation of the technological change index is that technical progress (regress) has occurred if TP is greater (less) than one. An assessment can also be made of the major sources of productivity gains / losses by comparing the values of TE and TP. If TE is greater than P then productivity gains are largely the result of improvements in efficiency, whereas if TE is less than TP productivity gains are primarily the result of technological progress. Overall technical efficiency is the product of pure technical efficiency and scale efficiency, such that TE = PT × SE. If PT is greater than SE then the major source of efficiency change (both increase and decrease) is improvement in pure technical efficiency, whereas if PT is less than SE the major source of efficiency is an improvement in scale efficiency. Subtracting one from any index provides the change in efficiency, technology or productivity from one period to the next.

Input and Output Variables of the Efficiency Analysis:

In order to measure the efficiency in government spending the following input and output variables are considered. The public social spending such as on education, health, rural housing and

sanitation, drinking water, electrification, transport and communication, subsidies and other transfers etc. can be considered as inputs.

In order to get a composite output Principal Component Analysis is used. To get the output both physical resources and human resources are used. A composite index Physical resource index is constructed using Principal Component Analysis (PCA). Before using principal component analysis for the physical resource index of the institutions, a multivariate factor analysis is used to address the inter-relationship among the set of observed variables. After doing factor analysis, Principal Component method is used for the construction of Infrastructure Index. The aim of Principal Component method is the construction of a given set of variables X_j 's ($j = 1, 2, \dots, k$) of new variables ($P_i \forall i = 1, 2, \dots, k$), called i^{th} Principal Components which are linear combinations of the X_k

$$\begin{aligned}
 P_1 &= a_{11}X_1 + a_{12}X_2 + \dots\dots\dots a_{1k}X_k \\
 P_2 &= a_{21}X_1 + a_{22}X_2 + \dots\dots\dots a_{2k}X_k \\
 &\dots\dots\dots \\
 P_k &= a_{k1}X_1 + a_{k2}X_2 + \dots\dots\dots a_{kk}X_k
 \end{aligned}$$

The method is being applied mostly by using the standardized variables, i.e.,

$$Z_j = \frac{(X_j - \bar{X}_j)^2}{\sigma_j}$$

The a_{ij} 's are called factor loadings and are worked out in such a way that the extracted principal components satisfy two conditions: (i) principal components are uncorrelated (orthogonal) and (ii) the first principal component (P_1) has the maximum variance, the second principal component (P_2) has the next maximum variance and so on.

According to the Kaiser's criterion only the Principal Components having latent root or characteristic root greater than one are considered as essential and that should be retained. The Principal Components so extracted and retained are then rotated from their beginning position to enhance the interpretability of the factors. Communality, symbolized as h^2 , is then worked out which shows how much of each variable is accounted for by the underline factors taken together. A high communality figure means that not much of the variables are left over after whatever the factors represent is taken into consideration.

So, h^2 of the i^{th} variable = $(i^{\text{th}}$ factor loading of factor A) 2 + $(i^{\text{th}}$ factor loading factor B) 2 + ...

The amount of variance explained (sum of squared loadings) by each Principal Component factor is equal to the corresponding roots. When these roots are divided by the number of variables they show the characteristic roots as proportions of total variance explained. The variables are then regressed against each factor loading and the resulting regression coefficients are used to generate what are known as factor scores. To compute infrastructure related indices of the department, the factor scores (f_{jk}) and the corresponding weight are used. So, a composite index is to be developed as weighted sum of scores, the weight being the percentage of the variations explained by the factors. If the percentage of k^{th} factor is denoted by S_k^2 , then the index for the department can be calculated by using the formulae:

$$H_j = \sum S_{kj}^2 f_{jk} \quad j = 1, 2 \dots k$$

In this way physical resource index for each year has been calculated by taking sum of percentage of variation explained by factors multiplied by the respective factors of the departments.

The index value has been calculated for each year and the value of the index could be negative or positive and can measure one value relative to the other. However, for ease of comparison this index is standardized on a scale of 0 to 1 (Das and Singh, 2019). Standardized index of the j^{th} year is

$$H_j = \frac{H_j - H_{Min}}{H_{Max} - H_{Min}} \quad j = 1, 2, 3, \dots, j$$

Whereas for the outputs such as primary school enrollment (gross and net), secondary school enrolment (gross and net), literacy of youth, average years of schooling, completion of primary level education, completion of secondary level education, and learning scores for education sector; life expectancy at birth, immunization (DPT and measles), and the disability-adjusted life expectancy (DALE) for health sector; number of rural housing constructed under the Government Schemes, average amount sanctioned to the rural beneficiaries for housing, number of rural toilets and sanitation constructed under the Government Schemes, average amount sanctioned to the rural beneficiaries for toilets and sanitation; number of households getting drinking water facilities, average per-capita supplied of portable water in the municipal area, number of electrified household, power generation (in MW), power supplied to the household, power surplus if any for electrification; length of State Highway, length of Flyover construction, total number of Network connection, coverage of 5G Network etc. for transport and communication is considered.

4. Analysis of deficit- Graphical analysis of fiscal and revenue deficit.

$$\begin{aligned}
 \text{Fiscal Deficit} &= \text{Total Expenditure} - \text{Total Receipts (except borrowings)} \\
 &= (\text{Revenue Expenditure} + \text{Capital Expenditure}) - (\text{Revenue Receipts} + \text{Capital Receipts excluding Borrowings}) \\
 &= (\text{Revenue Expenditure} - \text{Revenue Receipts}) + (\text{Capital Expenditure} - \text{Capital Receipts excluding Borrowings}) \\
 &= \text{Revenue Deficit} + (\text{Capital Expenditure} - \text{Capital Receipts excluding Borrowings})
 \end{aligned}$$

A tabular and graphical analysis of both fiscal deficit and revenue deficit along with its each component of the State over time can be done.

5. The level of debt to GSDP ratio and the use of debt (i.e., whether it has been used for capital expenditure or otherwise). Composition of the state’s debt in terms of market borrowing, off-budget borrowings, Central government debt (including those from bilateral/multilateral lending agencies routed through the Central government), liabilities in public account (small savings, provident funds etc.) and borrowings from agencies such as NABARD, LIC etc.

- i. Types, pattern and composition of debt is important and for which purpose it is used and whether it is beneficial or not for the development of the state. If the debt is used for capital expenditure or used for constructing social overhead capital, then it will accelerate the development process. A descriptive analysis along with composite bar diagram can be done.
- ii. Sources of debt from different lending agencies such as NABARD, LIC, etc., burden of debt viz. terms and condition of debt, time period for repayment of debt and interest payment with rate of interest for debt is important. A descriptive analysis is done in order to address this issue.
- iii. Trend and growth of Debt to GSDP ratio over time can be examined in order to check whether trend is declining or upward trend and positive or negative growth. Declining trend of Debt-GSDP ratio and negative growth will indicate debt is useful for sustainable development. Trend line will be shown by using line diagram whereas the growth equation can be written as:

$$\text{Ln} \left(\frac{\text{Debt}}{\text{GSDP}} \right) = \alpha + \beta t + u \dots\dots\dots(5.1)$$

For all t = 1,2,3,T and $u_t \sim N(0, \sigma^2)$ is stochastic error component.

6. Implementation of FRBM Act and commitment towards targets. Analysis of MTFP of various departments and aggregate

i. The basic objective of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 is to maintain financial discipline in the economy, eliminate fiscal deficits, and to enhance the public fund. The target of FRBM Act is also to reduce the Revenue deficit at zero over time. As per FRBM Act, the fiscal deficit limit should be 3% of the GDP of the country. In case of a State, the fiscal deficit should be 3% of the GSDP of the State. So, a trend line for both revenue deficit and fiscal deficit is examined for the State.

ii. The Medium-term Fiscal Policy (MTFP) is a statement presented to the Parliament under Section 3(2) of the FRBM Act, 2003, which sets out three-year rolling targets for five specific fiscal indicators in relation to GSDP at market prices, viz; (i) Revenue Deficit (ii) Effective Revenue Deficit (the difference between fiscal deficit and grants for creation of capital assets), (iii) Fiscal Deficit, (iv) Tax to GSDP ratio and (v) Total outstanding debt as percentage of GSDP at the end of the year.

Both the department-wise and aggregative analysis of MTFP (Midterm Fiscal Policy) will be examined whether the State has implemented or not. A graphical analysis is given and discussed in detail.

7. Analysis of the state's transfers to urban and rural local bodies in the State. Major decentralization initiatives

i. Analysis of the State's transfer to Urban Local Bodies (ULB) and Rural Local Bodies:

In Tripura, there are 20 Urban Local Bodies (1 Municipal Corporation, 13 Municipal Councils and 6 Nagar Panchayats). In the rural area, there are 3-tier PRIs - 8 Zilla Parishads; 35 Panchayat Samitis and 591 Gram Panchayats (GPs). Apart from this, there is a Tripura Tribal Areas Autonomous District Council (TTAADC) which is established under Sixth Schedule of the Indian Constitution; Council is the apex body with 587 Village Committees (VCs). TTAADC covers 68.10% of the geographical area. A tabular and graphical analysis are given regarding the fund devolution of the State to these three bodies.

ii. What are the major decentralization initiatives taken by the State for smooth functioning of the local government will be analyzed after thorough discussion with the competent authority at the different tier of the government (top to bottom approach).

8. Impact of State Public Enterprises finances on the State's financial health and measures taken to improve their performance and/or alternatives of closure, disinvestment etc.

There are many public sector enterprises in Tripura viz. Tripura Industrial Development Corporation Limited (TIDCL), Tripura Tea Development Corporation Limited (TTDCL), Tripura Small Industries Development Corporation Limited (TSICL), Tripura Jute Mills Limited (TJML), Tripura Khadi & Village Industries Board (TKVIB), Society For Entrepreneurship Development (SoFED), Tripura Bamboo Mission (TBM), Tripura Horticulture Corporation Limited (THCL), Tripura Rehabilitation Plantation Corporation Limited (TRPCL), Tripura Handloom and Handicrafts Development Corporation Limited (THHDCL), Tripura State Electricity Corporation Limited (TSECL), and Tripura Natural Gas Corporation Limited (TNGCL) etc.

To measure the performance of public enterprises in Tripura, Turnover, Percentage of Turnover to GSDP, Debt-Turnover ratio (DTR), accumulated profits or losses can be considered as a proxy of performance variable.

9. Impact of Power Sector Reforms on States' fiscal health. In case reforms have not been implemented, the likely outcome on the States' fiscal health.

Impact of power sector reforms on States fiscal health can be analyzed using the above regression specification mentioned in ToR # 8.

10. Analysis of Contingent Liabilities

The information about the specific and item-wise (if any) contingent liabilities of the State Tripura will be collected from Ministry of Finance, Govt. of Tripura. An item-wise contingent liabilities will be discussed through trend analysis and how it is covered or met over the time can also be discussed.

11. Subsidies given by the States (Other than Central subsidies), their costs and benefits, targeting and evaluation

Subsidies given by states (other than central subsidies), their cost and benefits, targeting and evaluation is analyzed using Graphical analysis eg. Bar diagram, Pie chart, line plots.

12. Outcome Evaluation of State Finances in the context of recommendations of the 14th and 15th FC, in particular

i. analysis of the flow of resources from Centre to States through various schemes, the expenditure of States in those schemes, resources of States channeled towards these schemes and the overall impact on development spending of the States;

ii. States' own schemes for different development objectives

a. Various schemes-wise flow of resources from Centre (fund sanctioned by the Central Govt.) during the period of 14th and 15th Finance Commission to the State and the utilization of these funds by the State will be analyzed using tabular and graphical analysis. In order to check the impact of these schemes, analysis on revenue generation (Revenue Receipt-Expenditure Ratio) from these schemes and number of beneficiaries getting benefits will be done using tabular and graphical (trend) analysis. The secondary information can be collected from the concerned department of the State Govt.

b. State's own schemes for different development objectives or activities during the period of 14th and 15th Finance Commission is documented after thorough discussion with the concerned department of the State Govt.

13. Determination of a sustainable debt roadmap for 2026-31, taking into account tax/non-tax trend forecasts

i. The purpose of debt sustainability road map for 2026-31 is important for the development of the State. Prior to debt sustainability road map, it is important to check the revenue effect of debt that is whether sectoral contribution improves or not after taking each sector specific debt. The functional specifications of the revenue effect of a particular sector can be written in log-log form:

$$\log(STR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (13.1)$$

$$\log(SNTR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (13.2)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. STR is sectoral tax revenue and SNTR is sectoral non-tax revenue. Xs are the debt taken from the different sources for that particular sector. The marginal effect shows the partial elasticities of debt from different sources on sectoral tax revenue and non-tax revenue.

$$\log(TR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (13.3)$$

$$\log(NTR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (13.4)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. TR is total tax revenue of the State and NTR is total non-tax revenue of the State. X_s are the total debt for each sector taken from the different sources for all sector. The marginal effect shows the partial elasticities of sectoral debt on growth of tax revenue and non-tax revenue. The decision or road map for taking debt will be based on the values of partial elasticities. Higher value of partial elasticities will indicate debt is productive and it will enhance the revenue. Using group parametric test, the returns to scale can be checked whether use of debt follows Increasing Returns to Scale (IRS), Constant Returns to Scale (CRS), or Decreasing Returns to Scale (DRS).

ii. Debt is beneficial for the development if it is productive. If GSDP increases after taking debt, then debt is productive. To check whether the sectoral debt is productive or not, a log-log linear regression specification can be written in the following.

$$\log(GSDP)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (13.5)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. X_s are the total debt for each sector taken from the different sources for all sector. The marginal effect shows the partial elasticities of sectoral debt on GSDP. The decision or road map for taking debt will be based on the values of partial elasticities. Higher value of partial elasticities will indicate debt is productive and it will enhance the GSDP. Using group parametric test, the returns to scale can be checked whether use of debt follows Increasing Returns to Scale (IRS), Constant Returns to Scale (CRS), or Decreasing Returns to Scale (DRS).

iii. To check whether the total debt of the state is productive or not, a log-log linear regression specification can be written in the following.

$$\log(GSDP)_t = \alpha + \beta_1 \log(Debt)_t + \beta_2 \log(Revenue)_t + u_t \dots (13.6)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. The marginal effect shows whether debt and revenue generated are elastic to GSDP or not.

iv. To check whether the total debt of the state is productive or not, a linear regression specification can be written in the following.

$$GSDP_t = \alpha + \beta_1 Debt_t + \beta_2 Capex_t + u_t \dots (13.7)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. The marginal effect shows whether debt and revenue have any impact on GSDP or not.

v. For a sustainable debt road map, the following mathematical function can be considered Fiscal deficit = $f(\text{debt/capex})$, $f' < 0$. If debt is used as a part of capital expenditure then it will be

sustainable if it reduces the fiscal deficit of the State. Fiscal deficit (FD) is measured by the difference between revenue receipt (RR) and revenue expenditure (RE). The above functional form can be written in regression specification:

$$FD_t = \alpha + \beta \left(\frac{Debt}{Capex} \right)_t + u_t \dots\dots\dots(13.7)$$

For all $t = 1, 2, 3, \dots\dots\dots T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. After estimation of the above regression specification, forecasting can be done given the exogenous variable.

Indicators for Measuring Public Debt Sustainability:

Public Debt sustainability can be measured by using different indicators which are following.

- (a) Rate of growth of public debt (D) should be lower than rate of growth of nominal GSDP (G) that is $D - G < 0$.
- (b) Rate of growth of public debt (D) should be lower than effective interest rate (i) that is $D - i < 0$.
- (c) Real rate of interest (r) should be lower than real output growth (g) that is $r - g < 0$.
- (d) Primary balance (PB) should be in surplus that is $PB/G > 0$.
- (e) Primary Revenue Balance (PRB) should be in surplus that is $PRB/G > 0$.
- (f) Primary Revenue Balance (PRB) should be adequate enough to cover interest payments (IP) that is $PRB/IP > 100$.
- (g) Revenue Receipts (RR) as a per cent to GSDP should increase over time.
- (h) Revenue variability should decline over time.
- (i) Public debt to revenue receipts ratio should decline over time.
- (j) Public debt to tax revenue ratio should decline over time.
- (k) Interest burden defined by interest payments (IP) as a per cent to GSDP should decline over time.
- (l) Interest payments (IP) as a per cent of revenue expenditure (RE) should decline over time.
- (m) Interest payments (IP) as a per cent of revenue receipts (RR) should decline over time.

On the basis of sustainable debt road map, some potential areas will be identified for the betterment of fiscal health of the State and maintaining sustainable GSDP in the long run.

Chapter – 3

Overview of the State Finances

This chapter highlights overview of the state finances of the state Tripura which includes revenue receipts as well revenue generations and all types of expenditures incurred by the state during 2004-05 to 2023-24. These are discussed in the following sections. Section 3.1 highlights the summary of the state finances whereas the remaining sections explain the detail analysis of it.

3.1 Summary of the State Finances (2010 to 2023)

This section focuses on the summary of revenue receipts and expenditures incurred by the state.

Table 3.1 shows the revenue of the state for the period 2004-05 to 2023-24.

Table 3.1: Revenue of the State of Tripura from 2004-05 to 2023-24 (Rs.in Crore)

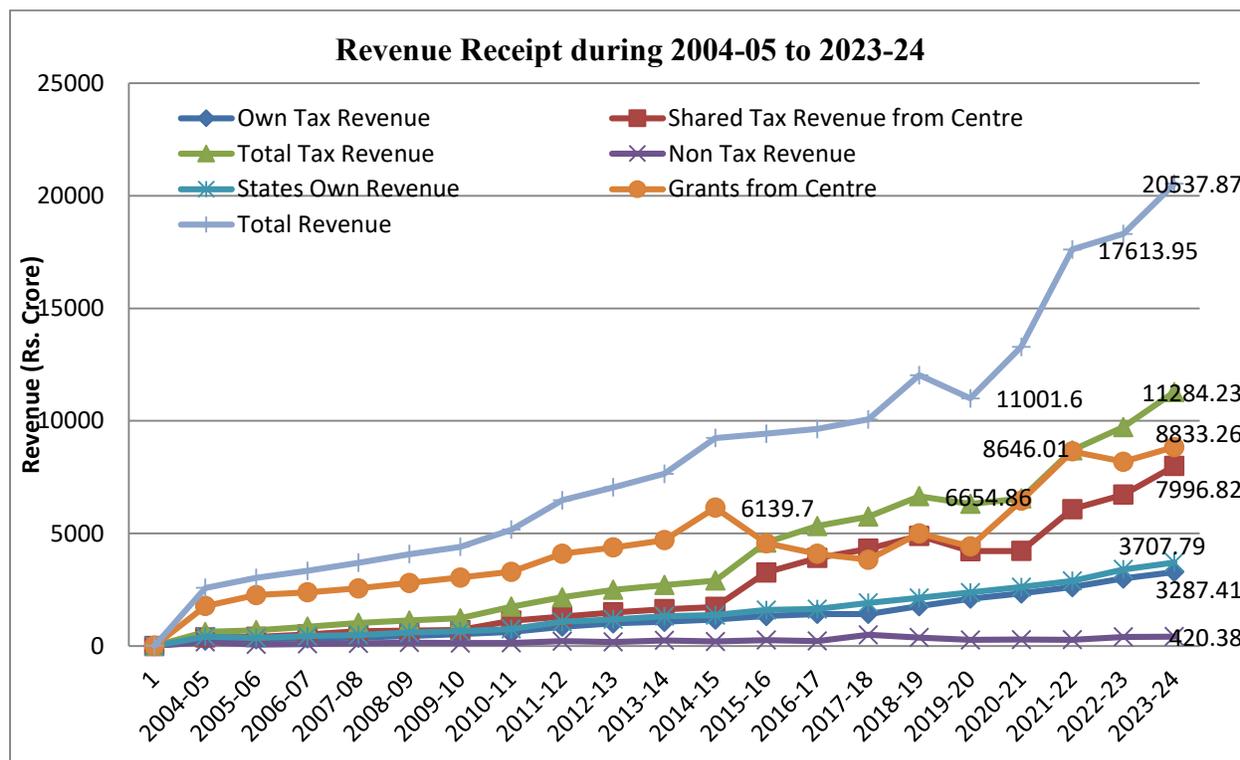
Year	Own Tax Revenue	Shared Tax Revenue from Centre	Total Tax Revenue (2+3)	Non Tax Revenue	States Own Revenue (2+5)	Grants from Centre	Total Revenue (4+5+7)
1	2	3	4	5	6	7	8
2004-05	239.63	383.12	622.75	177	416.63	1777.30	2577.05
2005-06	296.09	404.38	700.47	64	360.09	2260.03	3024.50
2006-07	341.55	515.78	857.33	95	436.55	2381.60	3333.93
2007-08	370.70	650.62	1021.62	115	485.70	2561.61	3697.93
2008-09	442.50	686.52	1129.52	149	591.50	2798.72	4077.24
2009-10	527.01	706.34	1233.34	125	652.01	3042.60	4400.94
2010-11	622.34	1122.36	1744.70	131.79	754.13	3292.11	5168.6
2011-12	858.02	1307.56	2165.58	214.23	1072.25	4097.1	6476.91
2012-13	1004.65	1493.18	2497.83	178.75	1183.4	4373.72	7050.3
2013-14	1073.91	1630.25	2704.16	246.52	1320.43	4699.5	7650.18
2014-15	1174.26	1730.13	2904.39	195.64	1369.9	6139.7	9239.73
2015-16	1332.25	3266.02	4598.27	262.61	1594.86	4565.87	9426.75
2016-17	1422.01	3909.12	5331.13	218.85	1640.86	4095.48	9645.46
2017-18	1422.02	4322.08	5744.1	493.49	1915.51	3830.37	10067.96
2018-19	1765.91	4888.95	6654.86	372.2	2138.11	5003.84	12030.90
2019-20	2101.8	4211.78	6313.58	271.65	2373.45	4416.37	11001.60
2020-21	2332.44	4218.45	6550.89	285.49	2617.93	6456.02	13292.40
2021-22	2616.31	6077.52	8693.83	274.11	2890.42	8646.01	17613.95
2022-23	2999.68	6724.23	9723.91	402.35	3402.03	8182.75	18309.01
2023-24	3287.41	7996.82	11284.23	420.51	3707.79	8833.26	20538.60

Source: <https://cag.gov.in/ae/tripura/en>

The revenue of the state is of two types viz; tax revenue and non-tax revenue. Tax revenue is again divided into two parts viz. state’s own tax revenue and shared tax-revenue received from the centre. However, state can generate revenue from the non-tax sources such as from interest, dividend, general services, social services, economic services and from other including fiscal services. Apart from that a sizable amount of revenue receipt of the state comes from the centre as grants. So, total revenue of the state is the total tax revenue plus total non-tax revenue and grants from centre. Table 3.1 shows that out of the total revenue of the state, the share of the tax revenue is highest which is followed by the grants from the centre. The least share of the total revenue comes from the non-tax sources.

Figure 3.1 shows the trend of revenue receipt during 2004-05 to 2023-24. From the Figure 3.1, it is observed that tax revenue from the centre increases after 2014-15 and this rate of increase has a higher increasing trend from 2020-21. Whereas, own tax revenue also increases but at a slower rate. It is also found that the increase in non-tax revenue is very limited or negligible.

Figure 3.1: Trend of Revenue Receipt during 2004-05 to 2023-24 (Rs.in Crore)



Source: Drawn based on the data collected from <https://cag.gov.in/ae/tripura/en>

During 2023-24, total revenue of the state is Rs.20538.60 crore and out of that total tax revenue is Rs.11284.23 crore and non-tax revenue is Rs.420.51 crore. Out of the total tax revenue, own tax

revenue is Rs.3287 crore and shared tax revenue is Rs.7996.82 crore. In this year, the state has received Rs.8833.26 crore as grants from centre.

3.2 Own Revenue Receipts

Table 3.2 shows the composition of state's own tax revenue collected from the different sources. The major sources of the own tax revenue are taxes on sales, trade, state excise, stamps and registration fees, taxes on vehicles, land revenue. It is observed that, from 2017-18 onwards, the major portion of the state's own tax revenues has come from the SGST. It is also found that state excise, stamps on registration fees and tax on vehicles has increased with a sizable amount from 2018-19 onwards.

Table 3.2: Composition of Own Tax Revenue during 2004-05 to 2023-24 (Rs.in Crore)

Year	Taxes on Sales, Trade etc	State GST	State Excise	Land Revenue	Stamps and Registration fees	Taxes on Vehicles	Others*	Total OTR
2004-05	160.69	--	32.37	1.20	12.07	10.46	22.85	239.63
2005-06	203.39	--	32.30	3.25	14.21	17.43	25.51	296.09
2006-07	233.45	--	38.41	3.03	16.61	22.51	27.53	341.55
2007-08	264.98	--	38.50	2.97	14.98	23.20	26.08	370.70
2008-09	314.79	--	48.28	5.55	17.03	29.82	27.03	442.50
2009-10	374.93	--	61.09	5.54	18.15	37.14	30.16	527.01
2010-11	444.93	--	85.85	15.25	24.23	21.91	30.17	622.34
2011-12	666.32	--	94.68	9.33	30.73	25.18	31.78	858.02
2012-13	763.07	--	114	26.44	36.7	30.73	33.71	1004.65
2013-14	837.09	--	115.18	8.07	39.24	36.79	37.54	1073.91
2014-15	909.81	--	138.96	10.76	37.56	36.09	41.08	1174.26
2015-16	1058.48	--	143.56	5.97	42.49	37.62	44.13	1332.25
2016-17	1112.89	--	163.19	13.32	41.83	43.6	47.18	1422.01
2017-18	611.88	479.71	186.96	4.46	40.16	54.38	44.47	1422.02
2018-19	361.95	977.44	214.35	5.29	51.32	83.5	72.06	1765.91
2019-20	435.88	1026.63	231.7	12.98	61.67	97.14	235.79	2101.79
2020-21	403.19	1056.01	287.36	9.85	69.53	97.41	409.09	2332.44
2021-22	463.12	1282.69	319.6	8.94	89.65	103.22	349.09	2616.31
2022-23	463.57	1459.01	368.11	12.59	102.53	117.55	476.32	2999.68
2023-24	541.15	1589.78	417.00	22.24	115.15	142.73	459.36	3287.41

Source: <https://cag.gov.in/ae/tripura/en>

Note: * denotes includes Taxes and duties on Electricity; Taxes on Agricultural Income; Taxes on Immovable Property other than Agricultural Land; Estate Duty; Other taxes on income and expenditure excluding share of net proceeds; Other Taxes and Duties on Commodities and Services excluding share of net proceeds.

From 2019-20, state's own tax revenue has increased due to taxes on immovable property other than agricultural land, taxes on income and expenditure, taxes and duties on commodities. It is also seen that, during the year 2023-24, the state government has collected a total of Rs.3287.41 crore as its own tax revenue, which comprises of Rs.1589.78 crore as GST, Rs.417 crore as state excise duty, Rs.541.15 crore as taxes on sales and trade, Rs.142.73 crore as taxes on vehicles, and Rs.115.15 crore is collected from taxes on stamps and registration. Taxes and duties on electricity is one of the major sources under the others category of own tax revenue.

3.3 Shared Tax Revenue from the Centre

Table 3.3 reveals the composition of shared tax revenue from the central government during 2004-05 to 2023-24. The state government has received getting shared tax from the centre at a growth rate of 16.87 percent. There are different sub-heads under this shared tax revenue from the centre viz. Goods and Service Tax, Corporation tax, union excise duties, service tax, customs duties etc. It is important to note that after the imposition of Goods and Service Tax (GST), the state governments are getting more revenue from the centre from 2017-18 financial year. Out of that the state government is getting the maximum amount as CGST from the centre. Apart from the GST, the major portion of central shared tax comes from corporation tax, taxes on income other than corporation tax, customs, union excise duties, service tax, taxes on wealth and from other taxes and duties on commodities and services. From Table 3.3, it can be observed that the shared tax revenue has an increasing growth rate with 16.88 percent from corporation taxes and this shared tax revenue is increased particularly from Rs.1031.98 crores in 2015-16 to Rs.2254.97 crores in 2022-23. Taxes on income other than corporation tax also increases at a 19.61 percent growth rate and this increase is higher from 2020-21. Out of the shared tax revenue from the centre, customs duties and union excise duties also contribute a sizable amount. Customs duties increases at 8.84 percent and union excise duties increases at 4.36 percent. It is also observed that the contribution of both customs duties and union excise duties fluctuates in the shared tax coming from the centre. The contribution of union excise duties in the shared taxes from the centre is found relatively higher during 2015-16 to 2017-18. It is found maximum during 2015-16 (Rs.616.32 crore) and it is declined thereafter. It decreased to double digit figure (Rs.82.96 crore) during 2022-23. The contribution of service tax in shared tax revenue from the centre is significant. During 2010-11 to 2017-18 the contribution of service tax is found triple digit but surprisingly it has decreased thereafter. In 2022-23, it has reduced to Rs.10.46 crores only.

Table 3.3: Composition of Shared Tax Revenue from Centre during 2004-05 to 2023-24 (Rs.in Crore)

Year	Central Goods and Services Tax	Integrated Goods and Services Tax	Corporation Tax	Taxes on Income other than Corporation Tax	Other Taxes on Income and Expenditure	Taxes +++on Wealth	Customs	Union Excise Duties	Service Tax	Other Taxes and Duties on Commodities and Services	Total Share of net proceeds of Taxes
2004-05			109.05	70.20	0	0.01	76.95	106.56	20.34	0.01	383.12
2005-06			111.66	78.71	-0.02	0.22	78.84	105.22	29.78	-0.03	404.38
2006-07			161.00	97.77	-0.03	0.2	100.61	106.84	49.42	-0.03	515.78
2007-08			206.52	138.61	-0.01	0.23	123	117.41	64.88	-0.02	650.62
2008-09			225.20	141.40	0	0.25	131.23	114.42	74.02	0	686.52
2009-10			290.73	161.95	0	0.66	98.87	79.64	74.49	0	706.34
2010-11			438.70	231.83	0	0.9	196.26	142.77	111.9	0	1122.36
2011-12			514.68	261.43	0	1.98	226.71	146.71	156.05	0	1307.56
2012-13			536.36	321.11	0	0.91	248.14	168.61	218.05	0	1493.18
2013-14			548.28	361.03	0	1.51	265.99	187.87	265.57	0	1630.25
2014-15			604.18	431.44	0.02	1.63	279.82	158	255.04	0	1730.13
2015-16			1031.98	720.42	0.03	0.18	521.94	431.38	558.17	1.92	3266.02
2016-17	0	0	1254.73	872.03	0	2.87	539.73	616.32	623.43	0.01	3909.12
2017-18	61.64	436.56	1324.23	1117.74	0	-0.04	436.40	456.2	489.35	0	4322.08
2018-19	1206.74	96.30	1700.27	1252.18	8.86	0.62	346.56	230.32	44.58	2.52	4888.95
2019-20	1195.17	0	1436.04	1125.24	0	0.06	266.97	185.63	0	2.67	4211.78
2020-21	1258.50	0	1269.27	1300.84	0	0	227.34	142.28	17.36	2.89	4218.48
2021-22	1792.99	0	1754.97	1838.83	0.01	0.28	416.36	207.4	60.43	6.25	6077.52
2022-23	1899.83	0	2254.97	2200.61	0	0	264.33	82.96	10.46	11.07	6724.23
2023-24*	2426.94	0	2400.30	2772.01	0	0	280.23	106.05	1.48	9.81	7996.82

Source: Collected from <https://cag.gov.in/ac/tripura/en>

3.4 Non Tax Revenue

The other significant source of revenue of the state is non-tax revenue which is collected from four major sources viz. general services, social service, economics service and from interest receipts and dividends and profits. Table 3.4 shows that the amount of Non-Tax Revenue generated from different sources during 2004-05 to 2023-24. It is found that main sources of non-tax revenue are general services and economic services. Under the general services, a significant amount of revenue comes from the police and home department of the state which comes through imposition of fines and violation of mainly traffic rules and regulation.

Table 3.4: Total Non-Tax Revenue under Different Heads during 2004-05 to 2023-24 (Rs.in Crore)

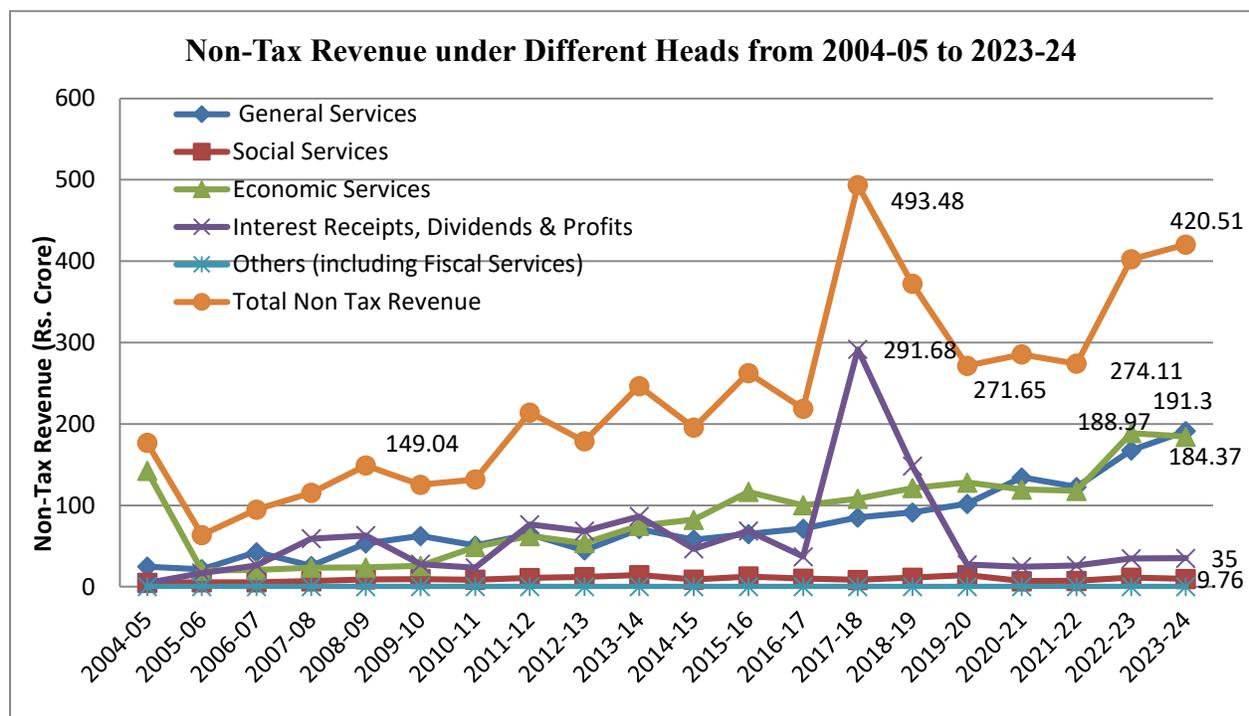
Year	General Services	Social Services	Economic Services	Interest Receipts, Dividends & Profits	Others (including Fiscal Services)	Total Non Tax Revenue
2004-05	24.77	5.03	142.48	4.56	0.00	176.85
2005-06	21.50	5.47	19.75	16.89	0.01	63.62
2006-07	42.41	5.58	20.65	26.33	0.00	94.97
2007-08	25.70	6.91	23.60	59.19	0.00	115.41
2008-09	53.32	9.06	23.72	62.93	0.01	149.04
2009-10	62.35	9.47	25.69	27.88	0.01	125.40
2010-11	50.75	8.60	49.05	23.37	0.02	131.79
2011-12	64.34	10.81	62.45	76.61	0.01	214.22
2012-13	44.56	11.98	53.65	68.55	0.01	178.75
2013-14	70.81	14.29	74.94	86.47	0.01	246.52
2014-15	57.91	8.89	82.30	46.53	0.01	195.64
2015-16	64.74	12.59	116.61	68.65	0.01	262.60
2016-17	71.40	10.10	100.22	37.12	0.01	218.85
2017-18	85.14	8.42	108.23	291.68	0.01	493.48
2018-19	91.38	11.29	121.24	148.26	0.03	372.20
2019-20	101.83	14.39	128.18	27.20	0.04	271.65
2020-21	134.31	6.87	119.54	24.73	0.04	285.49
2021-22	122.68	7.31	118.03	26.06	0.02	274.11
2022-23	167.51	11.21	188.97	34.59	0.06	402.35
2023-24*	191.30	9.76	184.37	35.00	0.08	420.51

Source: <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

It is observed that total non-tax revenue of the state has increased from Rs.274.11 crore in 2021-22 to Rs.402.35 crore in 2022-23. In the year 2023-24, the non-tax revenue has increased to Rs.420.51 crore which comprised of Rs.191.30 crore collected from the general services, Rs.184.37 crore from the economic services. It is also observed that the non-tax revenue under the economic services has increased after 2015-16. The non-tax revenue generated from economic services is found Rs.142.48 crores in the year 2004-05, and out of that the major portion of it has come from the power sector. After 2004-05, the revenue generated from the power sector has diminished drastically due to the formation of TSECL (Tripura State Electricity Corporation Ltd.) as a public sector enterprise (PSE). Under this economic services head, another important source of non-tax revenue comes from forestry and wildlife. Presently, the state collects non-tax revenue of Rs.18.61 crore from forestry and wildlife sources. Under the social services head, a substantial amount of non-tax revenue comes from medical and public health which is followed by housing, education and water supply and sanitation.

Figure 3.2: Trend of Non-Tax Revenue under Different Heads from 2004-05 to 2023-24 (Rs.in Crore)



Source: <https://cag.gov.in/ae/tripura/en>

From Figure 3.2, it is observed that non-tax revenue has reached a maximum during 2017-18. This maximum revenue received (Rs.291.68 crore) in the form of interest receipts, dividends and

profits; and out of that Rs.276.99 crore comes from interest receipt. During 2017-18, the interest receipt is also high (Rs.291.68 crore) and due that under this head the revenue is Rs.493.48 crore. Table 3.5 shows the major sources of non-tax revenue under general services. It is observed that a significant sizable portion of non-tax revenue come from police through payment against deployment of Tripura State Rifles (TSR) and from imposition of fine. It is observed that non-tax revenue from this police heads increases significantly from Rs.122.43 crore in 2022-23 to Rs.145.94 crore in 2023-24. Another important source of non-tax revenue comes from Public works under the general heads.

Table 3.5: Major Sources of Non-Tax Revenue under General Services during 2004-05 to 2023-24 (Rs. in Crore)

Year	Public Service Commission	Police	Jails	Stationery and Printing	Public Works	Other Admin. Services	Contributions and Recoveries towards Pension and Other	Misc. General Services	Total General Services
2004-05	0.00	16.17	0.08	0.75	1.48	5.71	0.24	0.34	24.77
2005-06	0.00	11.15	0.06	2.30	2.09	2.14	0.41	3.35	21.50
2006-07	0.26	6.88	0.11	2.47	3.62	3.18	0.46	25.43	42.41
2007-08	0.18	14.22	0.14	1.86	3.98	3.55	1.25	0.52	25.70
2008-09	0.18	19.86	0.05	1.75	6.17	2.33	0.7	22.28	53.32
2009-10	0.25	16.88	0.08	1.26	7.71	11.76	2.12	22.29	62.35
2010-11	0.21	24.73	0.07	1.51	7.83	3.9	1.21	11.29	50.75
2011-12	0.12	37.33	0.08	1.4	7.84	5.45	0.52	11.6	64.34
2012-13	0.15	28.48	0.08	1.29	5.56	5.36	2.84	0.80	44.56
2013-14	0.15	33.95	0.06	1.29	8.54	4.52	1.06	21.24	70.81
2014-15	0.45	34.34	0.04	1.83	8.92	6.28	0.78	5.27	57.91
2015-16	0.47	40.50	0.05	1.16	8.15	6.84	1.10	6.47	64.74
2016-17	0.07	48.07	0.05	1.1	8.08	6.12	0.66	7.25	71.40
2017-18	0.27	60.11	0.06	0.81	8.51	5.60	0.90	8.88	85.14
2018-19	0.46	71.77	0.06	2	5.06	4.71	1.14	6.18	91.38
2019-20	0.22	65.13	0.05	2.15	4.95	8.29	0.6	20.44	101.83
2020-21	0.47	75.79	0.05	1.5	6.94	5.22	0.23	44.11	134.31
2021-22	1.09	82.77	0.04	1.06	6.67	7.07	0.28	23.70	122.68
2022-23	0.93	122.42	0.04	1.46	6.11	6.58	0.26	29.71	167.51
2023-24*	1.34	145.94	0.04	1.76	8.61	7.42	0.35	25.84	191.30

Source: <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

The growth rate of non-tax revenue under general services is positive and significant. It is surprising that there is a huge increase in non-tax revenue from the police department during 2022-23. From the discussion with the appropriate authority it is cleared that the deployment charges of police personnel which are reimbursed by the Central Government are included in the non-tax revenue of the State and also the same entry is also made in the revenue expenditure. For the purpose of making projections for award period of 16th Finance Commission, the deployment charges are excluded both from non-tax revenue (NTR) and revenue expenditure.

Table 3.6 reveals the major sources of non-tax revenue under the heads of social service during 2004-05 to 2023-24. It is observed that there are upswing and downswing in the non-tax revenue receipt from education, sports, art, and culture.

Table 3.6: Major Sources of Non-Tax Revenue under Social Services during 2004-05 to 2023-24 (Rs. in Crore)

Year	Education, Sports, Art and Culture	Medical and Public Health	Water Supply and Sanitation	Housing	Information and Publicity	Labour and Employment	Social Security and Welfare	Other Social Services	Total Social Services
2004-05	0.82	1.78	1.11	0.99	0.08	0.11	0.05	0.06	5.03
2005-06	0.87	2.45	0.75	1.11	0.05	0.11	0.07	0.06	5.47
2006-07	0.73	2.74	0.68	1.12	0.14	0.10	0.04	0.03	5.58
2007-08	1.00	3.74	0.62	1.23	0.11	0.16	0.03	0.02	6.91
2008-09	1.55	4.52	1.23	1.13	0.22	0.26	0.03	0.12	9.06
2009-10	1.50	4.87	1.13	1.34	0.16	0.39	0.06	0.02	9.47
2010-11	1.27	4.06	1.21	1.35	0.20	0.44	0.04	0.03	8.60
2011-12	2.06	5.14	1.26	1.73	0.14	0.34	0.09	0.03	10.81
2012-13	0.68	6.95	1.68	1.71	0.15	0.67	0.05	0.03	11.98
2013-14	1.32	2.84	7.32	1.80	0.20	0.46	0.32	0.03	14.29
2014-15	1.45	3.00	1.92	1.84	0.08	0.29	0.27	0.04	8.89
2015-16	2.30	6.01	1.76	1.82	0.09	0.49	0.08	0.04	12.59
2016-17	2.29	2.42	2.44	1.85	0.14	0.87	0.05	0.03	10.10
2017-18	1.48	1.51	2.36	2.08	0.01	0.92	0.03	0.03	8.42
2018-19	1.78	3.97	1.88	2.07	0.17	1.24	0.15	0.02	11.29
2019-20	1.05	8.94	1.25	2.16	0.10	0.87	0.02	0.00	14.39
2020-21	1.04	1.88	1.28	2.03	0.01	0.60	0.02	0.00	6.87
2021-22	0.76	1.73	1.87	2.23	0.00	0.68	0.02	0.01	7.31
2022-23	2.98	3.54	1.46	2.57	0.01	0.58	0.03	0.00	11.21
2023-24*	2.45	3.25	1.26	1.94	0.01	0.82	0.01	0.02	9.76

Source: Collected from <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

In the year 2003-04, the revenue was Rs.1.28 crore which decreased to Rs.0.82 crore in 2004-05. The non-tax revenue from education, sports, art and culture has increased significantly to Rs.2.30 crore during 2015-16 and again in 2022-23 where it is maximum at Rs.2.98 crore in the year 2022-23. The revenue in this category was Rs.2.45 crore in 2023-24, indicating a positive trend towards the end of the period. In the medical and public health sector, it is noticed that there is a fluctuations in revenue over the years with a notable maximum amount (Rs.8.94 crore) in 2019-20 and the minimum at Rs.1.51 crore in the year 2017-18 during the study period. During 2023-24, the revenue from medical and public health is found Rs.3.25 crore. The revenue from water supply and sanitation shows a notable spike in the year 2013-14 where it has reached at Rs.7.32 crore. The revenue from housing remains relatively stable, with a slight upswing over the years, which is highest at Rs.2.90 crore in 2023-24. The revenue from information and publicity department is found often below Rs.0.25 crore indicating a minor source of income compared to the other categories. In the early years, the revenue from social security and welfare is fluctuated slightly. The highest revenue (Rs.0.32 crore) is generated from social security and welfare during 2013-14 followed by Rs.0.27 crore in the next year.

Table 3.7 reveals the composition of non-tax revenue under the economic service during 2004-05 to 2023-24. It is observed that the major non-tax revenue under this economic sector comes from industry and forestry. The contribution of non-tax revenue from industry has increased from Rs.5.61 crore in 2004-05 to Rs.156.65 crore in 2023-24. It is found that after 2009-10, the revenue comes from the industry at a faster rate. During the Covid-19 pandemic period the revenue from the industry has suddenly decreased. However, during post pandemic period, the situation has improved again. The non-tax revenue from the forest was Rs.14.70 crore during 2004-05. The amount was minimum (only Rs.4.87 crore) during 2005-06, though after that it has increased persistently. Apart from the industry and forestry, the significant contribution comes from crop husbandry and animal husbandry though the amount is small compared to industry and forestry. At present, the revenue from crop husbandry is Rs.2.09 crore and the revenue from animal husbandry is Rs.1.58 crore during 2023-24. The revenue generated from storage and warehousing is very small as there is a lack of sufficient storage and warehousing facilities available in Tripura. Similarly, the revenue generated from village and small industries, minor irrigation, civil supplies, cooperation, other rural development programmes etc. are very small in amount.

Table 3.7: Major Sources of Non-Tax Revenue under Economic Services during 2004-05 to 2023-24 (Rs. in Crore)

Year	Crop Husbandry	Animal Husbandry	Fisheries	Forestry and Wild Life	Food Storage and Warehousing	Co-operation	Other Rural Development Programmes	Minor Irrigation	Village and Small Industries	Industries	Roads and Bridges	Civil Supplies	Other General Economic Services	Total Economic Services
2004-05	1.43	1.14	0.54	5.63	0.05	0.05	0.27	0.12	0.1	6.99	0	0.07	126.09	142.48
2005-06	1.43	1.31	0.6	4.87	0.52	0.07	0.13	0.3	0.05	8.47	0	0.06	1.94	19.75
2006-07	1.56	1.54	0.64	6.24	0.02	0.06	0.09	0.25	0.06	9.25	0	0.06	0.88	20.65
2007-08	1.53	1.54	1.27	5.52	1.53	0.49	0.07	0.10	0.07	9.3	1.21	0.06	0.91	23.6
2008-09	1.7	1.56	1.89	5.57	1.53	0.05	0.03	0.71	0.02	9.38	0.07	0.09	1.12	23.72
2009-10	1.52	1.45	0.68	6.29	1.54	0.07	0.03	0.06	1.46	11.87	0.01	0.08	0.63	25.69
2010-11	1.85	1.57	0.55	7.64	0.05	0.05	0.08	0.08	0.04	30.63	0.29	0.11	6.11	49.05
2011-12	1.93	1.32	0.67	6.98	0.02	3.69	0.04	0.08	0.01	39.8	0.38	1.09	6.44	62.45
2012-13	1.97	1.49	0.6	6.56	0.03	0.07	0.03	0.16	0.03	41.2	0.14	0.61	0.76	53.65
2013-14	2.48	2.13	0.8	7.7	0.02	0.08	0.02	0.07	0.05	59.91	0.49	0.17	1.02	74.94
2014-15	2.79	2.47	0.85	9.83	0.01	0.09	0.03	0.23	0.01	65.01	0	0.09	0.89	82.3
2015-16	3.61	2.42	0.77	11.86	0.01	0.1	0.02	0.17	0.03	96.41	0	0.11	1.10	116.61
2016-17	2.59	1.84	0.89	11.01	0.01	0.13	0.04	0.47	0	80.36	1.4	0.13	1.35	100.22
2017-18	2.71	1.79	0.74	9.76	0.06	0.17	0.37	0.99	0	87.36	2.95	0.1	1.23	108.23
2018-19	3.56	2.07	0.91	11.96	0.2	0.28	0.5	0.84	0	92.81	6.54	0.15	1.42	121.24
2019-20	2.98	2.05	0.93	13.82	0.16	0.13	0.33	0.32	0	100.27	4.91	0.12	2.16	128.18
2020-21	2.54	1.57	0.88	19.45	0.16	0.18	0.17	0.2	0	89.56	2.03	0.11	2.69	119.54
2021-22	2.33	1.3	0.88	21.35	0.14	0.17	0.15	0.2	0	86.62	2.95	0.06	1.88	118.03
2022-23	2.94	1.42	0.94	15.83	0.19	0.15	0.12	0.25	0	161.94	2.8	0.12	2.27	188.97
2023-24*	2.09	1.58	1.00	16.56	0.24	0.23	0.33	0.16	0	156.65	3.21	0.16	2.16	184.37

Source: <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

During 2004-05, the total non-tax revenue was Rs.142.48 crore and out of that amount under other general economic services was Rs.126.09 crore. The high value of other general economic services is due to larger revenue from energy selling of Rs.125.20 crore. In the year 2005-06, the state has constituted a public sector enterprise viz. TSECL and as a result the revenue from energy selling decreases and it is nil from 2008-09 onwards. To improve the revenue generated from these heads under the economic sector, the promotional activities and infrastructures are needed.

Table 3.8 shows the major sources of non-tax revenue of the state under interest receipts, dividends and profit during 2004-05 to 2023-24. It is observed that a significant amount of revenue comes from interest receipts. The revenue receipt as a part of dividend and profit is very small and negligible amount.

Table 3.8: Major Sources of Non-Tax Revenue under Total Interest Receipts, Dividends and Profits during 2004-05 to 2023-24 (Rs. in Crore)

Year	Interest receipts	Dividends and Profits	Total Interest Receipts, Dividends and Profits
2004-05	4.56	0	4.56
2005-06	16.62	0.27	16.89
2006-07	26.23	0.11	26.34
2007-08	58.93	0.27	59.20
2008-09	62.93	0	62.93
2009-10	27.88	0	27.88
2010-11	23.37	0	23.37
2011-12	50.66	25.95	76.61
2012-13	67.88	0.67	68.55
2013-14	86.47	0	86.47
2014-15	46.02	0.51	46.53
2015-16	55.24	13.41	68.65
2016-17	37.07	0.05	37.12
2017-18	276.99	14.69	291.68
2018-19	146.11	2.15	148.26
2019-20	19.25	7.95	27.2
2020-21	18.11	6.62	24.73
2021-22	24.43	1.63	26.06
2022-23	22.93	11.66	34.59
2023-24*	27.15	7.85	35.00

Source: <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

It is also important to note that the other non-tax revenue (ONTR) included an amount of Rs.276.99 crore during 2017-18 and Rs.146.11 crore during 2018-19 being the accrued interest withdrawn from the Consolidated Sinking Fund set up for repayment of internal debt. The interest accrued over a number of years, had to be withdrawn, to repay internal debt, in view of very tight ways and means position of the State. These were one-time receipt. These one-time receipts must be excluded while assessing the State's revenue. In the year 2023-24, total interest receipts dividends and profit is Rs.35 crore.

Table 3.9 reveals that growth of non-tax revenue under different heads and sub-heads during 2004-05 to 2023-24. It is observed that a significant amount of non-tax revenue comes from different sources such as police, industry, forestry and wildlife, public works, interest, dividends and profit, roads and bridges etc.

Table 3.9: Growth of Non-Tax Revenue under Different Heads over Time Period

Categories	Growth	t-value	p-value
Public Service Commission	0.031*	5.38	0.000
Police	0.138*	15.34	0.000
Jails	-0.002*	-3.62	0.002
Stationery and Printing	-0.0002	-0.03	0.97
Public Works	0.0515*	3.45	0.003
Other Administrative Services	0.052*	3.58	0.002
Contributions and Recoveries towards Pension and Other	-0.006	-0.55	0.58
Miscellaneous General Services	0.112*	3.32	0.004
Total General Services	0.106*	10.64	0.000
Education, Sports, Art and Culture	0.020**	2.39	0.027
Medical and Public Health	0.000075	0.000	0.99
Water Supply and Sanitation	0.170	1.43	0.17
Housing	0.031*	19.31	0.00
Information and Publicity	-0.005*	-2.60	0.017
Labour and Employment	0.029**	7.06	0.00
Social Security and Welfare	-0.00064	-0.25	0.80
Other Social Services	-0.0035*	-4.33	0.00
Total Social Services	0.027*	2.86	0.01
Crop Husbandry	0.047*	7.70	0.000
Animal Husbandry	0.010**	2.12	0.047
Fisheries	0.0067	1.29	0.21
Forestry and Wild Life	0.057*	5.43	0.00
Food Storage and Warehousing	-0.015	-1.45	0.164
Co-operation	0.00061	0.05	0.95

Other Rural Development Programmes	0.0053	1.53	0.19
Minor Irrigation	0.0079	1.27	0.22
Village and Small Industries	-0.0091	-1.34	0.197
Industries	0.176*	14.04	0.00
Roads and Bridges	0.0903*	5.79	0.000
Civil Supplies	0.0008	0.14	0.89
Other General Economic Services	0.038**	2.31	0.032
Total Economic Services	0.078**	3.60	0.002
Interest receipts	0.059***	1.75	0.097
Dividends and Profits	0.1003*	2.91	0.009
Total Interest Receipts, Dividends and Profits	0.0739**	2.25	0.036
Others (incl. Fiscal Services)	0.0028*	5.04	0.000
Total Non-Tax Revenue	0.069*	6.45	0.000

Source: Calculated from <https://cag.gov.in/ae/tripura/en>

The growth of general service heads is 10.6 percent, which is followed by economic service (7.8 percent) and only 2.7 percent from social service heads. The growth rate of major sources of non-tax revenue from the industry is 17.67 percent which is followed by police (13.8 percent), dividend and profits (10.03 percent), roads and bridges (9 percent), forestry and wildlife (5.7 percent), public works (5.1 percent) etc.

3.5 Capital Receipts

This section focuses on the capital receipts and its composition of the state during 2004-05 to 2023-24. Table 3.10 reveals the composition of capital receipts. It is found that there are three types of capital receipts viz. internal debt, loan from centre, and recovery from loans and advances. The major sources of capital receipts come from internal debt.

Table 3.10: Composition of Capital Receipt during 2004-05 to 2023-24 (Rs. in Crore)

Year	Internal Debt (1)	Loans from Centre (2)	Recovery of Loans & advances (3)	Capital Receipts (1+2+3)
2004-05	272.72	95.16	3.97	371.85
2005-06	136.16	8.82	3.86	148.84
2006-07	219.13	5.83	3.52	228.48
2007-08	46.80	3.29	3.27	53.36
2008-09	206.17	2.52	3.25	211.94
2009-10	490.51	3.3	3.51	497.32
2010-11	552.55	3.36	2.8	558.71
2011-12	411.82	6.07	2.1	419.99
2012-13	830.53	3.48	1.26	835.27

2013-14	783.25	3.73	0.96	787.94
2014-15	532.07	5.2	2.18	539.45
2015-16	1113.86	5.93	1.14	1120.93
2016-17	1135.95	3.61	0.91	1140.48
2017-18	1332.14	1.27	1.69	1335.10
2018-19	1694.53	13.04	0.6	1708.17
2019-20	3081.05	0.06	0.73	3081.84
2020-21	2224.42	527.98	1.25	2753.65
2021-22	520.79	526.29	0.87	1047.96
2022-23	519.36	358.06	51.58	929.00
2023-24*	703.22	697.46	0.89	1401.57

Source: <https://cag.gov.in/ae/tripura/en>

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

From Table 3.10, it is also observed that capital receipt of the state has increased Rs.371.85 crore in 2004-05 to Rs.3081.84 crore in 2019-20 though after that the capital receipt has decreased. It is also found that out of the total capital receipt, internal debt has increased continuously; though the amount of internal debt has increased heavily from 2015-16 (Rs.1113.86 crore) onwards and it reached at the maximum Rs.3081.05 crore though it has decreased after that. Loans from the centre has increased significantly from 2020-21, and it is Rs. 697.46 crore during 2023-24. However, during last year 2023-24 it is Rs.1401.57 crore.

3.6 Revenue Expenditure

This section highlights on the revenue expenditure and its composition of the state during 2004-05 to 2023-24. Table 3.11 reveals the revenue expenditure of the state Tripura during 2004-05 to 2023-24. It is observed that revenue expenditure of the state increases over time and out of the gross state domestic product, a significant percentage of that has been spent on revenue expenditure.

Table 3.11: Revenue Expenditure during 2004-05 to 2023-24 (Rs. in Crore)

Year	Revenue Expenditure (in Cr)	As % of GSDP
2004-05	2182.63	24.51
2005-06	2391.79	24.34
2006-07	2482.56	22.75
2007-08	2793.64	23.68
2008-09	3129.45	23.06
2009-10	4213.79	27.36
2010-11	4359.47	24.40

2011-12	4809.23	25.04
2012-13	5212.88	24.06
2013-14	5948.96	23.24
2014-15	7442.91	25.20
2015-16	7868.47	21.89
2016-17	8855.13	22.43
2017-18	10357.22	23.69
2018-19	11889.2	23.86
2019-20	13376.91	24.70
2020-21	14367.82	26.85
2021-22	16125.24	25.88
2022-23	17738.71	24.52
2023-24*	18342.08	22.20

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * The information is collected from the Ministry of Finance, Govt. of Tripura

During 2004-05, Rs.2182.63 crore has been spent on revenue expenditure which is 19.69 percentage of the GSDP is spent. During 2023-24, the state govt. has spent Rs.18342.08 crore which is nine times than that of 2004-05. The present revenue expenditure is 24.52 percent of the GSDP which is more than double than 2004-05.

Table 3.12 shows the composition revenue expenditure of the state during 2004-05 to 2023-24.

Table 3.12: Composition of Revenue Expenditure during 2004-05 to 2023-24 (Rs. in Crore)

Year	Salary & Wages	Pension	Interest Payment	Other Revenue Expenditure	Total Revenue Expenditure	(Salaries+ Pension + Interest) /Total Rev. Expenditure (%)
2004-05	1064.34	221.04	355.82	541.43	2182.63	75.19
2005-06	1085.47	241.62	370.62	694.08	2391.79	70.98
2006-07	1193.53	267.35	388.17	633.51	2482.56	74.48
2007-08	1334.12	267.35	395.76	796.41	2793.64	71.49
2008-09	1466.3	356.43	394.29	912.43	3129.45	70.84
2009-10	2042.75	559.89	447.32	1163.83	4213.79	72.38
2010-11	2143.15	654.77	447.32	1114.23	4359.47	74.44
2011-12	2189.77	730.03	493.27	1396.16	4809.23	70.97
2012-13	2467.90	694.19	532.81	1518.10	5213.00	70.88
2013-14	2687.68	677.25	590.96	1993.11	5949.00	66.50
2014-15	3123.13	837.18	681.68	2800.92	7442.91	62.37

2015-16	3628.51	1025.31	729.39	2485.26	7868.47	68.41
2016-17	3911.88	1208.68	794.31	2940.26	8855.13	66.80
2017-18	5008.87	1605.24	886.89	2856.22	10357.22	72.42
2018-19	5445.23	2036.49	1018.95	3388.53	11889.2	71.50
2019-20	5663.10	2375.06	1124.98	4213.77	13376.91	68.50
2020-21	5285.81	2324.38	1,284.81	5472.82	14367.82	61.91
2021-22	5472.39	2520.35	1,398.16	6734.34	16125.24	58.24
2022-23	6024.53	2681.24	1373.52	7659.42	17738.71	56.82
2023-24*	6620.09	3065.40	1333.42	7323.14	18342.08	60.07

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

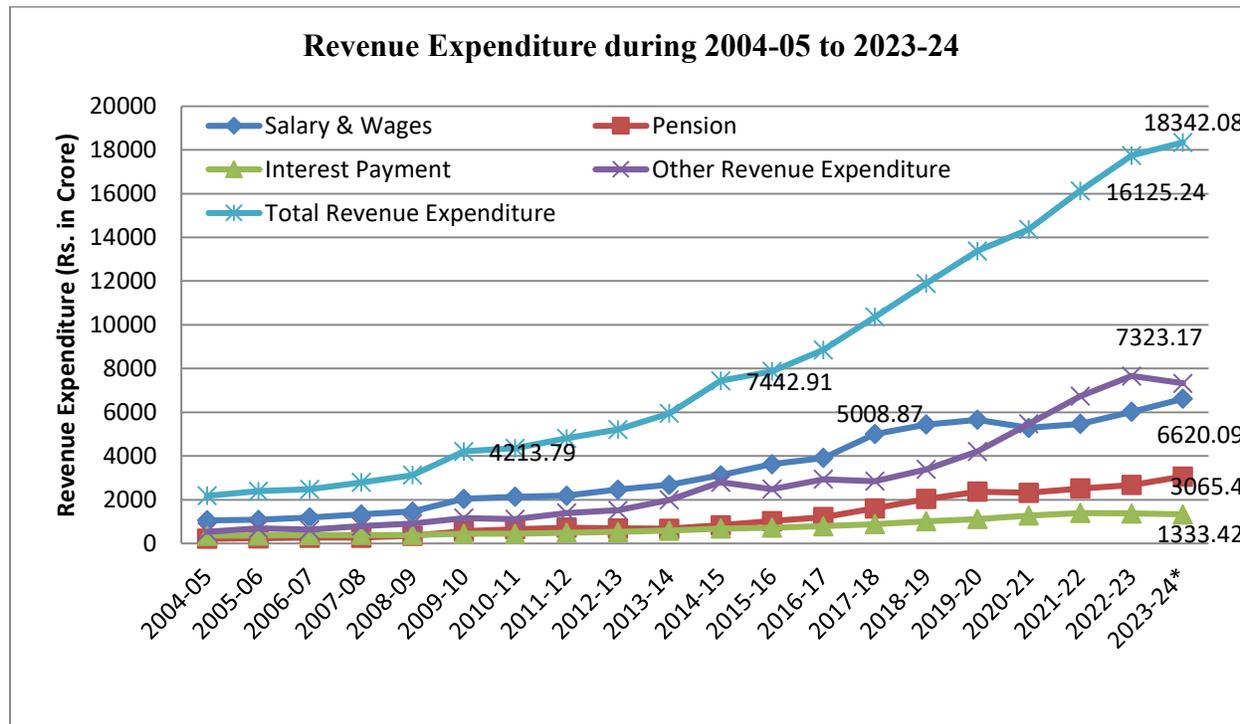
Note: * Collected from the Ministry of Finance, Govt. of Tripura

Under this revenue expenditure, the state government spends committed expenditure and non-committed expenditure. Committed expenditure includes salary and wages, pension, interest payments. However, other miscellaneous revenue expenditure is treated as non-committed expenditure. It is observed that the state govt. spend a sizable amount on the salary and wages wage head which is followed by interest payment and pension which are the major liability of the state in the revenue expenditure account. The state govt. has spent a total amount of Rs.1064.24 crore on salary and wages out of total spending of Rs.2182.63 crore on total revenue expenditure in 2004-05 which is about 50 percent of the revenue expenditure. During this financial year the state govt. has spent more than 75 percent of the total revenue expenditure on these three heads. Up to 2013-14, govt. has spent more than 70 percent of total revenue expenditure on salary and wages, pension and interest payment.

Table 3.12 also reveals that the amount spent on salary and wages has been increased more from 2017-18 to the present financial year. During 2018-19 to 2019-20, the state govt. has spent more than 70 percent of the total revenue expenditure on these three major heads. The other miscellaneous revenue expenditure has also increased significantly from 2019-20 to the present financial year.

Figure 3.3 shows the trends in different components of revenue expenditure of the spent during 2004-05 to 2023-24. It is observed that the revenue expenditure increases with consistently upward trend. However, it is found that the change in total revenue expenditure with an increasing rate due to salary and wages and other miscellaneous revenue expenditure of the state.

Figure 3.3: Trends in Different Components of Revenue Expenditure during 2004-05 to 2023-24 (in Crore)



Source: Compiled from the State Finances and Audit Report of the CAG of India (<https://cag.gov.in>)

3.7 Capital Expenditure

Table 3.13 shows the capital expenditure of the state during 2004-05 to 2023-24. It is found that capital expenditure has increased over the time period. The capital expenditure has increased from Rs.638.55 crore in 2004-05 to Rs.2734.19 crore in 2023-24. In 2004-05, the state has spent 5.76 percent capital expenditure out of the gross state domestic product. It is also found that a huge capital expenditure of Rs.2832.28 crore has increased from 2014-15 up to Rs.3293.56 in 2016-17. In 2014-15, 9.59 percent of GSDP has been spent on capital expenditure and it is gradually decreasing till 2020-21. From 2017-18, a sudden fall in capital expenditure is found to Rs.1777.05 crore which is almost half of the previous financial year and it is 4.07 percent of the GSDP of the state. Thereafter, the amount spent on capital expenditure has been decreased to 1.56 percent of the GSDP up to 2020-21. From 2021-22, the amount spent on capital expenditure has increased a little bit. In 2023-24, the proposed capital expenditure is 3.31 percent of GSDP (budgetary estimate) of the state.

Table 3.13: Capital Expenditure during 2004-05 to 2023-24 (Rs. in Crore)

Year	Capital Expenditure (Rs. Crore)	As % of GSDP
2004-05	636.5	7.15
2005-06	743.94	7.57
2006-07	722.45	6.62
2007-08	923.68	7.83
2008-09	1202.39	8.86
2009-10	1332.22	8.65
2010-11	1058.33	5.92
2011-12	1397.26	7.27
2012-13	1483.19	6.85
2013-14	1640.73	6.41
2014-15	2832.29	9.59
2015-16	3188.03	8.87
2016-17	3293.56	8.34
2017-18	1777.05	4.07
2018-19	1480.87	2.97
2019-20	883.22	1.63
2020-21	832.08	1.56
2021-22	1368.95	2.20
2022-23	2024.97	2.80
2023-24*	2734.19	3.31

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * Collected from the Ministry of Finance, Govt. of Tripura

Table 3.14 reveals the composition of the capital expenditure of the state during 2004-05 to 2023-24. There are three sub-heads under the capital expenditure viz general services, economic services and social services. Out of the total capital expenditure, the state govt. has spent major amount on economic services, followed by social services and general services including interest payments. In 2004-05, out of the total capital expenditure of Rs.636.50 crore, the state govt. has spent Rs.356.46 crore on economic services, Rs.214.58 crore on social services and only Rs.65.46 crore on general services including interest payments. The total capital expenditure increases with increase in all components up to the year 2009-10.

During 2010-11, there is a sudden fall in capital expenditure though after that it has increased again up to the year 2016-17. There is huge increase in expenditure on economic services during 2014-

15 to 2015-16. From 2016-17, the expenditure on economic services has decreased continuously till 2021-22 though after that there is an increase in capital expenditure on economic services.

Table 3.14: Composition of Capital Expenditure during 2004-05 to 2023-24 (Rs. in Crore)

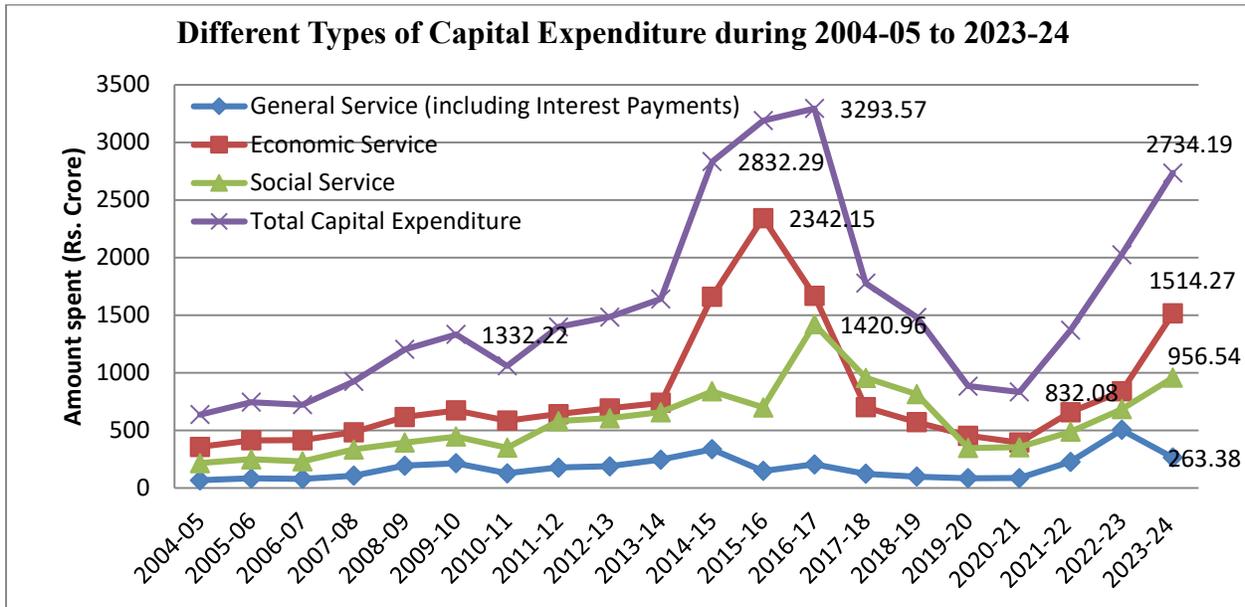
Year	General Service (including Interest Payments)	Economic Service	Social Service	Total Capital Expenditure
2004-05	65.46	356.46	214.58	636.50
2005-06	82.84	412.60	248.50	743.94
2006-07	78.36	413.89	230.2	722.45
2007-08	106.09	483.45	334.14	923.68
2008-09	192.83	616.12	393.44	1202.39
2009-10	213.87	671.93	446.42	1332.22
2010-11	126.37	583.57	348.40	1058.33
2011-12	176.73	640.37	580.16	1397.26
2012-13	188.08	690.12	605.00	1483.19
2013-14	245.61	737.93	657.19	1640.73
2014-15	334.63	1659.51	838.15	2832.29
2015-16	147.54	2342.15	698.34	3188.03
2016-17	204.55	1668.05	1420.96	3293.57
2017-18	122.67	699.56	954.82	1777.05
2018-19	97.65	570.72	812.50	1480.87
2019-20	84.50	452.89	345.83	883.22
2020-21	85.60	392.77	353.71	832.08
2021-22	225.52	656.56	486.88	1368.95
2022-23	503.21	838.07	683.69	2024.98
2023-24*	263.38	1514.27	956.54	2734.19

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * Collected from the Ministry of Finance, Govt. of Tripura

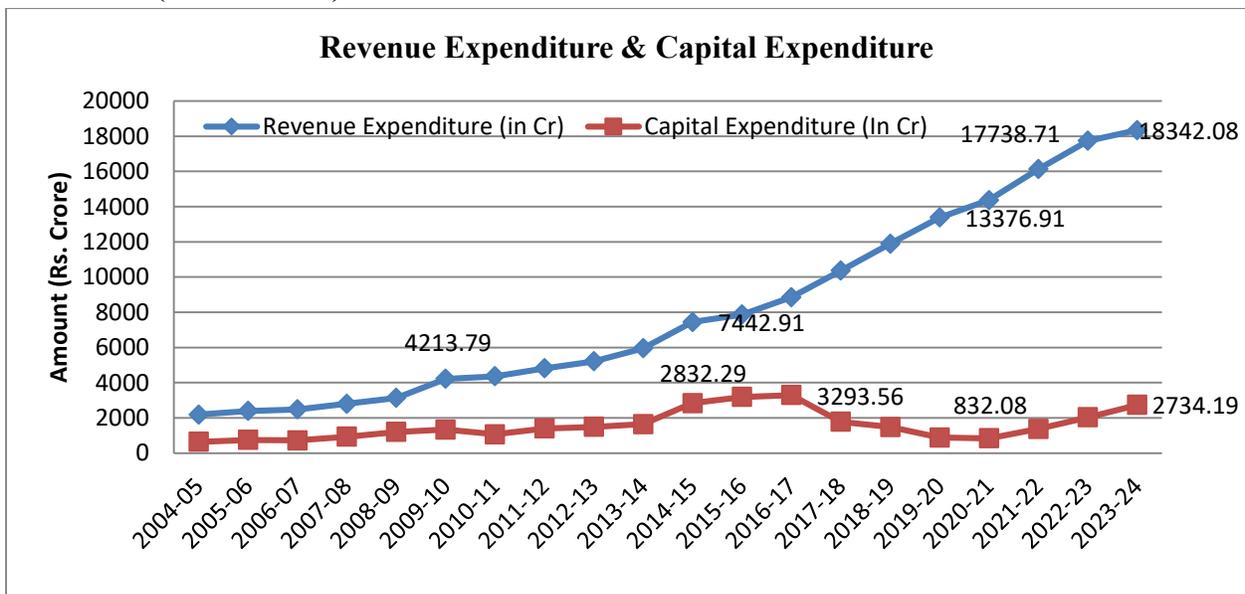
Figure 3.4 shows the trends in different types of capital expenditure during 2004-05 to 2023-24. It is observed that there is an upward trend in total capital expenditure till 2016-17 and after that a downward trend is observed till 2020-21. The peak in total capital expenditure has been found due to sharp rise in capital expenditure on both economic services as well as social services. It is also found that there is an upward trend in capital expenditure on both general services as well as social services from 2019-20 till the present financial year. At present, the state has a long-term vision through infrastructure development. The state has spent capital expenditure of Rs.2734.19 crore in 2023-24.

Figure 3.4: Trends in Different Types of Capital Expenditure during 2004-05 to 2023-24 (Rs. in Crore)



Source: Calculated from <https://cag.gov.in/ae/tripura/en>

Figure 3.5: Trend Line Plot of Revenue Expenditure & Capital Expenditure during 2004-05 to 2023-24 (Rs. in Crore)



Source: Based on the data collected from <https://cag.gov.in/ae/tripura/en>

Figure 3.5 shows the graph of comparison between the revenue expenditure and capital expenditure of the state during 2003-04 to 2023-24. It is observed that revenue expenditure of the

state is more than its capital expenditure during this study period. However, the gap between revenue expenditure and capital expenditure has been increasing over the time.

The trend of revenue expenditure is found always upward raising, however, the trend of capital expenditure decreases after 2016-17 to 2020-21. Due to decrease in capital expenditure and increase in revenue expenditure simultaneously, the gap between revenue expenditure and capital expenditure is found significantly high.

As per the information of Planning, Research and Statistics (PRS), Tripura has spent 4.7 percent of their budget on roads and bridges and out of that 3.4 percent has spent on capital outlay and rest on revenue expenditure during 2015-21,. Compare to other states belongs to Sub-Himalayan region in the North-east Tripura has spent less except Manipur (4.2 percent of the budget). In case of both rural development and urban, Tripura has spent more capital expenditure compare to other states of North-eastern region. In case of water and sanitation, Tripura has spent less capital expenditure compare to Meghalaya, Assam, Manipur.³

Capital expenditure has a greater impact on long-term growth and productivity than revenue expenditure due to its ability to create a multiplier effect. Allocating capital for new projects, expanding ventures, or improving technology and infrastructure promotes economic growth by increasing productivity, demand for related industries, and creating job opportunities.

3.8 Fiscal Deficit & Revenue Deficit

This section highlights the fiscal deficit and revenue deficit of the state during 2004-05 to 2023-24. The fiscal deficit represents the government's total expenditures over its total revenues, excluding borrowing. Whereas, the revenue deficit represents the government's revenue expenditures exceed its revenue receipts. In fiscal deficit, both revenue expenditure and capital expenditure are included.

Table 3.15 reveals the gross fiscal deficit and revenue deficit of the state during 2004-05 to 2023-24. From Table 3.15, it is observed that the state has faced the fiscal deficit in most of the years though during some financial years (2011-12 to 2013-14) there are fiscal surpluses in the state. In 2012-13, the fiscal surplus is Rs.336.56 crore which is 1.55 percent of the state GSDP. The state

³ Source: Analytical Reports of Planning Research & Statistics (<https://prsindia.org/policy/analytical-reports/state-state-finances-2020-21>)

has faced a huge fiscal deficit from 2014-15 and it is found that the state has faced a very high fiscal deficit of Rs.3261.56 crore during 2019-20 which is 6.02 percent of GSDP.

Table 3.15: Gross Fiscal Deficit and Revenue Deficit during 2004-05 to 2023-24

Year	Fiscal Deficit (-) / Surplus (+) (Rs. in Crore)	Gross Fiscal Deficit (-)/Surplus (+) as % of GSDP	Revenue Deficit (-)/ Surplus (+) (Rs. in Crore)	Revenue Deficit (-) / Surplus (+) as % of GSDP
2004-05	-240.31	-2.70	394.27	4.43
2005-06	-110.1	-1.12	632.32	6.44
2006-07	131.19	1.20	850.8	7.80
2007-08	-16.01	-0.14	904.71	7.67
2008-09	-269.89	-1.99	947.33	6.98
2009-10	-1158.71	-7.52	187.56	1.22
2010-11	-247.37	-1.38	809.12	4.53
2011-12	258.62	1.35	1667.67	8.68
2012-13	336.56	1.55	1837.42	8.48
2013-14	45.68	0.18	1701.22	6.65
2014-15	-1049.03	-3.55	1796.82	6.08
2015-16	-1650.45	-4.59	1558.27	4.34
2016-17	-2529.62	-6.41	790.32	2.00
2017-18	-2071.64	-4.74	-289.27	-0.66
2018-19	-1339.7	-2.69	141.69	0.28
2019-20	-3261.56	-6.02	-2375.32	-4.39
2020-21	-1909.14	-3.57	-1075.42	-2.01
2021-22	66.55	0.11	1488.71	2.39
2022-23	-1512.73	-2.09	570.3	0.79
2023-24*	-647.01	-0.78	2195.97	2.66

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * Collected from the Ministry of Finance, Govt. of Tripura

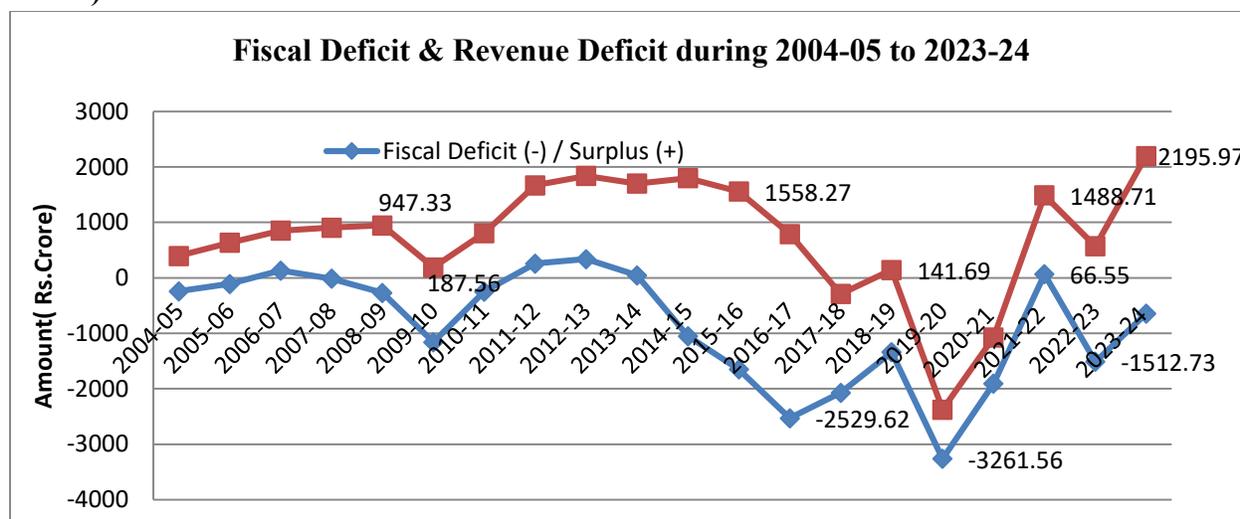
It is found that during 2009-10 the state has faced a maximum fiscal deficit of about 7.52 percent. From 2014-15 to 2020-21 the fiscal deficit has increased heavily and it has exceeded 3 percent of GSDP. However, the situation is controlled after the year 2021. During 2022-23, the fiscal deficit of the state is 2.09 percent and in 2023-24 it is only 0.78 percent which indicates the state satisfies the FRBM regulation.

In most of the financial year since last 20 years, the state has maintained a revenue surplus except only four years. Revenue deficit of the state is shown only in four years. The maximum revenue deficit is found of Rs.2375.31 crore during 2019-20 which is 4.39 percent of the state GSDP.

During 2020-21, the revenue surplus is 2.39 percent of the GSDP. The percentage of maximum revenue surplus (8.68 percent) is found during 2011-12, followed by 2012-13 (8.48 percent)

Figure 3.6 shows the trend line of fiscal deficit and revenue deficit during 2004-05 to 2023-24. It is found that fiscal deficit is more than the revenue deficit during all the time periods. There are fiscal surpluses in five financial years, otherwise a fiscal deficit is found in Tripura. There are four peak points of fiscal deficit are observed during last 20 years period viz. 2009-10, 2017-18, 2019-20 and 2023-24. In other side, there is a revenue surplus almost in every year except three financial years. During 2019-20, the figure shows the highest revenue deficit is found in Tripura.

Figure 3.6: Trend Plots of fiscal Deficit & Revenue Deficit during 2004-05 to 2023-24 (Rs. in Crore)



Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>)

Note: * Collected from the Ministry of Finance, Govt. of Tripura

3.9 Fiscal Policy

From the above Figure 3.6, it is observed that the state has faced challenges to reduce and control the fiscal deficit. The state has been facing fiscal deficit from last two financial years. During the last year there is small fiscal deficit which is 0.78 percent of the state GSDP though there is a revenue surplus of 2.66 percent of the state GSDP. In the present year budget analysis, Rs.4255 crore has been estimated as the targeted fiscal deficit during 2024-25. During this period, the state Govt. has estimated the net expenditure of Rs.27238 crore and net receipt (excluding borrowing) of Rs.22983 crore.

Revenue expenditure of the state in 2024-25 is proposed to be Rs.21,171 crore, a decrease of 1% from the revised estimate for 2023-24. This includes the expenditure on salaries, pensions, interest,

grants, and subsidies. For housing sector, there is a significant cut in budget allocation as compared to the previous year. In 2024-25, revenue expenditure on housing is estimated to be Rs.217 crore, a decrease of 88 percent from the revised estimate for 2023-24 (Rs 1,739 crore). This is due to a reduction in allocation towards the Pradhan Mantri Awas Yojana for the rural area.

In 2024-25, capital outlay on energy, and agriculture and allied activities has seen a significant increase over the previous year (by Rs.373 crore and Rs.231 crore respectively). The increase in capital outlay towards agriculture and allied activities is primarily on account of allocation of Rs.295 crore for river catchment development projects. Increase in allocation towards the energy sector is owing to expenditure for up-gradation of the power transmission and distribution network. During 2024-25, Tripura has allocated 2.7 percent of its total expenditure towards energy, 6.2 percent towards health, 4.1 percent of its expenditure towards urban development and 6.5 percent of its total expenditure towards agriculture.

There is a huge amount of committed expenditure in terms of payments on salary, pension and interest. In 2024-25, Tripura is estimated to spend Rs.12,466 crore on committed expenditure, which is 54 percent of its estimated revenue receipts. This is similar to the national average of estimated committed expenditure by states (53 percent of revenue receipts in 2023-24). In 2023-24, as per revised estimates, expenditure on salaries, pension, and interest payment is estimated to decrease by 8 percent, 6 percent, and 6 percent respectively. Tripura has allocated 7.9 percent of its expenditure on police.

In case of devolution in 2024-25, state's share in central taxes is estimated at Rs.8,636 crore, an increase of 10 percent over the revised estimate for 2023-24. In 2023-24, as per the revised estimates, Tripura's share in the central taxes is estimated to be Rs.7,820 crore, which is 8 percent higher than the budgeted estimate. In 2024-25, share in central taxes are estimated at Rs.10,098 crore, a decrease of 5 percent from the revised estimates for 2023-24. This decline (Rs.530 crore) is estimated to be largely on account of reduction in revenue deficit grants and grants for the Pradhan Mantri Awas Yojana for the rural area. Total own tax revenue of Tripura is estimated to be Rs.3,748 crore in 2024-25, an increase of 8 percent over the revised estimate for 2023-24.

3.10 Recommendations

For enhancing Non-tax Revenue through user charges

- In order to enhance the non-tax revenue, the stamp duty and registration charges for purchasing a property in Tripura can be enhanced from 5 percent to 7.5 percent based on the valuation of

property. The present duty for the same, so that the non-tax revenue of the state can be improved.

- A minimum stamp duty (2 percent) is recommended for Will registration in order to improve the fiscal health of the state.
- In order to enhance the non-tax revenue, the state can think about the user charges from the stakeholders. There are different areas such as food storage and warehousing; road and bridges; lodging and parking place; tourist spots; charges from auditorium and banquet hall etc. where the government can escalate some user charges. There is a scope to enhance non-tax revenue through increase in user charges; because in Table 3.7 of Chapter 3, it is observed that the amount collected from food storage and warehousing head is very negligible amount. The growth of revenue collected from food storage and warehousing is negative and insignificant. Road and bridges is another potential area where revenue can be increased more imposing fine against the traffic rule breaker through strict surveillance.
- A minimum stamp fee is also recommended for Kabinama. The state can think about the adoption of it.

For Revenue and Capital Expenditure

- It is observed that the trend of non-committed (other) revenue expenditures has increased sharply after 2017-18. In order to maintain better financial health of the state, it is recommended to reduce non-committed expenditure of the different departments.
- The capital expenditure should be increased especially in the economic services. Enhancing capital expenditure can promote the economic development of the state in the long run. Special focus should be given to the infrastructure viz. non-conventional energy sources, telecommunications, road and transport service, tourism which can boost up the economy of the state. Apart from that, some other areas should also get prioritized such as crop husbandry, Food, Storage & Warehousing, Agricultural Research and Education, rural activities through different government programmes, foreign trade as the amount of expenditures are very small. The amount of capital expenditure should be maintained in case of animal husbandry, fisheries, power project, and village small industries as per the spending made during 2022-23.

The state is maintaining fiscal deficit as per the FRBM Act, 2005 since 2020-21. It should be maintained in the long run for sustainable fiscal health of the state.

Chapter – 4

Projected Revenue Receipts and Revenue Expenditure and Pre-Devolution Revenue Receipts

This chapter highlights the projected revenue receipts and expenditure and pre-devolution revenue receipts. Section 4.1 shows the estimation of revenue capacity; section 4.2 shows the tax buoyancy and section 4.3 shows projected revenue receipts and expenditure and pre-devolution deficit. This chapter covers first four Terms of References given for the study.

4.1 Estimation of Revenue Capacity:

Ratio of revenue to GSDP is taken as an indicator of revenue capacity. This indicates also the revenue productivity. Table 4.1 shows the trend of revenue capacity. The table reveals that revenue capacity has a positive and significant trend over time. It is observed that the state maintains a 7.8 percent GSDP growth rate over time. During the study period of the last 20 years, own tax revenue (OTR) has increased at 13 percent growth. Non-tax revenue (NTR) of the state has increased by 7.7 percent growth rate, growth of tax revenue from the centre (TRC) has increased by 12.5 percent, and growth rate of total revenue (TR) has increased by 6.5 percent, growth of state's own revenue (SOR) has increased by 12.5 percent.

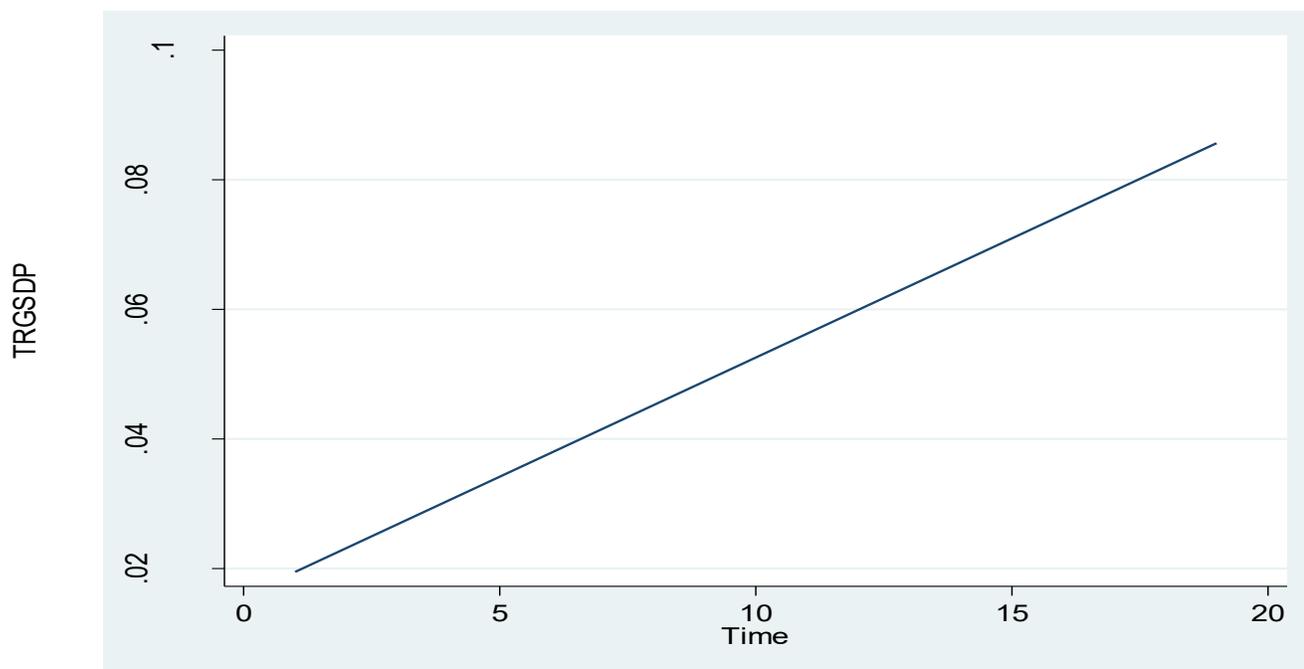
Table 4.1: Revenue Capacity over Time

Ingsdp	Coefficient	Std. Error	t-value	Prob.	R-square
time	0.07814	0.002081	37.55	0.000	0.9874
constant	9.245062	0.02493	370.84	0.000	
lnotr					
time	0.136635	0.003902	35.02	0.000	0.9855
constant	5.467848	0.046744	116.98	0.000	
lnntr					
time	0.0777411	0.010882	7.14	0	0.7393
constant	4.520863	0.130353	34.68	0	
lntrc					
time	0.1662273	0.0067631	24.58	0	0.9711
constant	5.781512	0.0810158	71.36	0	
lntr					
time	0.0650869	0.008674	7.5	0	0.7578
constant	8.034788	0.1039	77.33	0	
lnsor					
time	0.1251624	0.003694	33.88	0	0.9846
constant	5.793446	0.04425	130.92	0	

Source: Author's estimation

The revenue capacity of the State of Tripura can be measured by the revenue productivity. Revenue productivity is defined as the tax-GSDP ratio. Figure 4.1 shows the trend of revenue productivity over time. It is found that revenue productivity of the state has a positive trend over time which indicates that the revenue is productive.

Figure 4.1: Trend of Revenue Productivity from 2004-05 to 2022-23



To measure the revenue productivity, the following functional form can be considered. Revenue productivity

$$(TR/GSDP) = f(Capex/GSDP, PS/GSVA, SS/GSVA, TS/GSVA, SL/GSDP) \dots\dots\dots(1)$$

For enhancing revenue productivity, the above functional form can be estimated using the following econometric specification:

For enhancing revenue productivity, the above functional form can be estimated using the following econometric specification:

$$\frac{TR_t}{GSDP_t} = \alpha + \beta_1 \frac{Capex_t}{GSDP_t} + \beta_2 \frac{PS_t}{GSVA_t} + \beta_3 \frac{SS_t}{GSVA_t} + \beta_4 \frac{TS_t}{GSVA_t} + \beta_5 \frac{SL_t}{GSDP_t} + u_t \dots\dots\dots(2)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component.

Where; TR = Total Revenue

GSDP = Gross State Domestic Product

PS = Contribution of Primary Sector

SS = Contribution of Secondary Sector

TS = Contribution of Tertiary Sector

Capex = Capital Expenditure

Table 4.2 shows estimated revenue capacity of the state. Table 4.2 also reveals the determinants of the revenue capacity or revenue productivity of the state.

Table 4.2: Determinants of Revenue Capacity in Tripura

trgsdp	Coefficient	Std. Err.	t	P>t
capexgdp	1.67098*	0.46248	3.61	0.003
psgsva	1.06419	1.1439	0.93	0.368
ssgsva	2.26835***	1.2341	1.84	0.087
tsgsva	1.85882**	0.75743	2.45	0.028
slgdp	-0.0013	0.00124	-1.06	0.308
constant	-1.4062	0.84781	-1.66	0.119

Source: Author's estimation

From Table 4.2, it is observed that capital expenditure-GSDP ratio has a positive and significant influence on the revenue capacity of the state. It is also observed that the secondary sector and tertiary sector has a significant and positive effect on the revenue capacity of the state. The impact of the secondary sector on the revenue capacity estimation is more than the tertiary sector. However, the primary sector has no significant impact on the revenue capacity of the state. Similarly, the state liability has no significant impact on the revenue capacity estimation.

Table 4.3 shows the Analysis of Variance (ANOVA) of the estimated regression of the revenue capacity. It is observed that the entire regression is meaningful. The equation has a high value of R-square (0.7447) and adjusted R-square (0.6535).

Table 4.3: ANOVA in the Regression of Determinants of Revenue Capacity

Source	SS	df	MS	Number of obs. =	20
Model	0.046634	5	0.009327	Prob.> F =	0.0009
Residual	0.015986	14	0.001142	R-square =	0.7447
Total	0.06262	19	0.003296	Adj. R-square =	0.6535
		F(5, 14) =	8.17	Root MSE =	0.03379

Source: Author's estimation

4.2 Estimation of Tax Buoyancy

Tax buoyancy is an indicator to measure efficiency and responsiveness of revenue mobilization in response to growth in the gross state domestic product. Tax buoyancy is the ratio of change in tax revenue in relation to the change in gross State Domestic Product (GSDP). A tax is said to be buoyant if the tax revenues increase more than proportionately in response to a rise in income.

In order to measure the Tax Buoyancy the following specification is taken

$$\log(Tax)_t = \alpha + \beta \log(GSDP)_t + u_t \dots\dots\dots(1.3)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. Where;

$$Tax\ Buoyancy = \frac{d\log(Tax)}{d\log(GSDP)}$$

Table 4.4 shows the Analysis of Variance (ANOVA) of the estimated regression of the tax buoyancy relation. It is observed that the entire regression is meaningful and it has a high value of R-square (0.9906).

Table 4.4: ANOVA of the Tax Buoyancy Relation

Source	SS	df	MS	Number of obs.	20
Model	16.3168627	1	16.3168627	Prob.> F	0.000
Residual	0.155317235	18	0.008628735	R-square	0.9906
Total	9.59962526	19	0.866956837	Adj. R-square	0.9900
	F(1, 17)	1890.99		Root MSE	0.09289

Source: Author's estimation

Table 4.5: Estimation of Total Tax Buoyancy in Tripura

Intr	Coefficient	Std. Error	t-value	Prob.	R-square
lngsdp	1.303741	0.029981	43.49	0.000	0.9972
Constant	-5.342662	0.3066785	-17.42	0.000	

Source: Author's estimation

Table 4.5 shows the estimated total tax buoyancy of the state. It is found that the value of own tax buoyancy is 1.303 which is statistically significant at less than one percent level of significance. This indicates that one percent growth of the state economy or state domestic product causes only 1.303 percent growth of total tax revenue. So, total tax buoyancy in the state is impressive.

Table 4.6 shows the estimated own tax buoyancy of the state. It is found that the value of own tax buoyancy is 1.128 which is statistically significant at less than one percent level of significance. This indicates that one percent growth of GSDP causes only 1.128 percent growth of the own tax revenue of the state which is elastic and impressive.

Table 4.6: Estimation of State Own Tax Buoyancy in Tripura

Inotr	Coefficient	Std. Error	t-value	Prob.	R-squared
lngsdp	1.128796	0.0382821	29.49	0.000	0.9797
Constant	-4.620249	0.3915909	-11.80	0.000	

Source: Author's estimation

Table 4.7 reveals the estimated total revenue buoyancy of the state. Total Revenue includes both tax and non-tax revenue. It is observed that estimated total revenue buoyancy is 0.86 which is statistically significant at less than one percent level of significance. It is not elastic. It indicates that one percent growth of state economy or gross state domestic product causes 0.86 percent growth of total revenue which is not impressive.

Table 4.7: Estimation of Buoyancy of Total Revenue in Tripura

Intr	Coefficient	Std. Error	t-value	Prob.	R-square
lngsdp	0.86952	0.0312783	27.80	0.000	0.9772
Constant	0.0470431	0.319949	0.150	0.885	

Source: Author's estimation

Table 4.8 reveals the estimated total non-tax revenue buoyancy of the state. It is observed that estimated total not tax revenue buoyancy is 0.64 which is statistically significant at less than one percent level of significance. It is not elastic. It indicates that one percent growth of state economy or gross state domestic product causes 1.16 percent growth of total non-tax revenue which is not impressive.

Table 4.8: Estimation of Buoyancy of Total Non-Tax Revenue in Tripura

Inntr	Coefficient	Std. Error	t-value	Prob.	R-square
lngsdp	0.6472179	0.087234	7.42	0.000	0.7536
Constant	-1.271491	0.8923239	-1.42	0.171	

Source: Author's estimation

Table 4.9 reveals the estimated total own revenue buoyancy of the state. Total own revenue of the state includes the self-generated revenue of the state. It is observed that estimated total own

revenue buoyancy is 1.034 which is statistically significant at less than one percent level of significance. It indicates that one percent growth of state economy or gross state domestic product causes 1.034 percent growth of state's own revenue.

Table 4.9: Estimation of Buoyancy of States Own Revenue in Tripura

Insor	Coefficient	Std. Error	t-value	Prob.	R-square
lngsdp	1.034925	0.0328385	31.52	0.000	0.9822
constant	-3.45714	0.3359081	-10.29	0.000	

Source: Author's estimation

4.3 Overall Projected Revenue Receipts and Expenditure and Pre-Devolution Deficit for the 16th Finance Commission Period (2026-27 to 2030-31)

This section estimates the projected revenue receipt and projected expenditure of the state during 2026-27 to 2030-31. The projected revenue receipt is estimated by two methods. The first method is based on the Compounded Annual Growth Rate (CAGR) formula; whereas the second method is based on a compounded natural logarithmic growth formula.

Table 4.10 shows the projected revenue receipts and expenditure and pre-devolution revenue deficit during the period 2026-27 to 2030-31. This projection is based on the CAGR formula. The first part of the table shows the projected revenue and second part of the table shows the projected expenditure.

Table 4.10: Overall Projected Revenue Receipts and Expenditure and Pre-Devolution Revenue Deficit for the 16th Finance Commission during the Period 2026-27 to 2030-31 (Rs. in Crore) (Based on CAGR)

Sl.	Particulars	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
1	Total Revenue Receipts	5348.94	6051.85	6851.16	7760.25	8794.42	34806.62
1.1	State's Own Tax Revenue	4870.44	5552.30	6329.63	7215.77	8225.98	32194.13
1.2	State's Own Non Tax Revenue	478.50	499.55	521.53	544.48	568.43	2612.48
2	Total Revenue Expenditure	29297.36	33968.15	39417.46	45779.66	53213.02	201675.65
2.1	Salary & Wages	11101.21	12944.01	15092.72	17598.11	20519.40	77255.46
2.2	Pension	5750.72	6964.13	8433.56	10213.04	12367.99	43729.43
2.3	Interest Payments	1624.35	1734.81	1852.78	1978.77	2113.32	9304.03
2.4	Other Revenue Expenditure	10821.07	12325.20	14038.40	15989.74	18212.32	71386.74
3	Pre Devolution Revenue Deficit (2-1)	23948.42	27916.30	32566.30	38019.40	44418.61	166869.03

Source: Author's estimation

The total estimated projected revenue receipt is Rs.34806.62crore during 2026-31 period; out of that projected state own tax revenue is Rs.32194.13crore, projected non-tax revenue is Rs.2612.48 crore. The second part of the table reveals that the projected revenue expenditure during this period is estimated at Rs.201675.65 crore; out of that major expenditure is estimated for the salary and wages during this time period. The projected amount of salary and wages is Rs.77255.46 crore which is followed by pension (Rs.43729.43 crore) and interest payment (Rs.9304.03 crore). The other revenue expenditure is Rs.71386.74 crore during this time period. The estimated pre-devolution revenue deficit is Rs.168869.03 using CAGR method.

In order to meet the gap between the Central Government employees' DA (Dearness Allowance) and State employees' DA (currently, 30 percent DA is given by the State Govt., whereas Central Govt. employee DA is 57 percent at present), the salary and wage calculation is done by increasing 30 percent boost up during 2026-27 (expecting Central Govt. DA will increase to 60 percent up to 2025-26) based on the 2025-26. The expenditure of salary and wages from 2025-26 is calculated using the CAGR method, as others head for the period of 20 years (2004-2005 to 2023-24). Thereafter, another 7 percent DA is added annually with usual 9.6 percent (calculated according to the CAGR method) year on year increase in growth is added from 2027-28 onwards, yearly for the next three years.

For pension expenditure, we have taken an expenditure of the budget estimate of the state for 2024-25 and added it to the yearly expenditure of 2025-26. With the said expenditure, a boost of 30 percent was given with 2025-26 for 2026-27, i.e. 30 percent for DA, to equate the Central Govt. employees' DA (presently State Govt. DA is 30 percent whereas Central Govt. employees' DA is 57 percent at present). Thereafter, another 7 percent DA is added annually with usual 14.1 percent (calculated according to the CAGR method) year on year increase in growth is added from 2027-28 onwards yearly for the next three years.

Table 4.11 shows the projected revenue receipts and expenditure and pre-devolution revenue deficit during the period 2026-27 to 2030-31. The growth rate is estimated based on the natural logarithmic formula. After that compound growth rate is used for the projection of revenue receipts and expenditure and pre-devolution revenue deficit. The total estimated projected revenue receipt is Rs.34668.20 crore during 2026-31 period; out of that projected state own tax revenue is Rs.31604.74 crore, projected non-tax revenue is Rs.3063.46 crore.

Table 4.11: Overall Projected Revenue Receipts and Expenditure and Pre-Devolution Revenue Deficit for the 16th Finance Commission during the Period 2026-27 to 2030-31 (Rs. in Crore) (Based on Natural Logarithmic Growth)

Sl.	Particulars	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
1	Total Revenue Receipts	5344.67	6040.56	6828.69	7721.44	8732.84	34668.20
1.1	State's Own Tax Revenue	4819.35	5474.79	6219.36	7065.19	8026.06	31604.74
1.2	State's Own Non Tax Revenue	525.32	565.77	609.33	656.25	706.78	3063.46
2	Total Revenue Expenditure	29764.84	34688.89	40459.64	47227.43	55170.05	207310.86
2.1	Salary & Wages	11328.41	13299.56	15613.68	18330.46	21519.96	80092.08
2.2	Pension	5807.19	7055.73	8572.72	10415.85	12655.26	44506.75
2.3	Interest Payments	1693.76	1834.34	1986.59	2151.48	2330.05	9996.24
2.4	Other Revenue Expenditure	10935.48	12499.25	14286.65	16329.64	18664.77	72715.79
3	Pre Devolution Revenue Deficit (2-1)	24420.17	28648.33	33630.95	39505.99	46437.21	172642.66

Source: Author's estimation

Table 4.11 also reveals that total projected revenue expenditure is Rs.207310.86 crore; so projected pre-devolution revenue deficit is estimated Rs.172642.66 crore during 2026-31 period. Out of the projected revenue expenditures, the major amount is estimated for the salary and wages (Rs.80092.08 crore), for pension (Rs.44506.75 crore), for interest payments (Rs.9996.24 Crore) and for other revenue expenditures (Rs.72715 crore).

In order to meet the gap between the Central Government employees' DA and State employees' DA (currently, 30 percent DA is given by the State Govt., whereas Central Govt. employee DA is 57 percent at present), the salary and wage calculation is done by increasing 30 percent boost up during 2026-27 (expecting Central Govt. DA will increase to 60 percent up to 2025-26) based on the 2025-26. The expenditure of salary and wages from 2025-26 is calculated using the Natural Logarithmic Growth method, as others head for the period of 20 years (2004-2005 to 2023-24). Thereafter, another 7 percent DA is added annually including the usual 10.4 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

For pension expenditure, an expenditure of the budget estimate of the state for 2024-25 is taken and added it to the yearly expenditure of 2025-26. With the said expenditure, a boost of 30 percent

has been added with 2025-26 for 2026-27, to equate DA of the state government employees at par with central government employees. Presently, DA given by the state is 30 percent whereas Central Govt. employee DA 57 percent at present. Thereafter, another 7 percent DA is added annually including the usual 14.5 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

Table 4.12 reveals the major sources of projected revenue receipt with its expected increase in growth. It is observed that the state's own tax revenue is expected to increase around 14 percent year on year and expected revenue from the centre as shared tax proceeds is 16.27 percent. The expected revenue from non-tax sources is comparatively lower than own tax revenue and shared tax.

Table 4.12: Major Sources of Projected Revenue Receipt (in percent)

Sl. No.	Tax Revenue	Based on CAGR (year on year)	Based on Compounded Natural Logarithmic Growth (year on year)
1	State Own Tax Revenue	14.0 percent	13.6 percent
2	State's Own Non Tax Revenue	4.4 percent	7.7 percent
3	Shared Tax Proceeds from Centre/ State of Net Tax Proceeds Assigned to State	16.27 percent	16.87 percent

Source: Author's estimation

Table 4.13 reveals the major heads of projected revenue expenditure. It is observed that expected expenditure on pension head is more than 14 percent. The expected increase on salary and wages is around 10 percent and expected increase on interest payment is about 8 percent and expected other revenue expenditure is around 14 percent.

Table 4.13: Major Heads of Projected Revenue Expenditure (in percent)

Sl.	Tax Revenue	Based on CAGR (year on year)	Based on Compounded Natural Logarithmic Growth (year on year)
1	Salary & Wages	9.6 percent	10.4 percent
2	Pension	14.1 percent	14.5 percent
3	Interest Payments	6.8 percent	8.3 percent
4	Other Revenue Expenditure	13.9 percent	14.3 percent

Source: Author's estimation

Table 4.14 reveals the major sources of own tax revenue. It is observed that SGST, tax on sales/trade, state excise, stamps and registration tax, tax on vehicles and land revenue tax. It is found that SGST increases at 17.29 percent growth rate year on year, state excise by 13.98 percent which is followed by stamps and registration (11.44 percent), tax on vehicles (11.43 percent), land revenue (8 percent) and tax on sales/trade (4.7 percent).

Table 4.14: Major Sources of Own Tax Revenue (in percent)

Sl.	Item of Tax	Assumptions
1	SGST	17.29% increase year on year
2	Land Revenue	8% increase year on year
3	Stamps & Registration	11.44% increase year on year
4	State Excise	13.98% increase year on year
5	Tax on Sales / Trade	4.7% increase year on year
6	Vehicle Tax	11.43% increase year on year

Source: Author's estimation

Table 4.15 reveals the major sources of non-tax revenue of the state. The major non-tax revenue of the state comes from general service at 10.68 percent growth rate year on year which is followed by economic service at 7.81 percent growth rate and social service at 2.73 percent growth rate.

Table 4.15: Major Sources of Non-Tax Revenue (in percent)

Sl.	Item of Non-Tax Revenue	Assumptions
1	Interest & Dividend	7.39 percent increase year on year
2	General Services	10.68percent increase year on year
	(i) Police	13.88 percent increase year on year
	(ii) Public Works	5.51 percent increase year on year
	(iii) Other Administrative service	5.20 percent increase year on year
	(iv) Miscellaneous service	19.71 percent increase year on year
3	Social Services	2.73 percent increase year on year
	(i) Education, sports, culture etc.	3.31 percent increase year on year
	(ii) Water supply	3.16 percent increase year on year
	(iii) Housing	5.13 percent increase year on year
4	Economic Services	7.81 percent increase year on year
	(i) Crop Husbandry	4.73 percent increase year on year
	(ii) Animal Husbandry	1.76percent increase year on year

	(iii) Forestry	5.79percent increase year on year
	(iv) Industry	17.61percent increase year on year

Source: Author's estimation

From Table 4.15, it is also observed that general service is the major sources of non-tax revenue. Out of that the non-tax revenue, the revenue increases from the police heads at the growth rate of 13.88 percent, from the public works the non-tax revenue increases at 5.51 percent growth rate. From the economic service, the major portion of the non-tax revenue comes from the industry at the growth rate of 17.61 percent, which is followed by the forestry at the rate 5.79 percent. From the social service, non-tax revenue comes from housing at the growth rate 5.13 percent, which is followed by education, sports, culture etc. (3.31 percent), water supply (3.16 percent) etc. From the interest and dividend the non-tax revenue comes at the rate 7.39 percent.

The projected capital expenditure is also estimated based on both compound annual growth (CAGR) and also natural logarithmic method. Table 4.16 shows the projected capital expenditure based on CAGR for the period 2026-27 to 2030-31. It is observed that estimated total capital expenditure during 2026-27 is Rs.3403.92 crore; out of that major estimated expenditure is on economic service (Rs.1881.17 crore) which is followed by social service (Rs.1198.28 crore) and general service (Rs.324.46 crore). For 2030-31, the estimated projected capital expenditure is Rs.4558.95 crore and out of that major estimated expenditure is on economic service (Rs.2512.25 crore) which is followed by social service (Rs.1618.21 crore) and general service (Rs.428.50 crore). For the entire period the estimated projected capital expenditure is Rs.19801.83 crore. The estimated projected expenditure for general service is Rs.1873.37 crore, Rs.10926.59 crore for economic service and Rs.7001.87 crore for social service.

Table 4.16: Projected Capital Expenditure (Rs. in Crore) (Based on CAGR)

Year	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
General Service (including Interest Payments)	324.46	347.83	372.87	399.72	428.50	1873.37
Economic Service	1881.17	2022.26	2173.93	2336.98	2512.25	10926.59
Social Service	1198.28	1291.75	1392.51	1501.12	1618.21	7001.87
Total Capital Expenditure	3403.92	3661.84	3939.31	4237.81	4558.95	19801.83

Source: Author's estimation

Table 4.17 shows the projected capital expenditures based on natural logarithmic growth for the period 2026-27 to 2030-31. It is found that estimated total capital expenditures during 2026-27 is Rs.3108.98 crore; out of that major estimated expenditure is on economic services (Rs.1688.65 crore) which is followed by social services (Rs.1123.21crore) and general services (Rs.297.12 crore). For 2030-31, the estimated projected capital expenditures is Rs.3693.17 crore and out of that major estimated expenditure is on economic services (Rs.1952.79 crore) which is followed by social services (Rs.1391.36 crore) and social service (Rs.348.93crore). For the entire period the estimated projected capital expenditures is Rs.16972.86 crore. The estimated projected expenditure for general services is Rs.1612.53 crore, Rs.9091.60 crore for economic services and Rs.6268.73 crore for social services.

Table 4.17: Projected Capital Expenditure (Rs. in Crore) (Based on natural logarithmic growth)

Year	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
General Service (including Interest Payments)	297.12	309.30	321.99	335.19	348.93	1612.53
Economic Service	1688.65	1751.13	1815.92	1883.11	1952.79	9091.60
Social Service	1123.21	1184.99	1250.16	1318.92	1391.46	6268.73
Total Capital Expenditure	3108.98	3245.42	3388.07	3537.22	3693.17	16972.86

Source: Author's estimation

Table 4.18 shows the growth rate of major heads of projected capital expenditure. It is observed that capital expenditure for general services at 7.2 percent growth rate as per CAGR method; however it is only 4.1 percent in case of natural growth. The capital expenditure on economic service grows at 7.5 percent as per CAGR method; however it is 3.7 percent as per natural growth. The capital expenditure on social service increases at 7.8 percent as per CAGR; whereas it increases at 5.5 percent natural growth.

Table 4.18: Growth of Major Heads of Projected Capital Expenditure (in percent)

Sl.	Tax Revenue	Based on CAGR (year on year)	Based on Compounded Natural Logarithmic Growth (year on year)
1	General Service (including Interest Payments)	7.2 percent	4.1 percent
2	Economic Service	7.5 percent	3.7 percent
3	Social Service	7.8 percent	5.5 percent

Source: Author's estimation

Table 4.19 is tabulated from the estimation according to the Natural Logarithmic Growth where 17.4 percent growth is shown by Salaries & Wage, 21.5 percent by Pension and 14.3 percent by Other Revenue Expenditure. But, for Salaries & Wage and Pension 30 percent boost up based on the 2025-26 is given to equate with the said heads with Central DA for 2026-27.

Table 4.19: Percent Increase Year on Year of the Various Heads of Development Expenditures (in percent)

Year	Salaries & Wages	Pension	Other Revenue Expenditure	Interest Payments
2026-27	40.4 percent	44.5 percent	14.3 percent	As per the Repayment Schedule and borrowing trends
2027-28	17.4 percent	21.5 percent	14.3 percent	
2028-29	17.4 percent	21.5 percent	14.3 percent	
2029-30	17.4 percent	21.5 percent	14.3 percent	
2030-31	17.4 percent	21.5 percent	14.3 percent	

Source: Author's calculation

4.4 Measurement of Efficiency of Expenditure: Allocative & Technical Efficiency

Measuring the efficiency of expenditure is crucial to ensure that resources are utilized optimally in Tripura. Allocative and technical efficiency are two key concepts used to evaluate the efficiency of expenditure.

Allocative Efficiency:

Allocative efficiency refers to the optimal allocation of resources among different sectors or programs to achieve the desired outcomes. In Tripura, allocative efficiency can be measured by analysing the allocation of resources across different sectors, such as:

1. Education
2. Healthcare

Indicators of Allocative Efficiency:

1. Sectoral allocation of budget
2. Prioritization of programs and projects
3. Alignment of expenditure with policy objectives
4. Efficiency of resource allocation in achieving desired outcomes
5. Expenditure-GSDP ratio (in percent)

Technical Efficiency:

Technical efficiency refers to the optimal use of resources within a specific sector or program to produce the desired outputs. In Tripura, technical efficiency can be measured by analyzing the inputs, outputs, and productivity indicators of different sectors, such as:

1. Healthcare: hospital beds, doctors, nurses and other medical staffs (excluding doctors), and patient under the treatments
2. Education: student-teacher ratio, infrastructure, and academic performance
3. Infrastructure: road length (inclusive of state highway, village road and black topped road), transportation networks, and bridges and culverts

Measurement Techniques:

Data Envelopment Analysis (DEA) technique is used for measuring technical efficiency, allocative efficiency and total factor productivity. By applying this measurement technique and indicators, Tripura can evaluate the allocative and technical efficiency of its expenditure, identifying areas for improvement and optimizing resource allocation to achieve better outcomes.

The Malmquist Index (MI) is a widely used measure of total factor productivity (TFP) growth, which is a key indicator of economic performance. The Malmquist index is a productivity index that measures the change in TFP over time. It's a ratio of the current period's TFP to the previous period's TFP, adjusted for changes in technology and technical efficiency. MI can measure productivity changes over time, presenting the shifts in terms of efficiency change (TE) and technological change or technological progress (TP). So, the Malmquist index can be decomposed into two components viz.

1. ***Technical Efficiency Change (TE)***: Measures the change in technical efficiency, which reflects the ability of firms to produce maximum output given their inputs.

If $TE > 1$, then it indicates an improvement in technical efficiency, meaning that the department is producing more output with the same inputs.

If $TE = 1$, then it indicates no change in technical efficiency.

If $TE < 1$, then it indicates a decline in technical efficiency.

2. ***Technological Progress (TP)***: Measures the change in technology, which reflects the shift in the production frontier over time.

If $TP > 1$, then it indicates technological progress, meaning that the production frontier has shifted outward.

If $TP = 1$, then it indicates no technological progress.

If $TP < 1$, then it indicates technological regress.

Interpretation of Malmquist Index Values:

- Malmquist Index > 1 : Indicates an increase in TFP, meaning that the economy is producing more output with the same or fewer inputs.
- Malmquist Index $= 1$: Indicates no change in TFP, meaning that the economy is maintaining its current productivity level.
- Malmquist Index < 1 : Indicates a decrease in TFP, meaning that the economy is producing less output with the same or more inputs.

By analyzing the Malmquist Index and its decomposed components, policymakers and researchers can gain insights into the drivers of productivity growth and identify areas for improvement.

Table 4.20 shows the total factor productivity under variable returns to scale of the school education department. Both secondary education and higher secondary are taken together. Due to data limitation, the Malmquist Index is calculated using the data for the period 2013-14 to 2023-24. Here, four variables such as success rate of both Class-X and Class-XII, total enrolment of the students and Mid-Day Meal (MDM) coverage of the students are considered as output variable and amount utilized is considered as input.

Table 4.20: Malmquist Index for Total Factor Productivity of School Education Department

Year	Efficiency Change	Technological Change	Pure Efficiency Change	Scale Efficiency Change	Total Factor Productivity Change
2013-14	1	0.862	1	1	0.862
2014-15	1	0.748	1	1	0.748
2015-16	1	0.94	1	1	0.94
2016-17	1	0.846	1	1	0.846
2017-18	1	0.814	1	1	0.814
2018-19	1	0.871	1	1	0.871
2019-20	1	0.985	1	1	0.985
2020-21	1	1.119	1	1	1.119
2021-22	1	1.006	1	1	1.006
2022-23	1	1.159	1	1	1.159
2023-24	1	0.89	1	1	0.89
Mean	1	0.923	1	1	0.923

Source: Author's computation

It is found that technological change is less than one except 2020-21 which indicates the technologically regressive. The total factor productivity change of school education is less than one except 2020-21 which is indicates that the department is producing less output in all years except 2020-21, 2021-22 and 2022-23. The mean total factor productivity is 0.923. The constant efficiency change (value equal to one) indicates there is no change in technical efficiency over different time period. However the indices obtained from Malmquist DEA reveals that there is decline in technological change and total factor productivity.

Table 4.21 shows the total factor productivity under variable returns to scale of the Health Department. It is found that the total factor productivity is least (0.348) during Covid-19 pandemic year as the number of patient was least compared to other years. The common people tried to avoid the hospital due to Covid spreading or fear of isolation, unless there is life urgency or life threatening. The highest total factor productivity (2.870) and technological changes are observed during 2019-20. The mean total factor productivity of health is 1.030 for the period 2013-14 to 2022-23 which indicates health department is more productive and efficient.

Table 4.21: Malmquist Index for Total Factor Productivity of Health Department

Year	Efficiency Change	Technological Change	Pure Efficiency Change	Scale Efficiency Change	Total Factor Productivity Change
2013-14	1	0.813	1	1	0.813
2014-15	1	1.064	1	1	1.064
2015-16	1	0.482	1	1	0.482
2016-17	1	1.44	1	1	1.440
2017-18	1	0.730	1	1	0.730
2018-19	1	1.698	1	1	1.698
2019-20	1	2.870	1	1	2.870
2020-21	1	1.274	1	1	1.274
2021-22	1	0.348	1	1	0.348
2022-23	1	1.414	1	1	1.414
mean	1	1.030	1	1	1.030

Source: Author's computation

Table 4.22 shows the total factor productivity under variable returns to scale of the Public Works Department. It is found that the total factor productivity is least and technological change is regressive during 2020-21. Otherwise the total factor productivity is greater than one which indicates that the department is producing more output with the same or fewer inputs. The mean

value of total factor productivity is 1.07. The technical efficiency is surprisingly observed that it is equal to one which indicates that there is no change in technical efficiency.

Table 4.22: Malmquist Index for Total Factor Productivity of Public Works Department

Year	Efficiency Change	Technological Change	Pure Efficiency Change	Scale Efficiency Change	Total Factor Productivity Change
2017-18	1	1.466	1	1	1.466
2018-19	1	1.224	1	1	1.224
2019-20	1	1.359	1	1	1.359
2020-21	1	0.567	1	1	0.567
2021-22	1	1.015	1	1	1.015
mean	1	1.07	1	1	1.070

Source: Author's computation

Measuring Allocative Efficiency

In order to measure the allocative efficiency, expenditure ratio is taken for the study. Expenditure ratio compares the proportion of public spending allocated to different sectors like health, education, infrastructure, etc., to assess if the allocation is in line with national priorities.

Table 4.23 shows the allocation of fund of revenue expenditure and capital expenditure for the social service over the time period 2010-11 to 2023-24. It is observed that out of total GSDP, percentage of allocated fund for social service lies between 11 to 13 percent. Out of the total fund allocated for the social service, fund used for revenue expenditure is more than capital expenditure spend on social service.

Table 4.23: Allocation of Revenue Expenditure and Capital Expenditure during 2010-11 to 2023-24 (in percent of GSDP)

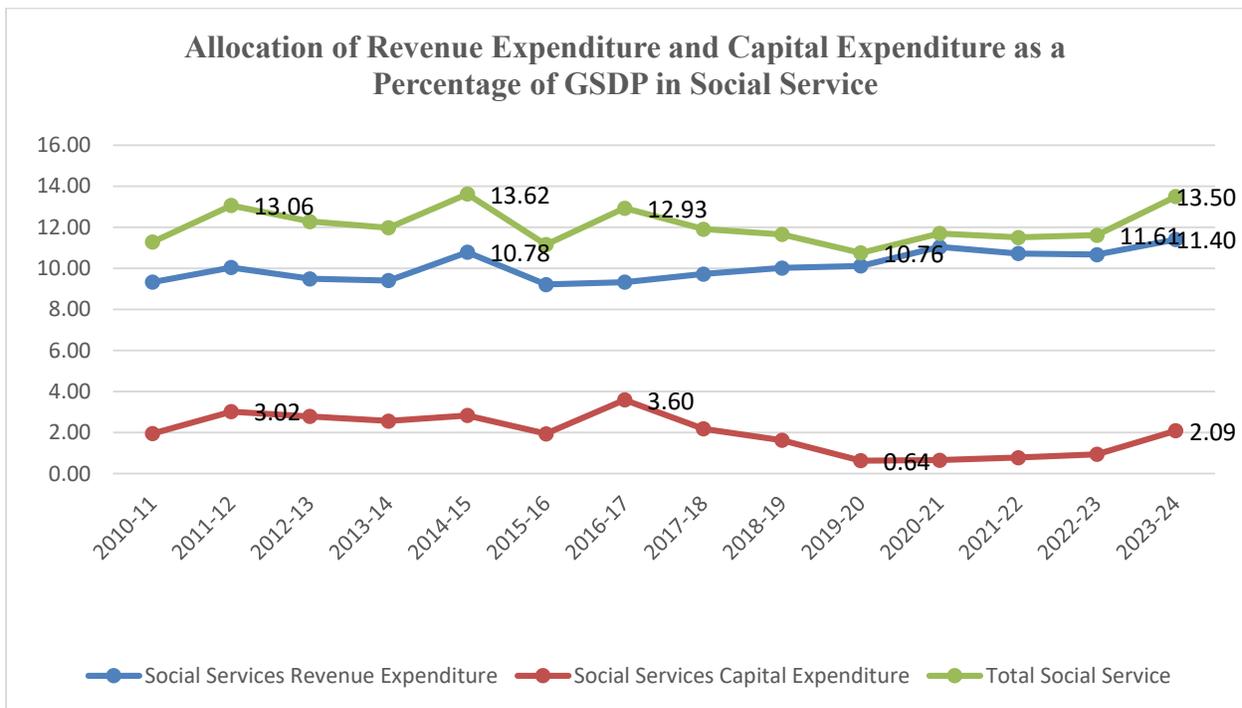
Year	Social Services Revenue Expenditure	Social Services Capital Expenditure	Total Social Service
2010-11	9.33	1.95	11.28
2011-12	10.04	3.02	13.06
2012-13	9.49	2.79	12.28
2013-14	9.41	2.57	11.98
2014-15	10.78	2.84	13.62
2015-16	9.21	1.94	11.16
2016-17	9.33	3.60	12.93

2017-18	9.72	2.18	11.91
2018-19	10.02	1.63	11.65
2019-20	10.12	0.64	10.76
2020-21	11.04	0.66	11.70
2021-22	10.72	0.78	11.50
2022-23	10.67	0.95	11.61
2023-24 (RE)	11.40	2.09	13.50

Source: Computed from <https://ecostat.tripura.gov.in> and Ministry of Finance, Govt. of Tripura

Figure 4.2 shows the trend of fund allocation on social service during 2010-11 to 2023-24. It is observed that percentage of allocation of fund out of GSDP for the social service is maximum (13.62 percent) during 2014-15 though in the following the percentage of allocation of fund for the social service is decreased. During 2019-20, the percentage of allocation of fund for the social service is minimum (10.76 percent).

Figure 4.2: Allocation of Revenue Expenditure and Capital Expenditure as a Percentage of GSDP in Social Service



Source: Computed from <https://ecostat.tripura.gov.in> and Ministry of Finance, Govt. of Tripura

Table 4.24 shows the department-wise fund allocation for the social service during 2010-11 to 2023-24. It is observed that fund allocated for the education, sports and culture is more compare to other services viz. social security and welfare, health, urban development, housing etc.

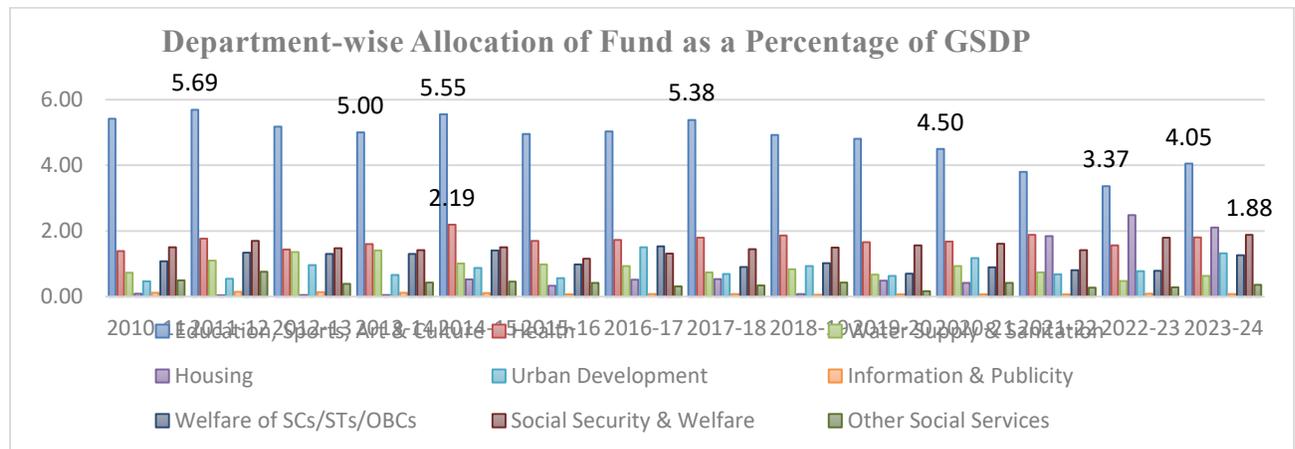
Table 4.24: Department-wise Allocation of Fund for the Social Service during 2010-11 to 2023-24 (in percent of GSDP)

Year	Education, Sports, Art & Culture	Health	Water Supply & Sanitation	Housing	Urban Development	Information & Publicity	Welfare of SCs/ STs/ OBCs	Social Security & Welfare	Other Social Services	Total Social Service
2010-11	5.41	1.39	0.73	0.09	0.46	0.12	1.08	1.51	0.49	11.28
2011-12	5.69	1.77	1.10	0.04	0.54	0.15	1.34	1.69	0.75	13.06
2012-13	5.17	1.44	1.36	0.05	0.96	0.13	1.30	1.47	0.39	12.28
2013-14	5.00	1.60	1.41	0.05	0.66	0.12	1.30	1.41	0.42	11.98
2014-15	5.55	2.19	1.01	0.52	0.87	0.11	1.40	1.51	0.45	13.62
2015-16	4.95	1.70	0.98	0.33	0.56	0.07	0.98	1.15	0.42	11.16
2016-17	5.02	1.73	0.93	0.52	1.51	0.08	1.53	1.31	0.31	12.93
2017-18	5.38	1.79	0.74	0.53	0.69	0.08	0.90	1.44	0.34	11.91
2018-19	4.93	1.87	0.84	0.08	0.93	0.06	1.02	1.49	0.43	11.65
2019-20	4.81	1.66	0.67	0.48	0.63	0.07	0.70	1.56	0.17	10.76
2020-21	4.50	1.68	0.93	0.42	1.17	0.07	0.90	1.61	0.42	11.70
2021-22	3.79	1.88	0.74	1.84	0.68	0.07	0.81	1.41	0.27	11.50
2022-23	3.37	1.56	0.48	2.48	0.77	0.09	0.79	1.79	0.28	11.61
2023-24	4.05	1.80	0.63	2.11	1.32	0.08	1.26	1.88	0.36	13.50

Source: Computed from <https://ecostat.tripura.gov.in> and Ministry of Finance, Govt. of Tripura

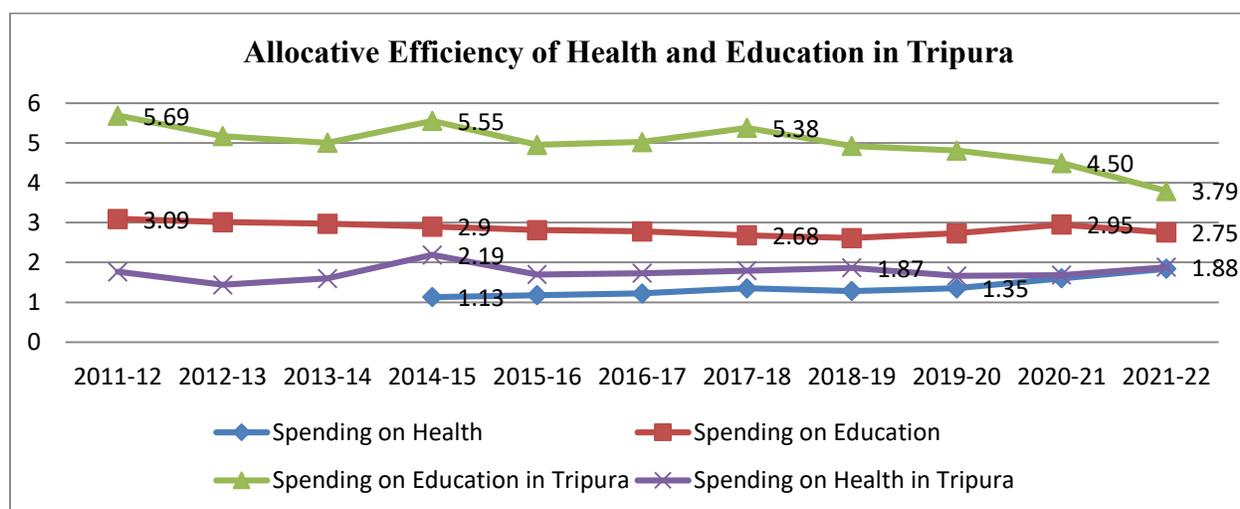
Figure 4.3 shows department-wise allocation of fund as a percentage of GSDP. From the figure, it is observed that though the fund allocated as percentage of GSDP for education, sports and culture is high compare to other department but the percentage of allocation decreases over time. During 2022-23 the allocated fund for education decreases to 3.7 percent of GSDP, though in during 2023-24 it increases slightly to 4.05 percent of GSDP.

Figure 4.3: Department-wise Allocation of Fund as a Percentage of GSDP during 2010-11 to 2023-24



Source: Computed from <https://ecostat.tripura.gov.in> and Ministry of Finance, Govt. of Tripura

Figure 4.4: Allocative Efficiency of Health and Education in Tripura during 2011-12 to 2021-22



Source: Computed from <https://ecostat.tripura.gov.in>, <https://pib.gov.in>, Ministry of Finance, Govt. of Tripura and Report on Analysis of Budgeted Expenditure 2019-20 to 2021-22, published by Ministry of Education, Govt. of India

Figure 4.4 shows the allocative efficiency of health and education department in Tripura. The trend line shows that the state Tripura has allocated more fund in education and health compare to the trend of national average. During 2011-12, the state allocated 5.69 percent on education against the national percentage 3.09 percent. During 2014-15, the percentage of allocated fund on education was 5.55 percent against the national percentage 2.9 of GDP. During 2017-18, the allocated fund on education was 5.38 percent against the national percentage 2.68. After 2017-18, the allocated fund on education decreases gradually and it reaches to 3.79 percent of GSDP in 2021-22; whereas the national percentage is 2.75 percent of GDP. The allocated fund on health is maximum 2.19 percent of GSDP during 2014-15 against the national percentage only 1.13 of GDP. After 2014-15, the percentage of allocated fund on health gradually decreases in Tripura. However, it is observed that the allocated percentage is better than national average. During 2021-22 the percentage of allocated fund on health in Tripura is almost at par the national average.

4.5 Fiscal Deficit & Revenue Deficit

Table 4.25 shows the projected revenue deficit and fiscal deficit using CAGR with taking 19 years data set. From the Table 4.25, it is observed that the projected revenue surplus and fiscal deficit during this the forthcoming period 2026-27 to 2030-31 will be Rs.4817.84 crore and Rs.10219.31

crore respectively. The projected revenue surplus is about 1 percent whereas, the projected fiscal deficit is about 2 percent. This implies that the state will achieve and follow the FRBM Act.

Table 4.25: Projected Revenue Deficit and Fiscal Deficit (Based on CAGR)

Year	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
Revenue Deficit (+) / Surplus (-) (Rs. crore)	-805.02	-877.48	-956.45	-1042.53	-1136.36	-4817.84
Fiscal Deficit (+) / Surplus (-) (Rs. crore)	1845.75	1939.88	2038.81	2142.79	2252.08	10219.31
GSDP	89028.00	95616.07	102691.66	110290.84	118452.36	516078.93
Revenue Deficit as Percentage of GSDP	-0.90	-0.92	-0.93	-0.95	-0.96	-0.93
Fiscal Deficit as Percentage of GSDP	2.07	2.03	1.99	1.94	1.90	1.98

Source: Author's Estimation

Table 4.26: Projected Revenue Deficit and Fiscal Deficit (Based on Natural Logarithmic Growth)

Year	2026-27	2027-28	2028-29	2029-30	2030-31	2026-31
Revenue Deficit(+)/Surplus(-) (Rs. crore)	-793.27	-861.49	-935.58	-1016.04	-1103.42	-4709.82
Fiscal Deficit (+) / Surplus (-) (Rs. crore)	2230.94	2458.50	2709.26	2985.61	3290.14	13674.44
GSDP (Rs. Crore)	91119.73	98318.19	106085.32	114466.06	123508.88	533498.19
Revenue Deficit as Percentage of GSDP	-0.87	-0.88	-0.88	-0.89	-0.89	-0.88
Fiscal Deficit as Percentage of GSDP	2.45	2.50	2.55	2.61	2.66	2.56

Source: Author's Estimation

Table 4.26 shows the projected revenue deficit and fiscal deficit using natural logarithmic growth with taking 19 years data set. From the Table 4.26, it is observed that the projected revenue surplus and fiscal deficit during this the forthcoming period 2026-27 to 2030-31 will be Rs.4709.82 crore and Rs.13674.44 crore respectively. The projected revenue surplus is about 1 percent whereas, the projected fiscal deficit is less than 3 percent and it is about 2.5 percent. This implies that the state will achieve and follow the FRBM Act.

4.6 Recommendations

For enhancing Revenue Productivity

To enhance the revenue productivity the following suggestions are recommended.

- To enhance revenue capacity, the secondary sector and tertiary sector should be focused. The impact of secondary sector is more than the tertiary sector in generating the revenue.

- The state should increase capital expenditure in order to generate more revenue in future. The infrastructural development especially for the rural area is needed in this respect.
- Though the total tax buoyancy and own taxes of the state are elastic and impressive, however the state can take proper steps to increase tax responsiveness.
- The growth rate of non-tax revenue is smaller than state own tax revenue. The buoyancy of the non-tax revenue is not impressive. There is a scope of generating more non-tax revenue through enhancing user fee which is already recommended in Section 3.10 of Chapter 3.
- For the projected revenue receipt and projected expenditure of the state during 2026-27 to 2030-31, natural logarithmic method is recommended as it captures year-on-year changes including longrun aspects of revenue and expenditure of the state. The projected pre-devolution revenue deficit is estimated and recommended of Rs.172642.66 crore during 2026-31 period.
- In order to meet the gap between the Central Government employees' DA and State employees' DA the salary and wage calculation is done by increasing 30 percent boost up during 2026-27. Thereafter, another 7 percent DA is added annually including the usual 10.4 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.
- For pension expenditure, boosting of 30 percent is recommended from 2026-27 to equate the Central Govt. employee DA. Thereafter, another 7 percent DA is added annually including the usual 14.5 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

For Improving Efficiency in Public Spending

- Though allocative efficiency is better in education sector compare to national average, but it is observed the trend of allocation of fund as percentage of GSDP is decreasing from 2017-18. The allocation of fund on health is just at par with national average which is also not sufficient for the state which is situated at the remote corner of the country. Therefore, it is recommended for allocation of more fund as percentage of GSDP on education and health, because it can improve the human capital of the state.
- It is observed that the mean technical efficiency of the education sector is less than one. In order to improve the technical efficiency of the education department, the state should take the necessary measures to improve the output viz. physical infrastructure and human capital infrastructure (Teacher-student ratio).

Chapter 5

Devolution of Share of Central Taxes and Revenue Deficits Grants & View of the State Government

This chapter contains 11 sections and covers the four Terms of References given by the Finance Commissions (viz. 5, 6, 8 and 9). Section 5.1 focuses on the basic terms of references. Section 5.2 and 5.3 highlight the views on vertical and horizontal devolution. Section 5.4 and 5.5 highlight revenue deficit grants and sources of debt and borrowing which also covers TOR # 5. Section 5.6 covers the TOR # 6. Section 5.7 discusses about various departments and aggregates. Section 5.8 and 5.9 cover the TOR # 8. Section 5.10 covers the TOR #9. Section 5.11 highlights the recommendations.

5.1 Terms of Reference

- **Division of Tax Proceeds:** The distribution between the net proceeds of taxes between the Union and the States and the allocation of the respective shares of such proceeds between the States.
- **Principles for Grants-in-Aid:** The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under article 275 of the Indian Constitution.
- **Enhancing State Funds for Local Bodies:** The measures needed to augment the Consolidated Fund of a State to supplement the resources of the local government (Panchayats and Municipalities in the State) on the basis of the recommendations made by the State Finance Commission.
- **Evaluation of Disaster Management Financing:** The review of the present arrangements on financing Disaster Management initiatives as per the Disaster Management Act, 2005, and make appropriate recommendations thereon.

5.2 Views on Vertical Devolution

Table 5.1 shows the distribution of vertical devolution of the previous Finance Commissions It also reveals the proposed vertical devolution for the present Finance Commission.

Table 5.1: Vertical Devolutions of the Finance Commissions

Finance Commission	Vertical Devolution	Inter-se share of State
XI Finance Commission	29.50%	0.487%
XII Finance Commission	30.50%	0.428%
XIII Finance Commission	32.00%	0.511%
XIV Finance Commission	42.00%	0.642%
XV Finance Commission	42.00% (41% for all States and 1% for J&K)	0.708%
XVI Finance Commission	45%	

Source: Compiled from previous Finance Commissions.

It is recommended that the central share should be 45% of the total divisible pool.

5.3 Views on Horizontal Devolution

The weights for the horizontal devolution of funds are suggested in Table 5.2 as per the parameters given in the earlier Finance Commissions.

Table 5.2: Horizontal Devolutions of the Finance Commissions

Criteria	Weight (%)					Proposed
	XI	XII	XIII	XIV	XV	XVI
Population	10.00	25.00	25.00	17.50	15.00	10.00
Area	7.50	10.00	10.00	15.00	15.00	10.00
Forest & Ecology	-	-	-	-	10.00	20.00
Forest Cover	-	-	-	7.50	-	
Income distance	62.50	50.00	-	50.00	45.00	40.00
Fiscal Capacity Distance	-	-	47.50	-	-	
Fiscal Discipline	7.50	7.50	17.50	-	-	
Tax & fiscal efforts	5.00	7.50	-	-	2.50	2.50
Demographic performance	-	-	-	-	12.50	10.00
Demographic changes	-	-	-	10.00	-	
Index of Infrastructure	7.50					7.50
Total	100.0	100.00	100.00	100.0	100.00	100.00

Source: Compiled from previous Finance Commissions and author's compilation.

The criteria for the vertical devolution of funds under 16th Finance Commission is proposed to reflect a shift towards equity, ecological considerations, and rewarding demographic performance. In order to ensure comprehensive and sustainable growth, a well-rounded strategy that rewards budgetary restraint, infrastructural development, and dynamic performance is essential.

Population: The weight given to the population has decreased from 25 percent in the 12th and 13th Finance Commissions to 15 percent in the 15th Finance Commission grants proposal, reflecting a shift from population-based allocations to development and ecological considerations. In order to achieve sustainable development results, it is imperative to maintain a balance between efficiency and equity when reducing the weight of population and income distance. This redistribution of weights is essential towards effective resource usage.

Geographical Area: The weight assigned to geographical areas has consistently remained 15 percent during the last two Finance Commissions; though in 12th and 13th Finance Commission the weight is assigned 10 percent. It is proposed to keep 10 percent weight for the 16th Finance Commission period. The weight for geographical areas should be reduced otherwise the smaller states will be deprived. Productive geographical area is more important compared to total geographical area.

Forest and Ecology: In order to achieve green GDP, criteria pertaining to forests have been suggested as a top priority. Forest cover and ecology are more significant than just forest cover alone. It has been suggested that the weight assigned to "Forest and Ecology" be increased from 10 percent in the 15th Finance Commission to 20 percent in the current plan. Twenty percent weighting is advised in order to support and promote the pollution-free green GDP-based economy. The state governments would be more motivated to enhance carbon credits and environmental sustainability measures if forest cover and ecology were given more weight.

Income Distance: The gap between a state's income and that of the highest-earning state is known as the "income distance." In the past Finance Commissions, income distance was a highly weighted criterion. The weight was reduced from 62.5 percent in the 11th Finance Commission to 50 percent in the 12th Finance Commission, and then it was gradually reduced after that. It is suggested at 40 percent in the current proposal. The rationale for lowering the weight is to promote the state's independence.

Tax and Fiscal Efforts: In previous Finance Commissions, Tax and Fiscal Efforts has been continuously assigned a low weight (between 2.5 and 7.5 percent). It is proposed to be continued in the current proposal.

Demographic Performance: Demographic performance rather than demographic changes is an important criterion for horizontal devolution, because it attempts to reward the states in controlling population growth. Demographic Performance was introduced in the 15th Finance Commission

(12.5 percent) and it is proposed to be retained with a reduced weight of 10 percent in the present proposal.

Index of Infrastructure: Index of Infrastructure was introduced as a feature only in the 11th Finance Commission (7.5 percent) and it is proposed to reintroduce in the XVI proposal (7.5 percent). Infrastructure is a key determinant of development. Increasing its weight (beyond 7.5 percent) can incentivize states to invest in long-term growth and economic competitiveness. The North-eastern states especially Tripura is facing cost-disadvantages situation due to its remote location and diverse topography. Here, 7.5 percent weightage is suggested to the infrastructure for the improvement of financial health of these states situated in the remote location of the country.

5.4 Revenue Deficit Grants

The state's Projected Pre-devolution Deficit for the 16th Finance Commission period is Rs.172295.21 crore based on the natural logarithmic growth method; specifics are provided in Section 4.3. Salary & Wages and Pensions expenditures have grown by 30 percent to bring the State DA up to par with the Central DA, which has resulted in a considerable increase in total spending.

5.5 Sources of Debt and Borrowing

Table 5.3 outlines the major sources of loans taken by the state from 2004-05 to 2023-24. It includes data for various types of loans and debts such as SDLs (State Development Loans), Power Bonds, NSSF (National Small Savings Fund), Loans from LIC (Life Insurance Corporation), Loans from NABARD (National Bank for Agriculture and Rural Development), and Loans from other institutions. It also includes the total internal debt and loans from banks and financial institutions (FIs). The table highlights the state's increasing dependence on SDLs, NSSF, and NABARD, alongside growing internal debt and borrowing from financial institutions, reflecting a rising reliance on debt to fund state expenditures with fluctuations based on fiscal needs and economic conditions. It is found that SDLs have steadily increased over time, reflecting a rising reliance on state-specific loans. SDLs has increased from Rs.1088.51 crore in 2004-05 to Rs.9538.83 crore in 2023-24. Increased support for agricultural and rural development is suggested by the steady rise in NABARD loans, which reached a noteworthy peak (Rs.1783.40 crore) in 2023-2024 from Rs.6.57 crore in 2004-05. It is also found that loans from LIC has decreased significantly, and in 2023-24 the amount of loan taken by the state is less than Rs.1 crore. The

amount of loan from NSSF is gradually increased up to 2015-16 (Rs.1534.39 crore), and after that the amount of loan by the state has decreased. In 2023-24, the amount of loan from NSSF is only Rs.598.44crore.

Table 5.3: Major Sources of Loan Taken by the State during 2004-05 to 2023-24 (Rs. in Crore)

Year	Market Loan (SDL)	LIC	NABARD	Compensation & Other Bonds	NCDC	Securities issued to NSSF of central Govt.	Other loan	Total Internal Debt
2004-05	1088.51	285.85	6.57	0.00	0.82	762.00*	60.14	2203.89
2005-06	1207.79	226.75	1.29	0.00	0.65	961.00*	7.18	2404.67
2006-07	1159.40	210.46	15.47	57.16	0.26	1114.24	6.98	2563.97
2007-08	1113.91	194.76	56.98	50.81	0.26	1114.79	10.76	2542.27
2008-09	1191.94	176.87	94.59	47.63	0.20	1096.16	8.25	2615.64
2009-10	1443.94	160.55	156.16	41.28	0.31	1130.99	7.68	2940.91
2010-11	1636.15	144.38	230.41	34.93	0.25	1266.39	7.18	3319.69
2011-12	1862.58	128.25	304.94	28.58	0.19	1230.32	4.03	3558.87
2012-13	2388.15	112.30	366.26	22.23	0.05	1215.53	3.62	4108.13
2013-14	2860.51	96.47	504.69	12.70	8.58	1233.06	3.22	4719.24
2014-15	2892.48	80.94	633.59	6.35	8.14	1358.13	2.86	4982.50
2015-16	3247.95	65.65	823.39	0.00	6.81	1534.39	2.53	5680.72
2016-17	4001.33	50.56	853.26	0.00	6.43	1421.82	2.25	6335.65
2017-18	5138.01	35.77	909.55	0.00	4.51	1308.62	2.00	7398.47
2018-19	6524.83	20.50	883.68	0.00	2.60	1193.36	1.80	8626.78
2019-20	9102.83	6.56	838.53	0.00	3.74	1074.38	1.65	11027.69
2020-21	10733.83	17.69	927.54	0.00	3.99	955.39	1.19	12639.64
2021-22	10733.83	10.82	950.11	0.00	4.67	836.41	1.19	12537.04
2022-23	10088.83	3.95	1272.75	0.00	13.55	717.43	1.19	12097.69
2023-24	9538.83	0.75	1783.40	0.00	6.82	598.44	1.12	11929.36

Source: <https://cag.gov.in/ae/tripura/en>

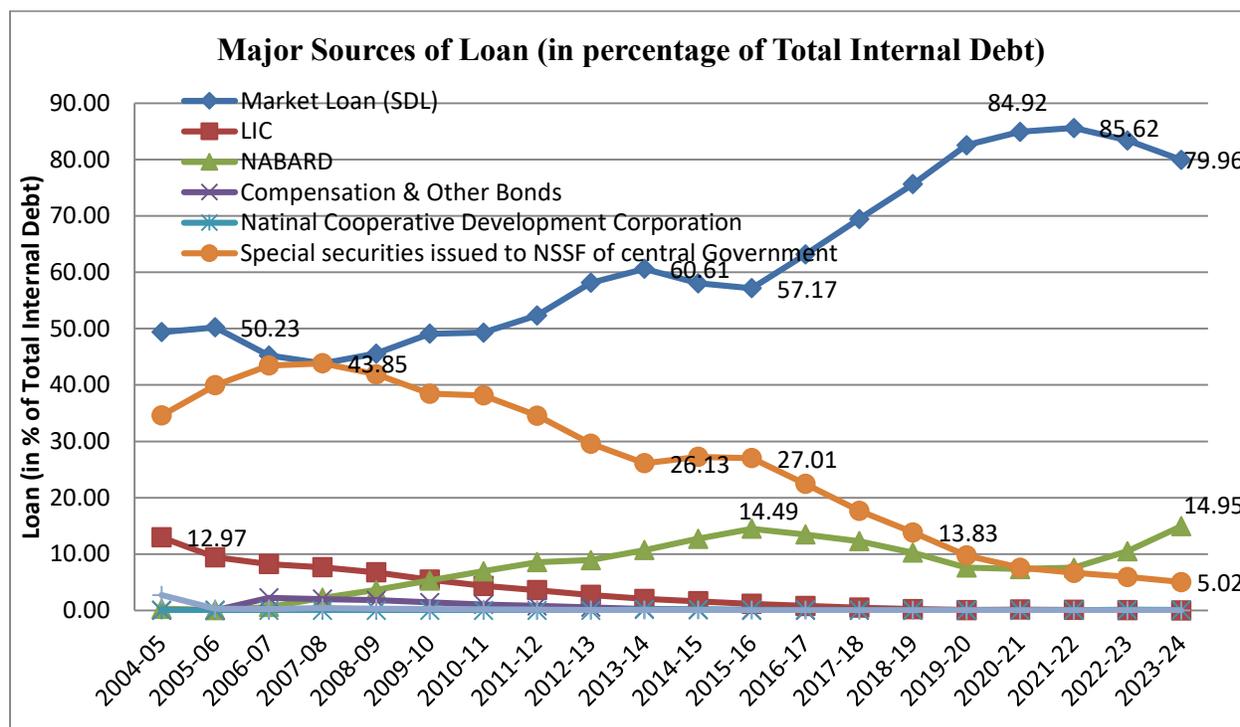
Note: * Collected from RBI Hand of Statistics on Indian States

The amount of loan from National Cooperative Development Corporation (NCDC) has increased over time though the amount is not very small compared to other loan. Earlier, the state gov. collected some loan through selling of govt. bonds, but after 2014-15 no amount has been collected from it. The total internal debt has been on an upward trajectory, it was Rs.2203.89 crore during 2004-05 and reaching Rs.11929.36 crore in 2023-24, an indication of growing fiscal reliance on

debt financing over the years. The amount of total internal debt is highest (Rs.12639.64 crore) in the year 2020-21.

Figure 5.1 shows the trend of percentage of loan out of total internal debt taken from the major sources. It is found that the state has collected major loan from the market (SDL). Out of the total internal debt, the state has collected 79.96 percent loan from SDL. Loan taken from LIC has decreased and it is less than one percent out of the total internal debt at present.

Figure 5.1: Trends of Loan from Major Sources during 2004-05 to 2023-24 (in percent of Total Internal Debt)



Source: <https://cag.gov.in/ae/tripura/en>

It is also significantly observed that the percentage of loan from NABARD increases over the time period. At present, out of total internal debt, the state has taken 14.95 percent loan from NABARD, and 5.02 percent through special securities issued to NSSF.

5.6 Implementation of FRBM Act and Commitment towards Targets

The Fiscal Responsibility of Budget Management (FRBM) Act, 2005 was implemented in Tripura on October 4, 2006 (TFRBM) to ensure fiscal discipline and manage the state finances effectively. It also aims to improve coordination between fiscal and monetary policy, and increase transparency in government fiscal operations. This act requires progressive elimination of revenue

deficit, reduction of fiscal deficit, management of debt cautiously, conduct fiscal policy in a mid-term framework and preparation of Medium Term Fiscal Policy Statement (MTFPS). In order to manage the FRBM Act, the state aims to reduce its fiscal deficit to 2.7 percent of its GSDP. Table 5.4 shows the outcomes of FRBM Act Implemented in Tripura over time.

Table 5.4: Outcomes of FRBM Act Implemented in Tripura during 2006-07 to 2023-24

Year	Revenue Receipts (Rs. in Crore)	Revenue Expenditure (Rs. in Crore)	Revenue Deficit (-)/ Surplus (+) as of GSDP Percentage	Fiscal Deficit (-) / Surplus (+) as of GSDP Percentage	Primary Surplus (+)/ Deficit (-) as of GSDP Percentage	Liabilities – As per cent of Gross State Domestic Product
2006-07	3333.36	2482.56	7.80	1.20	4.76	42.40 [#]
2007-08	3698.34	2793.63	7.67	-0.14	3.22	38.50 [#]
2008-09	4076.78	3129.45	6.98	-1.99	0.92	37.33
2009-10	4401.35	4213.79	1.22	-7.52	-4.87	37.51
2010-11	5168.60	4359.48	4.53	-1.38	1.12	36.17
2011-12	6476.90	4809.23	8.68	1.35	3.91	35.78
2012-13	7050.30	5212.88	8.48	1.55	4.01	35.47
2013-14	7650.18	5948.96	6.65	0.18	2.49	34.09
2014-15	9239.73	7442.91	6.08	-3.55	-1.24	31.61
2015-16	9426.74	7868.47	4.34	-4.59	-2.56	29.16
2016-17	9645.46	8855.14	2.00	-6.41	-4.40	30.14
2017-18	10067.95	10357.22	-0.66	-4.74	-2.71	30.62
2018-19	12030.89	11889.2	0.28	-2.69	-0.64	30.28
2019-20	11001.59	13376.91	-4.39	-6.02	-3.95	33.57
2020-21	13292.40	14367.82	-2.01	-3.57	-1.17	40.17
2021-22	17613.95	16125.24	2.39	0.11	2.35	36.02
2022-23	18309.01	17738.71	0.79	-2.09	-0.19	31.41
2023-24	20538.02	18342.05	2.66	-0.78*	-1.53**	28.71

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and Finance Account, Govt. of Tripura (<https://cag.gov.in/ae/tripura/en>)

Note: # Collected from RBI Handbook of Statistics, * calculated from Ministry of Finance, Govt. of Tripura and ** calculated from Budget at a Glance, 2024-25.

During 2022-23 the state has maintained the permissible fiscal deficit as per the FRBM Act. During 2015-16 to 2020-21 the state has faced very high fiscal deficit. The scenario of the revenue deficit is remarkable; here the data reveals that there is a revenue surplus in the state which is a very good sign for the state.

Table 5.5 shows the achievement of Medium Term Fiscal Policy target during last five year from 2018-19 to 2022-23. It is observed that the state of Tripura has achieved the target of fiscal deficit during last five financial year. In generating own tax revenue the state has fulfilled the target. During last three year the state has crossed the target in generating own tax revenue. In case of fiscal deficit, the state has maintained the fiscal deficit as a percentage of GSDP below the target level which indicates the better fiscal health.

Table 5.5: Achievement vis-a-vis MTFP Target during 2018-19 to 2022-23

Year	Revenue Deficit (-) / Surplus(+) as percentage of GSDP		Fiscal Deficit(-) / Surplus(+) as percentage of GSDP		Total outstanding liabilities as percentage of GSDP		Own tax revenue as percentage of GSDP	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
2018-19	0	0.28	(-)3.25	(-)2.69	34.33	29.66	6.21	3.54
2019-20	0	(-)4.39	(-)3.25	(-)6.02	34.16	32.96	6.52	3.88
2020-21	0	(-)2.01	(-)5.00	(-)3.57	36.30	38.98	3.60	4.36
2021-22	0	2.38	(-)4.50	0.11	34.90	33.74	3.60	4.18
2022-23	0	0.78	(-)4.00	(-)2.08	35.10	28.99	3.70	4.13

Source: www.cag.gov.in

It is observed that the state has also maintained the total outstanding liabilities as a percentage of GSDP below its target level. It is also noticed that the state has performed a revenue surplus in three financial years viz. 2018-19, 2021-22 and 2022-23.

5.7 Analysis of Various Departments and Aggregates

Achievements of Agricultural Sector

Table 5.6 presents a detailed analysis on trends of agricultural production such as rice, maize, wheat and pulses over the time period since 2005-06 to 2021-22. It is observed that growth rate of area under rice cropping is 0.45 percent which means the land used for rice production has increased slightly as the farmers are using their land for rice cropping near the optimization level. However, the growth rate of rice production has increased over time by 2.04 percent. The production of rice is fluctuating over the years with a notable peak in 2016-17 at 814644 MT from 277106 hectore of land.

Table 5.6: Area and Production of Some Important Crops in Tripura during 2005-06 to 2021-22 (Area in ha. & Production in MT)

Year	Rice		Maize		Wheat		Gram		Total Pulses	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
2005-06	256078	607780	2150	2113	2610	5259	939	616	8544	5608
2006-07	250980	620500	2450	2420	984	1827	-	-	8081	5290
2007-08	252897	640422	2123	2125	1023	1889	-	-	5361	3496
2008-09	242966	627174	2093	2046	635	1195	91	88	5796	4181
2009-10	244853	640948	1918	1909	701	1328	121	87	6170	4126
2010-11	262320	701562	3100	4101	800	1600	-	-	7500	5085
2011-12	265999	718304	3743	5058	274	536	-	-	8582	6005
2012-13	254743	713222	3948	5176	334	827	164	127	8439	5958
2013-14	254254	711831	4589	5863	150	300	125	95	12150	8696
2014-15	257273	746954	4519	5963	135	304	250	131	11664	8426
2015-16	269793	794848	8646	12095	182	407	250	195	22327	15463
2016-17	277106	814644	14696	20495	200	460	250	195	24327	16717
2017-18	274290	812092	15736	22473	171	376	235	186	27234	19358
2018-19	269364	793200	15982	22696	157	332	257	171	25854	18918
2019-20	267335	810244	14635	22974	148	330	291	180	24570	18663
2020-21	263793	803032	21784	42748	28	58	140	89	26145	20263
2021-22	255740	810879	19704	40315	28	58	71	45	23714	18263
Growth (%)	0.45	2.04	17.07	21.22	-22.37	-21.42	20.5	18.23	10.95	11.87

Source: Directorate of Agriculture, Government of Tripura

The growth of cultivated land under maize has observed 17.07 percent and the growth rate of maize production increases over time by 21 percent. The fluctuation of maize production is observed with a peak in the year 2020-21 at 42748 MT in the state Tripura.

The growth of cultivated area of land for wheat production is decreased as well as the production of wheat over time has decreased to 22.37 percent and 21.42 percent respectively. The area of wheat has decreased to 28 hector in the year 2021-22 from 2610 hector in the year 2005-06.

The growth rate of area of cultivated land for the production of gram is 20.5 percent indicates the land used for gram production has increased as the farmers of the state Tripura are showing their preference for the cropping of gram. The growth rate of gram production increases over time by 18.23 percent. However, the production area of gram has decreased to 71 hector in the year 2021-

22 from 939 hecter in the year 2005-06. The production of gram has decreased to 45 MT in the year 2021-22 from 616 MT in the year 2005-06.

The cultivated area of total pulses has increased to 23714 hecter in the year 2021-22 and the production of total pulses has also increased for the same from 5608 MT in the year 2005-06 to 18263 MT in the year 2021-22. The growth of cultivated land area on total pulses as well as the growth rate of total production of pulses has increased by 10.95 percent and 11.87 percent respectively from financial year 2006-07 to 2021-22.

Table 5.7 has revealed the area and production of some important horticultural crops such as groundnut, sesamum, rape seed/mustard, total oil seed, and potato in the state of Tripura from 2005-06 to 2021-22. Over the years, Tripura's horticultural sector has shown remarkable growth in the area and production of key crops like groundnut, sesamum, mustard, total oil seeds, and potato. Groundnut and sesamum witnessed significant expansions, with government initiatives such as certified seed distribution and technology transfer programs playing a vital role. Total oil seeds recorded 13.66 percent growth, driven by rising demand and supportive schemes. Potato production has also maintained a steady growth, reflecting increased farmer interest and cultivation efforts. These advancements underline the combined impact of government support and farmer participation in boosting Tripura's horticultural landscape.

Table 5.7 shows the increase in growth of the cultivated area of groundnut as well as the growth of it's production by 13.22 percent and 15.70 percent over time respectively. The cultivated area of total oil-seed has increased by 13.66 percent, and the production under the same has reported by 13.66 percent growth during the same time span in the state, which indicates the increase in demand for total oil seed due to the market demand for the same crops. The government has initiated different steps through government-sponsored schemes to support farmers of the state for the production of all oil seeds like groundnut, sesamum, rape seed/mustard oilseeds. The growth of cultivated area of land of mustard has increased by 14.2 percent, while the growth of its production for the same crop has increased by 15.68 percent over the year in the state of Tripura. The growth of cultivated area for the sesamum crop as well as its production has increased by 11.99 percent and 13.9 percent respectively. Potato is also an important crop for the farmers of the state Tripura, the growth of its cultivated area has increased by 3.13 percent over the year and its production has increased 4.97 during the same span of time from 2005-06 to 2021-22.

Table 5.7: Area and Production of Some Important Horticulture Crops in Tripura (Area in ha. & Production in MT)

Year	Groundnut		Sesamum		Rape/Mustard		Total oil seed		Potato	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
2005-06	379	400	1526	700	1479	890	3384	1990	5425	66741
2006-07	590	610	2077	1048	1744	1360	4411	3018	5380	80858
2007-08	679	687	1776	896	1451	1062	-	-	5800	84563
2008-09	486	539	1392	780	1588	1191	3466	2510	5336	93030
2009-10	423	483	1532	801	1467	1078	3422	2363	5653	88645
2011-12	369	480	1942	1095	2131	1683	2500	2163	6500	104000
2012-13	597	731	2085	1188	2132	1701	4814	3620	8312	149046
2013-14	613	725	2824	1706	2617	2159	6054	4590	3366	62843
2014-15	735	801	2468	1543	5934	4925	9137	7269	9040	159466
2015-16	1375	1587	3898	2261	6418	5166	12044	9303	7684	138512
2016-17	1833	2675	5590	3276	7500	6188	15373	12508	7948	143577
2017-18	2239	3207	7035	4151	7893	6630	17546	14279	7985	144534
2018-19	2251	3098	6967	4332	7729	6425	17101	13973	8005	144935
2019-20	2367	3361	6611	4209	7895	6670	17180	14478	8050	145866
2020-21	1996	2930	5862	3967	7391	6276	15249	13173	8134	147307
2021-22	1903	2757	6363	4081	6852	5763	15118	12601	7331	132764
Growth (%)	13.22	15.70	11.99	13.9	14.2	15.68	13.66	15.55	3.13	4.97

Source: Directorate of Agriculture, Government of Tripura

The cultivated area of land for groundnut production has increased to 1903 hectare in the year 2021-22 from 379 hectare in the year 2005-06. It is observed that the farmers cultivated the highest area of land (2367 hectare) for the groundnut production during 2019-20. The production of groundnut has also increased from 400 MT in the year 2005-06 to 2757 MT in the year 2021-22 with the highest level of production at 3361 MT in the year 2019-20. The increasing cultivation of groundnut in Tripura is due to different initiatives taken by the state government such as distribution of Certified HYVs seeds, transfer of technology programmes and demonstration (per hectare) under National Mission on Edible Oils – Oilseeds.

The cultivated area of land for sesamum production has increased from 1526 hectares in the year 2005-06 to 6363 hectares in the year 2021-22 with a peak at 6967 hectares in the year 2018-19. At the same time, the production of sesamum crop has also increased over the years, with the highest level of production at 4332 MT in the year 2018-19 and thereafter it has decreased. In 2021-22, production of sesamum crop is 4081 MT. The state government has taken the initiatives such as the distribution of certified HYV seeds which leads to positive change in cultivated area of land and production of sesamum in the state of Tripura.

The area of cultivation for the production of total oil-seed has increased at 13.66 percent growth rate. It has increased from 3384 hector in the year 2005-06 to 15118 hector in the year 2021-22; though it is observed that the highest area of land (17546 hector) was cultivated in the year 2017-18. The amount of production of total oil-seed has increased to 12601 MT in the year 2021-22 from 1990 MT in the year 2005-06. The maximum amount of production of total oilseed (14478 MT) produced in the year 2019-20.

The area of land for potato production has also increased to 7331 hector in the year 2021-22 from 5425 hectare in the year 2005-06 with a growth rate of 3.10 percent. In the year 2020-21, highest area of land (8134 hector) was cultivated for potato production. The production of potato has also increased with highest production level 147307 MT in the year 2020-21. The potato production was 66741 MT in the year 2005-06 but the production has increased to 132764 MT in the year 2021-22.

Table 5.8 shows the cash crops in Tripura during the year 2005-06 to 2021-22. The cash crops produced in Tripura are mainly jute, mesta, cotton and sugarcane. The growth of cultivated area of land for jute cultivation is increased by 0.2 percent during 2005-06 to 2021-22, though the growth rate of production for jute has decreased by 5.31 percent in amid of same time duration. The highest area of cultivation for jute is reported at 685 hector in the year 2005-06 and production has also reported as highest at 5838 hector in the year 2018-19. The growth of cultivated area of land for another cash crop mesta has decreased by 7.07 percent and the production of same crop has also decreased by 11.97 percent over the year 2005-06 to 2021-22. The change in cropping pattern might be an important reason of declining area of mesta.

The growth of cultivated area of land for cotton production is declined by 3.78 percent and the production of cotton has also declined by 8.30 percent over the year.

Table 5.8: Cash Crops in Tripura (Area in ha & Production in Bale/MT)

Year	Jute		Mesta		Cotton		Sugarcane	
	Area	Production*	Area	Production*	Area	Production**	Area	Production
2005-06	685	5410	1170	8522	1143	1610	874	43334
2006-07	466	3966	1064	7798	1148	1598	869	42373
2007-08	458	3734	949	6810	1110	1504	959	46678
2008-09	450	3678	638	4814	997	1355	991	48423
2009-10	466	3550	728	5453	965	1341	859	41892
2010-11	479	4139	776	6255	1063	1488	900	44955
2011-12	639	5483	628	5212	949	1348	921	45002
2012-13	640	5261	641	5077	922	1341	899	45436
2013-14	643	5369	854	7003	949	1395	964	49598
2014-15	650	5564	627	5079	904	1347	793	41510
2015-16	650	5701	627	5530	904	1365	793	40492
2016-17	590	5369	583	4961	870	1358	822	44100
2017-18	551	4695	541	4804	805	1160	875	46862
2018-19	656	5838	493	4117	812	1215	662	35914
2019-20	623	5731	430	3838	760	1139	687	36372
2020-21	436	3865	268	2359	605	942	860	48578
2021-22	433	3892	292	2563	526	809	880	48414
Growth (in %)	0.2	-5.31	-7.07	-11.97	-3.78	-8.30	-1.14	-0.25

Source: Directorate of Agriculture, Government of Tripura

Note: *indicates production in Bales of 180 Kg each ** indicates production in Bales of 170Kg

The growth of cultivated area of land area for sugarcane as well as the growth of its production is decreased by 1.14 percent and 0.25 percent during the period from 2005-06 to 2021-22 respectively.

Table 5.9 shows area and production of fruits and plantation crops in the state Tripura. The plantation crops produced in Tripura are mainly litchi, mango, pineapple, orange, guava and jackfruit. The crops namely mango, pineapple, guava and orange are showing positive growth in case of production as well as area for the same. The growth of land area for mango plantation is increased by 7 percent and growth of production of mango is increased over the year. The land area of mango production has increased to 10357 hector in the year 2021-22 from 3868 hector in the year 2005-06, indicating the highest growth rate of 7.8% in cultivated land area among the other fruits and plantation crops of the state.

Table 5.9: Area and Production of Fruits and Plantation Crops in Tripura (Area in ha & Production in MT)

Year	Litchi		Mango		Pineapple		Orange		Guava		Jackfruit	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
2005-06	2346	14255	3868	12340	5180	106406	2811	18150	356	1560	8645	256280
2006-07	2475	14400	3700	11358	6184	115829	2882	19445	333	1496	7430	249265
2007-08	2722	16032	3981	11925	6247	108009	2972	20383	336	1510	7666	252384
2008-09	2762	16165	4190	12706	6336	110487	3098	20926	348	1636	7627	250619
2009-10	2762	16972	4254	13170	6476	117531	3162	22230	350	1727	7636	251569
2010-11	2935	16566	5408	23861	6789	153310	3845	23592	384	2008	7796	279033
2011-12	3200	16566	7400	23861	11600	153709	4650	23592	352	2008	9000	245773
2012-13	3464	17980	8382	28849	11842	165010	5284	28414	525	2740	9021	269404
2013-14	3888	20179	10559	56279	11590	162260	6302	33905	997	5204	10120	302183
2014-15	3921	20578	11180	62559	11948	170890	6704	36521	1220	6300	10410	300000
2015-16	3991	20945	12224	68409	12669	181208	7301	39790	1013	5367	10079	302600
2016-17	2372	8710	10640	57035	8848	128971	6342	29352	881	4557	6096	150117
2017-18	1811	6278	10325	54929	8728	126994	5620	25328	700	3397	5560	135493
2018-19	931	3206	10231	52042	9628	140184	4780	21403	665	3117	5482	133033
2019-20	933	3219	10272	52284	9785	142665	4763	21319	665	3119	5487	133154
2020-21	933	3219	10288	52366	9918	144604	4709	21096	673	3156	5517	133882
2021-22	945	3260	10357	52717	11505	167743	6144	23040	671	3147	5595	135775
Growth (in %)	-6.79	-11.10	7.8	12.11	4.08	2.01	4.81	1.30	6.26	6.46	-2.66	-4.96

Source: Directorate of Agriculture, Government of Tripura

The mango production is notably highest at 68409 MT in the year 2015-16. It can be seen that guava production has the second highest growth rate with 6.46 percent after mango production. However, the growth of cultivated land area of guava plantation is 6.26 percent in the mid of time span from 2005-06 to 2021-22. The area of land for guava production is increased to 671 hecter in the year 2021-22 from 356 hecter in the year 2005-06. The production of Guava has increased from 1560 MT in the year 2005-06 to 3147 MT in the year 3147 MT in the year 2021-22. The area of land covered for guava production was 1220 hecter in the year 2014-15. The highest level of guava production stands at 6300 MT in the year 2014-15 in the state Tripura.

The growth of area of land for pineapple plantation is third highest as the growth of the same horticultural crop increased gradually over the year by 4.81 percent. The growth of production for pineapple is increased by 2.01 percent over the year amid of time from 2005-06 to 2021-22. The area of land for pineapple production has increased to 11505 hector in the year 2021-22 from 5180 hectare in the year 2005-06. The environmental support and technological advancement have positively influenced in case of enhancement of production level from 106406 MT in 2005-06 to 167743 MT in the year 2021-22. The GI tag for pineapple production has been introduced in March, 2015.

The area of land for horticultural crop orange is increased to 6144 hectare in the year 2021-22 from 2811 hectare in the year 2005-06. The production of orange in the state Tripura is also increased to 23040 MT in the year 2021-22 from 18150 MT in the year 2005-06. The highest production of orange 39790 MT and 7301 hector is found as the highest area of cultivation for orange in the year 2015-16.

The area of cultivation for jackfruit has decreased to 5595 hectare in the year 2021-22 from 8645 hectare in the year 2005-06. The production of jackfruit has drastically changed from 256280 MT in the year 2005-06 to 135775 MT in the year 2021-22.

The area of land for litchi production has decreased to 945 hectare in the year 2021-22 from 2346 hectare in the year 2005-06. The production has also declined from 14255 MT in the year 2005-06 to 3260 MT in the year 2021-22.

Achievements of Panchayat, Rural Development & Revenue

Table 5.10 presents the physical achievements of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in Tripura from 2014-15 to 2023-24. There is a fluctuation in employment and productivity in Tripura under the implementation of MGNREGA. The number of households participating and the total person days were highest in the first few years, with a noticeable drop in 2017-18, followed by a gradual recovery. The average man days per household, however, declined consistently over time. It is observed that the average person days have decreased to 63.16 in the year 2023-24 from 87.49 in the year 2014-15, with the highest peak being 94.38 in the year 2015-16. The number of families completed 100 days of MGNREGA work in a year is also decreased to 68991 families in the year 2023-24 from 243374 families in the year 2014-15. The maximum families reported as 303964 numbers have completed 100 days of work in the year 2015-16 during the time span.

Table 5.10: Physical Achievement of MGNREGA in Tripura from 2014-15 to 2023-24

Year	Employment Availed Household	Total Person days	Person days of Central Liability	No. of Families Completed 100 days	Average Persondays
2014-15	581254	50851597	50851597	243374	87.49
2015-16	570283	53824344	53824344	303964	94.38
2016-17	577324	46060581	46060581	116090	79.78
2017-18	522752	17603744	17603744	4438	33.68
2018-19	549356	25308683	25308683	14982	46.07
2019-20	565992	34402085	34402085	55381	60.78
2020-21	585583	43722399	43703991	115869	74.66
2021-22	593133	42617644	42600336	109217	71.85
2022-23	558313	33455311	33430849	49777	59.92
2023-24	586551	37048628	37042066	68991	63.16

Source: Ministry of Rural Development, Government of India

The person days of central liability have declined to 37042066 person days in the year 2023-24 from 50851597 in the year 2014-15, with the highest number reported at 53824344 in the year 2015-16 in the state of Tripura. The number of families completing 100 days of work varied considerably, with a high of 303,964 in 2015-16 and a low of 4,438 in 2017-18. This shows fluctuations in the program's intensity and participation.

The average number of person days per household gradually decreased over the years, from 87.49 in 2014-15 to 63.16 in 2023-24, reflecting a general reduction in the average number of workdays per household over the period.

Achievements of Economic Infrastructure

Table 5.11 highlights the development of road and railway infrastructure in Tripura from 2005 to 2021, presenting data on National Highways, State Highways, surfaced and un-surfaced roads, non-motorable roads, and railway route length. It is observed that National Highways are increased from 400 km in 2005 to 854 km in 2021, reflecting a significant improvement in connectivity. State Highways are expanded from 545 km in 2005 to 1,057 km in 2021, indicating an effort to enhance regional accessibility, connectivity, strategic importance, socio-economic development and boosting up of the economy. It is also found that the road with a hard, smooth surface made of concrete, cement, or bitumen called surfaced road increased from 3,783 km in 2005 to 6,804 km in 2021, showcasing better road quality and usability.

Table 5.11: Length of Road and Railway in Tripura during 2005 to 2021 (in Kilometer)

Year	National Highway (km)	State Highway (km)	Surfaced (km)	Other P.W.D Road Un-Surfaced Motorable (km)	Non Motorable (km)	Total (km) (4+5+6)	Railway Route Length (km)
2005	400	545	3783	2971	9066	15820	67
2006	448	689	3831	2971	9066	15868	67
2007	448	689	4234	3290	8396	15920	153
2008	448	689	4534	2990	8645	16169	153
2009	448	689	4885	3400	8646	16931	153
2010	448	689	4885	3400	8646	16931	153
2011	448	689	19040	7957	8224	35221	153
2013	628	689	19040	7957	8224	35221	153
2014	645	532	10011	6442	4381	20834	158
2015	853	329	11393	5742	3795	20930	158
2016	853	329	NA	NA	NA	NA	193
2017	853	329	NA	NA	NA	NA	203
2018	853	1057	NA	NA	NA	NA	216
2019	853	1057	6804	1363	NA	NA	226
2020	853	1057	6804	1363	NA	NA	265
2021	854	1057	6804	1363	NA	NA	265

Source: Some Basic Statistics of Tripura 2022

The number of unsurfaced motorable roads are reduced significantly from 2,971 km in 2005 to 1,363 km in 2021, indicating a shift towards surfacing and upgrading roads. Non-motorable roads show a fluctuating trend with incomplete figures for later years. The total length of roads rose from 15,820 km in 2005 to 20,930 km in 2015, though figures for later years are not consolidated. Railway route length increased from 67 km in 2005 to 265 km in 2021, a nearly fourfold increase, improving rail connectivity in the state. The state Tripura has now the advantages of railway route connectivity that facilitates economic growth, improved accessibility, tourism development, social integration, strategic significance and development of remote areas.

Achievements of Social Sector (Health & Education)

Table 5.12 shows the health statistics of Tripura in accordance with data collected from Some Basic Statistics of Tripura during the year 2005-06 to 2021-22. The primary hospital under

allopathic is increased in the state Tripura to 163 numbers in the year 2021-22 from 99 numbers in the year 2005-06.

The dispensaries and sub-centers are essential for primary healthcare access, maternal and child health, disease prevention and control, chronic and lifestyle diseases, emergency care, health infrastructure support and reduction of health inequities. The state Tripura has continued efforts to strengthen healthcare delivery with the enhancement of dispensaries sub-centres in the state from 658 centres in the year 2005-06 to 1091 centres in the year 2021-22.

Table 5.12: Health Statistics of Tripura during 2005-06 to 2021-22 (in Number)

Year	Hospital Primary Health (Allopathic)	Dispensaries Sub-Centres*	Bed Available	Doctor	Nurse female	Midwives Dhai	Pharmacist*	Indoor Patients	Number of Patients treated Outdoor	Total
2005-06	99	658	2653	883	928	59	336	600000	2139000	2739000
2006-07	108	579	2627	797	886	52	327	515000	1607000	2122000
2007-08	104	579	2827	726	1070	44	337	680000	1879000	2559000
2008-09	107	702	2894	891	1198	37	321	679614	1879149	2558763
2009-10	109	821	3489	904	1420	32	322	770652	2235271	3005923
2010-11	107	876	3548	880	1557	14	315	323266	1650592	1973858
2011-12	115	832	3681	740	1347	15	340	699746	3297560	3997306
2012-13	121	941	4363	846	1620	12	353	244040	1888184	2132224
2013-14	124	1101	4363	1025	1777	12	351	268444	2077002	2345446
2014-15	132	1126	4724	948	1902	4	402	459769	2372966	2832735
2015-16	135	1142	4704	975	2038	1	396	455934	3039441	3495375
2016-17	139	1113	4296	987	2334	1	387	2724630	1338568	4063198
2017-18	154	1134	4367	1084	2298	1	417	4289342	4349300	4724272
2018-19	154	1111	4377	1001	2271	1	408	930642	4698272	5628914
2019-20	154	1117	4530	888	2236	1	387	433912	4702780	5136692
2020-21	154	1117	4530	888	2210	1	378	275447	3066937	3342384
2021-22	163	1091	4725	1210	2158	0	340	340979	3715889	4056868

Note: *Allopathic, Ayurvedic & Homeopathic
Source: Some Basic Statistics of Tripura 2022

The number of doctors are increased from 883 to 1210 in the year 2021-22 from 2005-06. The number of female nurses are also increased to 2158 in the year 2021-22 from 928 in the year 2005-06. The modernization in healthcare system is also a positive side in the state Tripura as it is proved by the declining numbers of Midwives Dhais from 59 numbers in the year 2005-06 to zero in the year 2021-22. The number of pharmacists are also increased to 340 in the year 2021-22 from 336 in the year 2005-06 with the highest number of appointments as 417 in the year 2017-18. The indoor patients are also increased to 340979 numbers in the year 2021-22 from 600 numbers in the year 2005-06. The highest number of indoor patients have been admitted in the year 2017-18, viz., 42,89,342 patients. The number of patients treated outdoor are also increased during this time from 2139000 in the year 2005-06 to 3715889 in the year 2021-22. The highest numbers of patients treated in outdoor are reported as 4702780 numbers in the COVID period, 2019-20 in the state.

Table 5.13 shows the data related to immunization of the children against special diseases in the state Tripura during the year 2005-06 to 2021-22. In view to protecting children against specific diseases, vaccination programmes ensure a healthier future for the state and continued investment in awareness, infrastructure and equitable access to vaccines will further enhance the impact of immunization, fostering a resilient and thriving society.

Table 5.13: Immunization of Children against Special Diseases in Tripura (in Number)

Year	D.P.T.	O.P.V.	B.C.G	Measles	D.T. (5 Yrs.)	T.T. (P.W.)	T.T. (10.Yrs.)	T.T. (16.Yrs.)	IFA (Large)	IFA (Small)	Vitamin 'A' Sol
2005-06	60250	60422	64775	57221	60458	45158	52880	50721	91146	149304	70568
2006-07	59216	59541	69047	59841	58873	45929	52929	49661	67326	62702	72886
2007-08	58147	28578	67951	58931	57508	44896	49767	46777	73447	65498	29557
2008-09	51742	51737	55359	51414	36901	43784	35515	31559	83458	21468	57458
2009-10	46395	45968	51083	43672	34035	51654	30252	27435	55814	-	42862
2010-11	49943	49667	55186	48301	19006	44903	32193	26023	53735	-	38371
2010-11	49943	49667	55186	48301	19006	44903	32193	26023	53735	-	38371
2011-12	53235	51319	55273	52106	23580	50836	28885	26156	60415	-	17098
2012-13	54463	54574	56179	52580	23907	56151	28291	25369	43620	-	52552
2013-14	55784	55618	56067	54416	28122	55793	29262	25520	34761	-	44092
2014-15	52985	52815	53842	54489	30605	56016	26488	22495	46465	-	44573
2015-16	43284	48928	53117	51926	29084	53916	24110	18940	48660	-	38942
2016-17	49400	48362	51370	49981	30225	30225	22499	16817	-	-	-

2017-18	49515	49141	51145	46721	32431	32431	23308	15849	-	-	-
2018-19	49953	50071	48383	48489	31919	31919	21303	15368	-	-	-
2019-20	50759	51215	50324	48689	34649	34649	49022	35334	-	-	-
2020-21	47861	48856	44841	46420	31506	31506	20198	10269	167475	24727	40751
2021-22	46562	46909	47012	48834	32714	32714	25192	14739	284707	322305	56193

Source: Some Basic Statistics of Tripura 2022

The highest number of immunizations, viz., 60250 children, under DPT (protects against diphtheria, tetanus and polio) has been given in the year 2005-06 but after that it has declined to 46562 children in the year 2021-22. The Oral Polio Vaccine (OPV) has reported as highest in number with 60422 children in the year 2005-06 that has declined to 46909 children in the year 2021-22. The Bacillus Calmette-Guérin (B.C.G) has been done for a total of 64775 children in the year 2005-2006 where the highest number of vaccinations has been given to a total of 69047 children in the year 2006-07. In the year 2021-22, the number of vaccinations have been reported as lowest a total of 47012 children in the state Tripura during the time period from 2005-06 to 2021-22. The measles vaccination in the state Tripura have been given to a highest number of patient (59841) in the year 2006-07 but the vaccination was done a total of 57221 persons in the year 2005-06. There is a variation in numbers under the cases of measles vaccinations during the time period mentioned in the Table 5.12 with further reduction of vaccination to 48834 patients in the year 2021-22. The Tetanus Toxoid (TT) vaccine for pregnant women have been given to 56151 women in the state of Tripura in the year 2012-13, which is reported as the highest vaccination under the same category during the time from 2005-06 to 2021-22. A total number of 45158 pregnant women in the year 2005-06 have been vaccinated under the category of TT in the state, but the number of vaccinations have reduced to a total of 32714 women in the year 2021-22. However, there is variations in the number of vaccinations for pregnant women over the year. It is also observed that the TT vaccination has drastically fallen to 30225 in number in the year 2016-17 in the case of pregnant women after the year 2015-16, where reasons might be a lack of awareness among people regarding vaccination among the targeted group as well as others in the state of Tripura. A total of 52880 children with the age group of ten years have been vaccinated with the Tetanus Toxoid (TT) vaccine in the year 2005-06 in the state. The Tetanus Toxoid (TT) vaccination has been vaccinated less in number to a total of 25192 children in the year 2021-22. The most important reason for the decline in number of vaccinations among ten-year-old youth is

migration from one place to another due to study. Moreover, Tetanus Toxoid (TT) vaccinations in case of sixteen year olds have been vaccinated to a total of 50721 youths in the year 2005-06 further variations over the years has been observed during the time period for the same age group in the state. A total of 14739 youths in the age group of sixteen years are vaccinated with Tetanus Toxoid (TT) in the year 2021-22. The Incomplete Freund's Adjuvant (IFA) and vitamin A solution are other immunizations in Tripura.

Table 5.14 shows the type-wise educational institutions, enrolments and teachers (excluding Madrassa schools) in numbers during 2005-06 to 2021-22 in Tripura. The number of institutions under primary or junior basic school is increased to 2522 in the year 2021-22 from 1863 in the year 2005-06 while the highest numbers of junior basic schools have been a total of 2578 in the year 2018-19 in the state. However, a total of 56 institutions have been merged with a total of 2522 numbers schools during the year 2018-19 to 2021-22. The enrollment of students under junior basic schools are declining over the year has decreased to 97632 in number in the year 2021-22 from 500284 numbers of students in the year 2005-06. The number of teachers under junior basic schools have been a total of 7348 in the year 2005-06 that has increased to a total of 8214 in the year 2021-22. The number of teachers have been highest with a figure of 10801 in the year 2017-18. The number of middle or senior basic schools have increased to 1226 in the year 2021-22 from 1004 in the year 2005-06. The number of students' enrollment have been highest (222317) in the year 2011-12. The highest number of 13285 teachers have been appointed in the year 2010-11 under the same level of schools in the state while the numbers of teaches have declined to 7039 in the year 2021-22 from 8439 in the year 2005-06.

A total number of 419 high schools have been there in the year 2005-06 and that have been increased to a highest number of schools (702) in the year 2021-22. The number of students' enrollment numbers are highest (205073) in the year 2012-13. After 2014-15 the number of students' enrollment has declined over time. The numbers of teachers have been highest 11446 in the year 2017-18 while the numbers of teachers (8322) for the same level of school have been appointed in the year 2005-06. The numbers of teachers are decreased to 8495 numbers of teachers in the year 2021-22.

The number of higher secondary schools have increased to 479 in the year 2021-22 from 248 schools in the year 2005-06. The number of students' enrollment of students are increased to 330575 in the year 2021-22 from 32613 in the year 2005-06. A total of 8991 teachers have been

appointed in the year 2005-06 but the numbers of teachers are increased to 12685 in the year 2021-22.

In order to examine the infrastructure of the educational institutes; a Physical Resource Index (PRI) has been constructed through Principal Component Analysis. A multi-variate Factor Analysis is performed prior to Principal Component Analysis (PCA) to examine the interrelationship between the observed variables. The basic goal of factor analysis is to transform a group of observed variables into new categories known as factors. The index is constructed using seven indicators for the period 2012-13 to 2023-24.

The indicators used for Principal Component Analysis are number of schools having electricity, number of schools having drinking water, number of schools having computer, number of schools having internet facilities, number of schools having library, number of schools having toilet, number of schools having playground and number of students covered mid-day meal programme. Before construction of index, the factor analysis has been done. Table 5.14 shows the indicators of the Physical Resource Index (PRI).

Table 5.14: Type-wise School Educational Institutions, Enrolments & Teachers (excluding Madrassa) in Number

Year	Primary/Junior Basic School			Middle/Senior Basic School			High School			Higher Secondary School			State Total		
	Institution	Enrolment	Teacher	Institution	Enrolment	Teacher	Institution	Enrolment	Teacher	Institution	Enrolment	Teacher	Institution	Enrolment	Teacher
2005-06	1863	500284	7348	1004	197186	8439	419	90155	8322	248	32613	8991	3534	820238	33100
2006-07	2142	493169	7805	1020	204356	8319	424	91235	8423	289	36679	9049	3875	825439	33596
2007-08	2159	464985	7855	1023	209088	8476	431	92788	8584	298	46993	9119	3911	813854	34034
2008-09	2378	463521	7800	1139	219846	8687	459	93088	8319	311	47193	9546	4287	823648	34352
2009-10	2280	444516	7936	1250	219303	9522	509	106801	8952	317	40739	9546	4356	811359	35956
2010-11	2298	394418	7580	1274	215680	13285	533	113344	9676	350	44230	10824	4455	767672	41365
2011-12	2343	392132	NA	1240	222317	NA	572	127022	NA	362	46786	NA	4517	788257	NA
2012-13	2584	137018	9426	1243	170028	11352	590	205073	9478	372	293268	11963	4789	805387	42219
2013-14	2592	136690	9448	1237	165551	11294	592	202308	9691	387	305259	12542	4808	809808	42975
2014-15	2578	132329	10608	1256	156710	12854	589	202851	10724	395	308675	13069	4818	800565	47255
2015-16	2575	127152	10638	1263	152540	12590	600	199183	10456	412	310271	12929	4850	789146	46613
2016-17	2548	117440	10580	1275	144128	12463	623	193003	10693	420	304018	13092	4866	758589	46828
2017-18	2564	114818	10801	1252	136026	12099	665	194402	11446	447	312678	14434	4928	757924	48780
2018-19	2578	112911	10207	1245	129097	10923	669	189952	11244	453	309416	14535	4945	741376	46909
2019-20	2562	111517	9998	1241	123753	10515	672	185296	11299	465	316372	14916	4940	736938	46728
2020-21	2547	103906	8609	1230	113739	7042	688	178355	8397	469	310003	12486	4934	706003	36534
2021-22	2522	97632	8214	1226	107507	7039	702	178148	8495	479	330575	12685	4929	713862	36433

Source: Some Basic Statistics of Tripura 2022

Table 5.15: Indicators of the Physical Resource Index

Year	No. of Schools having electricity	No. of Schools having drinking water	No. of Schools having computer	No. of Schools having internet	No. of Schools having Library	No. of Schools having toilet	No. of Schools having playground
2012-13	742	3291	477	19	457	3958	3061
2013-14	951	3456	444	25	1356	4305	3238
2014-15	1077	3629	567	21	1843	4539	3386
2015-16	1113	4097	571	24	1937	4534	3425
2016-17	1146	3724	572	43	1965	4531	3429
2017-18	1206	3283	634	57	3064	4521	3447
2018-19	1349	3567	469	67	2442	4186	3423
2019-20	1485	3551	500	68	2761	4291	3416
2020-21	1681	3635	749	117	2989	4289	3442
2021-22	2305	3691	1255	682	3221	4269	3460
2022-23	2765	3888	1528	1261	3488	4352	3569
2023-24	3444	4133	2103	1453	3378	4301	3012

Source: Compiled data from Some Basic Statistics of Tripura, 2022 and Economic Review of Tripura, 2022

From Table 5.15, it is observed that the numbers of govt. schools have increased. The drinking water facilities, toilet facilities and playground facilities are satisfactory. The library facilities are improving gradually. But, the improvement of computer facilities and internet facilities in the schools are not satisfactory till now. The concerned authority should look after these issues in order to improve the physical infrastructure of the schools.

Table 5.16 shows the KMO and Bartlett's test. Here, Kaiser-Meyer-Olkin Measure of Sampling Adequacy statistic reveals that the dataset is explaining 48.5 percent of the population which indicates the adequacy is a good indicator of representative population. Bartlett's test provides sufficient statistical significance.

Table 5.16: KMO and Bartlett's Test for construction of Physical Resource Index (PRI)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.485383411
Bartlett's Test of Sphericity	Approx. Chi-Square
	Degrees of Freedom
	Significance
	89.92037898
	21
	0.000*

Source: Computed on the basis of compiled data from Some Basic Statistics of Tripura, 2022 and Economic Review of Tripura, 2022

Note: * indicate significant at 1% level of significance

The Principal Component Analyses indicate that there exist only two principal components for the seven indicators, which explain 82.56 per cent of the cumulative variation in the data (Table 5.17). A composite index is developed as weighted sum of scores for each year, the weight being the percentage of the variation explained by the factors.

Table 5.17: Total Variance Explained by Factors of Physical Resources

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.9752	56.78888	56.78888	3.975222	56.78888	56.78888
2	1.7652	25.21794	82.00682	1.765256	25.21794	82.00682
3	0.7955	11.3643	93.37112			
4	0.3161	4.51638	97.8875			
5	0.1335	1.907282	99.79478			
6	0.0099	0.142237	99.93702			
7	0.0044	0.062984	100			

Extraction Method: Principal Component Analysis

Source: Computed on the basis of compiled data from Some Basic Statistics of Tripura, 2022 and Economic Review of Tripura, 2022

Table 5.18: Physical Resource Index (PRI) of the School Education in Tripura

Year	Value of the Factor score 1	Value of the Factor score 2	Composite Index	Standardized PRI	Rank
2012-13	-1.27863	-2.33272	-131.4384	0.000	12
2013-14	-0.87712	-0.58837	-64.64814	0.290	11
2014-15	-0.53172	0.6349	-14.18492	0.510	9
2015-16	-0.18053	0.91802	12.898475	0.628	4
2016-17	-0.40955	0.79323	-3.254261	0.557	7
2017-18	-0.42224	0.92476	-0.657996	0.569	6
2018-19	-0.43761	-0.09379	-27.21657	0.453	10
2019-20	-0.30916	0.22822	-11.80161	0.520	8
2020-21	-0.00707	0.30469	7.2821564	0.603	5
2021-22	0.76049	0.0895	45.444383	0.769	3
2022-23	1.49357	0.54424	98.542782	1.000	1
2023-24	2.19958	-1.4227	89.034128	0.959	2

Source: Computed on the basis of compiled data from Some Basic Statistics of Tripura, 2022 and Economic Review of Tripura, 2022

Table 5.18 shows the Physical Resource Index (PRI). This index measures the physical resource index of each year relative to the other on a linear scale. The index value is calculated for each

year in Table 5.14. For example, the composite index for the year 2012-13 is $-1.274 \times 56.78 - 2.332 \times 25.21 = -131.438$. This composite index is converted to 0-1 in a linear scale.

5.8 Impact of State Public Sector Enterprises Finances on the State's Financial Health

This section deals with the performance of the public sector enterprises functioning in the state of Tripura and its impact on the financial health of the state. The performance of these various public sector enterprises are explained below.

According to the Ministry of Finance Govt. of Tripura, there are 12 PSEs in Tripura which are the following:

- Tripura State Electricity Corporation Ltd.
- Tripura Road Transport Corporation Ltd.
- Tripura Small Industries Corporation Ltd.
- Tripura Industrial Development Corporation Ltd.
- Tripura Handloom & Handicraft Development Corporation Ltd.
- Tripura Jute Mills Ltd.
- Tripura Forest Development and Plantation Corporation Ltd.
- Tripura Tea Development Corporation Ltd.
- Tripura Rehabilitation and Plantation Corporation Ltd.
- Tripura Horticulture Corporation Ltd.
- Tripura Tourism Development Corporation Ltd.
- Tripura Urban Transport Company Ltd.

All of them are unable to provide us with the latest audit report. A few of them are non-cooperative in providing information. Here, the impact of the PSEs on the state financial health is given below only those who have provided the information.

Tripura Jute Mills Ltd. (TJML)

Table 5.19 shows the financial information of Tripura Jute Mills Ltd. (TJML). It was started back in 1981; the mill's installed capacity was 11700 metric tons (MT) annually with 150 sacking looms and 50 hessian looms, but currently production is down to zero due to no recruitment of manpower. According to Economic Review of Tripura 2022-23, TJML needs 250 skilled and unskilled workers to run the machines for at least 1.5 MT per day of production, but as on 31st March, 2023, the number of workers is 90 only. The following Table 5.18 shows the year-wise financial data of

Tripura Jute Mills Ltd. during the year 2004-05 to 2023-24. It is found that TJML has been incurring loss during this long period.

Table 5.19: Year-wise Financial data of Tripura Jute Mills Ltd (Rs. in Crore)

Financial Year	Investment	Total Revenue	Profit/Loss
2004-05	7.70	2.41	-7.60
2005-06	8.20	4.33	-5.93
2006-07	8.85	3.47	-7.44
2007-08	8.35	3.04	-8.61
2008-09	8.60	4.64	-8.61
2009-10	12.93	4.81	-13.21
2010-11	11.93	7.29	-13.55
2011-12	15.80	7.60	-14.78
2012-13	18.68	7.59	-15.37
2013-14	19.52	7.26	-17.12
2014-15	21.00	5.99	-19.44
2015-16	20.00	6.96	-18.14
2016-17	31.10	4.63	-26.79
2017-18	21.56	13.10	-28.15
2018-19	30.65	4.39	-33.21
2019-20	29.80	3.46	-31.62
2020-21	25.21	3.27	-22.78
2021-22	18.99	0.52	-16.03
2022-23	12.53	0.41	-11.82
2023-24	31.13	0.41	-93.61

Source: Directorate of Industries & Commerce, Govt. of Tripura

The main reason for losses, as stated in the Economic Review of Tripura 2022-23, is the unavailability of Jute, the primary raw materials for production. Presently, Tripura has only 50 MT annually, and remaining requirements is imported from Assam at a higher cost which makes the cost of production very high. As a result TJML has been incurring huge loss since long time.

Tripura Road Transport Corporation Ltd. (TRTC)

Tripura Road Transport Corporation (TRTC) was established in 1969 under the Road Transport Corporation (RTC) Act. 1950. The main objective of this Corporation is to provide people with efficient, economical and well-coordinated transport facilities. TRTC started transportation of

goods and services by utilizing automobile truck in June 1971. Subsequently, to meet the growing demand, TRTC started domestic passenger bus service throughout the state in December 1973.

Table 5.20: Year-wise Financial data of TRTC (Rs. in Crore)

Year	Income for operation, Bank interest & other (A)	Employee Responses	Administrative Expenses	Other Expenses	Expenses for Operation & Other Charges	Depreciation on Fixed Assets	Total Expenditure & Depreciation (B)	Profit before Tax (A-B)
2017-18	22.24	17.40	0.25	0.02	4.14	0.43	22.25	-0.02
2018-19	20.26	15.41	0.25	0.04	4.30	0.56	20.55	-0.29
2019-20	15.91	14.14	0.18	0.02	0.63	0.43	15.39	0.52
2020-21	15.54	14.30	0.84	0.32	0.42	0.34	16.21	-0.68
2021-22	14.45	13.07	0.72	0.01	0.62	0.27	14.70	-0.25
2022-23	11.85	13.35	0.78	0.02	1.12	0.21	15.47	-3.63

Source: Multiple Annual Audit Reports of TRTC

Table 5.20 shows that TRTC is struggling to be a profitable company between 2017-18 and 2022-23. The cumulative loss was Rs.4.35 crore due to the significant increase in loss in 2022-23, i.e. Rs.3.63 crore. Year on year, the income decreased from Rs. 22.24 crore in 2017-18 to Rs.11.85 crore in 2022-23, which is half in six years. However, TRTC is unable to decrease employee expenses significantly in the said six years.

Tripura Urban Transport Corporation Limited (TUTCL)

Table 5.21 shows the financial information of the Tripura Urban Transport Company Limited (TUTCL). It was established in 2010 with the intention of offering city bus services within and outside of Agartala. The State Government of Tripura, Agartala Municipal Corporation (AMC) and Tripura Road Transport Corporation (TRTC) are the company's shareholders, their respective share patterns are 40:30:30. Table 5.21 depicts a good financial scenario of the TUTCL, which is comparably efficient among all other PSUs, where it is found that during 2023-24 the profit was 41.5 lakh. Except the year of inception, the enterprise is profitable and it has grown up to 54.5 lakh up to 2016-17; thereafter, the profit was in ebb and flow, which fell up to 2.9 lakh in 2021-22. This replicates the effect of the COVID-19 pandemic on Tripura's urban transportation. Regarding liabilities and assets, the reports maintain equality in both accounts; in the last draft annual account

report of 2023-24 both were little over 23 lakh in 2023-24 and both of them were peaking at 2.1 crore in 2015-16.

Table 5.21: Year-wise Financial Information of Tripura Urban Transport Corporation Ltd. (Rs. in lakh)

Year	Revenue	Other Income	Income	Expenditure	Profit / Loss
1	2	3	4 = (2 + 3)	5	6=(4-5)
2010-11	4.33	0.31	4.64	6.19	-1.55
2011-12	24.23	0.67	24.9	15.23	9.67
2012-13	29.63	3.21	32.84	18.59	14.25
2013-14	34.47	8.78	43.25	29.47	13.78
2014-15	59.06	7.41	66.47	48.98	17.49
2015-16	122.94	19	141.94	85.05	56.89
2016-17	128.42	24.44	152.86	98.37	54.49
2017-18	135.95	14.37	150.32	102.96	47.36
2018-19	109.15	7.75	116.9	83.4	33.5
2019-20	87.95	19.93	107.88	62.28	45.6
2020-21	27.27	20.68	47.95	36.2	11.75
2021-22	25.69	7.54	33.23	30.36	2.87
2022-23	44.12	15.67	59.79	22.02	37.77
2023-24	47.19	11.87	59.06	17.55	41.51

Source: Different Annual Audit Reports of TUTCL

Despite this, TUTCL's statutory audit report for FY2011-2023 indicates a profit. In actuality, TUTCL has a fleet of 173 buses that were acquired in two phases between 2010 and 2015 under the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) Scheme. The approximate total cost of 173 buses is Rs.43 crores. The Ministry of Urban Development (MoUD), Govt. of India and the Transport Department, Govt. of Tripura has provided funding for this purpose on the basis of 90:10. TUTCL has an authorized capital of Rs.10.00 crore, of which Rs.90.10 lakh is its paid-up capital. Since a grant of Rs.43 crore was obtained to purchase 173 buses, the 173 buses' book value in the books of accounts is just Rs.173 (Accounting for Government Grants, Accounting Standard (AS) 12). Therefore, the revenue generated by ply 173 buses and profit earned by TUTCL does not show the actual picture. TUTCL never had the funds to procure 173 buses on its own. In addition, TUTCL lacks the finances to replace the aging buses with new ones in order to maintain public transportation service. Since 2017, TUTCL has been devoid of any grants from the State Government.

Table 5.22 shows the important statistics of Tripura Urban Transport Corporation Limited (TUTCL).

Table 5.22: Some Important Statistics of TUTCL

Sl.	Particulars	Numbers
1	Buses handover to TRTC	50
2	Buses under TUTCL	123
3	Total Buses on-route	47
4	Total Buses off-route	76
5	Fleets	47
6	Routes operated	19
7	Average daily passengers carrier	7050

Source: Economic Review of Tripura 2022-23

From Table 5.22, it is evident that 76 buses became a liability for the TUTCL, and it does not have the potential to replace those. Also, TUTCL does not have the parking space for these 76 buses; presently, 50 of those buses are handed to Tripura Road Transport Corporation (TRTC) and the other 26 are depreciating in the TRTC parking lot.

It is suggested that TUTCL and TRTC must be merged into a single entity for better use of each other's resources and Tripura's urban magnitude is not sizable enough that it requires a separate urban transport enterprise. By implementing both suggestions, the new single entity can be more efficient in terms of finances.

Table 5.23 shows the asset information of TRTC and TUTCL. It is found that the asset position of TUTCL is very, only they have 173 vehicles but they have no manpower, whereas TRTC have no vehicles but they have manpower.

Table 5.23: Asset Information of TRTC and TUTCL

Sl.	Particulars	TRTC	TUTCL
1	Total Number of Vehicles	27	173
2	Total Number of employees	125+	One
3	Workshop available	Yes	Nil
4	Parking Place available	Yes	Nil
5	Own conductors and Drivers available	Yes	Nil
6	Expenditure on Income Taxes	Nil	Approx. Rs. 5 Lakh + annually
7	Expenditure on Company Secretary	Nil	35,000/- Annually
8	Own Office Premises Available	Yes	Nil
9	Traffic Supervisor Available	Yes	Nil

Source: Information collected from Manager, TUTCL

Tripura Industrial Development Corporation Limited (TIDCL)

TIDC was set up in 1974, which makes it the first PSU of Tripura. Over the past ten years, the development of infrastructure projects has progressively been the main emphasis of TIDC's activity. TIDC has invested Rs.101.97 crore to build 535.73 acres of infrastructure for a Growth Center (320.80 acres), an EPIP (126.12 acres), a Rubber Park (58.81 acres), and a Food Park (30.00 acres) at Bodhjunnagar industrial area. TIDC has also developed 226.16 acres of infrastructure at R.K. Nagar industrial area, which includes a Bamboo Park (135.00 acres), IOCL (40.00 acres) and R.K. Nagar industrial park (51.16 acres) with an investment of Rs. 24.28 crore.

Table 5.24: Financial Information of Tripura Industrial Development Corporation Limited (Rs. in Crore)

Year	Revenue from operation	Other Income	Total Income	Expenditure	Profit / Loss (before Tax)
1	2	3	4 = (2 + 3)	5	6 = (5 - 4)
2004-05	0.39	0.90	1.30	0.69	0.61
2005-06	0.34	1.03	1.36	0.71	0.65
2006-07	0.24	1.19	1.43	0.70	0.72
2007-08	0.25	1.58	1.83	0.86	0.97
2008-09	0.34	1.60	1.94	0.92	1.03
2009-10	0.49	2.98	3.47	1.30	2.17
2010-11	2.66	1.17	3.83	1.52	2.30
2011-12	7.30	3.88	11.18	6.36	4.81
2012-13	4.37	4.96	9.33	7.70	1.63
2013-14	3.83	4.69	8.52	7.93	0.60
2014-15	4.11	2.94	7.05	23.27	-16.22
2015-16	4.98	3.26	8.24	13.02	-4.78
2016-17	7.19	4.72	11.90	9.18	2.73
2017-18	5.91	5.26	11.17	7.88	3.29
2018-19	4.23	6.62	10.85	23.09	-12.23
2019-20	4.24	10.22	14.46	12.91	1.55
2020-21	5.37	4.67	10.04	11.73	-1.69
2021-22	6.89	3.10	10.00	11.21	-1.21
2022-23	6.21	4.75	10.96	10.85	0.10

Source: Annual Audit Reports of TIDCL

From Table 5.24, it is clear that TIDCL is one of the most successful PSUs among all. In the period of 2004-05 to 2022-23 (19 years), it suffered losses only five times, which is encouraging

compared to other PSUs in the state. But it is found that TIDCL is earning a negligible amount of profit over the year. Total income is also fluctuated but it is significantly increased to Rs.11.18 crore 2011-12 from Rs.3.83 crore in 2010-11. As per the Annual Audit Report 2022-23, TIDCL's assets and liabilities in the statement are equal over the year; and both were Rs.207.25 crore.

Tripura Handloom & Handicrafts Development Corporation Limited (THHDCL)

Table 5.25 shows the financial information of Tripura Handloom and Handicrafts Development Corporation Ltd. From Table 5.25, it is found that THHCL is continuously making losses from 2004-05 to 2021-22, i.e. 18 years; the accumulated loss is Rs.131.29 crore for this period. In 2021-22, the loss has significantly decreased over the previous 10 years but it is also due to the increase in other income, which has increased over 14 times from the previous year.

Table 5.25: Financial Information of Tripura Handloom & Handicrafts Development Corporation Limited during 2004-05 to 2021-22 (Rs. in Crore)

Year	Sales	Other Income	Total Income	Expenditure	Net Profit / Loss
1	2	3	4 = (2 + 3)	5	6 = 4 - 5
2004-05	3.15	0.31	3.46	6.21	-2.75
2005-06	2.97	0.18	3.15	6.27	-3.12
2006-07	3.43	0.58	4.01	4.81	-0.80
2007-08	4.31	0.37	4.67	7.76	-3.09
2008-09	2.96	0.23	3.19	6.17	-2.98
2009-10	3.23	0.65	3.88	5.50	-1.62
2010-11	3.75	0.36	4.11	10.93	-6.81
2011-12	2.68	1.42	4.10	10.24	-6.14
2012-13	2.62	0.63	3.25	19.47	-16.22
2013-14	3.95	0.68	4.63	15.02	-10.39
2014-15	4.28	1.94	6.22	15.34	-9.12
2015-16	4.59	0.56	5.15	15.99	-10.84
2016-17	4.72	0.56	5.28	17.45	-12.17
2017-18	4.21	0.58	4.79	16.95	-12.16
2018-19	5.57	0.50	6.07	14.11	-8.04
2019-20	4.72	0.54	5.25	14.60	-9.34
2020-21	4.32	0.45	4.77	16.08	-11.32
2021-22	5.66	7.23	12.90	17.28	-4.39

Source: Annual Audit Reports of THHDCL

It is suggested that THHDCL has potential to grow but for its sustainability, it needs to decrease its expenses and make more efficient use of manpower. It needs to sell some high-value products,

such as traditional drinks, to increase profit. THHDCL needs to expand its markets across India by distributing its product across all handicrafts shops in India and sell products through e-commerce.

Tripura Tea Development Corporation Limited (TTDC)

TTDC was founded in 1980 with the intention of advancing the state's tea sector. TTDC is currently operating in three tea gardens at Brahmakunda, Machmara, and Kamalasar. Their total area under tea plantation is only 260 hectares, only out of total 657.33 hectares total area.

In Table 5.26, TTDC constant loss is visible apart from 2020-21 when the profit was Rs.1.13 crore; it was due to the rise in revenue from operation from Rs.5.95 crore in 2019-20 to Rs.12.53 crore in 2020-21. As per the Annual Report 2021-22, the asset and liabilities of TTDC are equal over the year and both were Rs.36.5 crore.

Table 5.26: Year-wise Financial data of Tripura Tea Development Corporation Ltd. (Rs. in crore)

Year	Revenue from Operations	Other Income	Total Income	Expenditure	Net Profit / Loss
1	2	3	4=(2+3)	5	6 =(4 - 5)
2004-05	2.63	0.04	2.66	3.42	-0.76
2005-06	2.12	0.10	2.22	3.27	-1.05
2006-07	2.69	0.16	2.85	3.49	-0.64
2007-08	3.10	0.41	3.52	3.92	-0.40
2008-09	4.50	0.39	4.89	4.41	0.48
2009-10	4.45	0.38	4.82	5.74	-0.92
2010-11	5.25	0.52	5.77	8.14	-2.36
2011-12	4.55	0.79	5.33	6.09	-0.76
2012-13	5.21	1.34	6.54	6.96	-0.42
2013-14	3.82	1.39	5.21	7.39	-2.17
2014-15	4.43	0.89	5.32	7.97	-2.65
2015-16	4.44	1.43	5.87	7.95	-2.08
2016-17	4.10	2.43	6.53	8.35	-1.83
2017-18	3.65	4.94	8.58	10.90	-2.31
2018-19	5.46	3.07	8.54	9.90	-1.36
2019-20	5.95	2.26	8.21	10.06	-1.85
2020-21	12.53	1.77	14.30	13.17	1.13
2021-22	12.18	1.06	13.24	15.50	-2.25

Source: Annual Audit Reports of TTDC

Tripura Small Industries Corporation Limited (TSICL)

TSICL was established in 1965 with the goal of advancing small-scale businesses in the state by offering assistance to small business owners in a variety of ways, including marketing help. The primary activities of TSIC are:

- a) Supporting the local SSI Units with marketing and selling of goods like auto parts and furniture, among other things.
- b) Manufacturing operations, such as managing departmental production units and making bricks.
- c) Additional tasks include overseeing LC Stations and other infrastructure, getting rid of waste, etc.

Table 5.27: Year-wise Financial data of Tripura Small Industries Corporation Ltd. (in Rs. Crore)

Year	Total Income	Expenditure	Net Profit/Loss
1	2	3	4 = (2 - 3)
2015-16	15.40	18.56	-3.34
2016-17	18.22	24.82	-6.60
2017-18	14.39	21.15	-6.76
2018-19	8.27	16.25	7.98
2019-20	5.84	9.73	-3.89

Source: Annual Audit Report of TSICL

According to the Economic Review of Tripura as of March 31, 2022, TSIC's paid-up share capital was about Rs.59.56 crore. As of March 31, 2023, there were 348 authorized employees and 71 working employees.

From Table 5.27, it is very clear that TSICL is struggling for its survival. In the period of 2015-16 to 2019-20, the total loss is almost Rs.13 crore. Over the years, the total income has decreased significantly, from Rs.18.22 crore in 2016-17 to Rs.5.84 crore in 2019-20.

5.9 Measures Taken to Enhance Performance of Different Departments and Public Enterprises

Tripura has taken several measures to enhance the performance of its different departments and public enterprises.

Institutional Reforms

The state government has established a robust institutional framework to facilitate effective governance and administration. This includes the creation of a dedicated department for finance, power, and rural development, which oversees the allocation of resources and ensures efficient utilization. Industries and Commerce Department, Government of Tripura (GoT) is the nodal Department for industrialization in the State. The Department discharged its functions through its nodal agency Tripura Industrial Development Corporation Limited (TIDCL). The state government has taken initiatives to increase farmers' income by organizing them into Farmer Producer Organizations (FPOs). It also encourages agro-entrepreneurship and agricultural start-ups.

Capacity Building and Training

Capacity building is the process of developing and strengthening the skills, abilities, and resources that organizations and communities need to adapt and thrive in a changing world. To enhance the capacity of its officials, the Tripura government has introduced various training programmes. These initiatives focus on developing skills, knowledge, and attitudes necessary for effective governance and public administration. In order to provide capacity building and training, the institutions like SIPARD, Panchayat Raj Training Institute (PRTI), Tripura Rural Livelihood Mission (TRLM), SAFED plays an effective role. Directorate of Information Technology (DIT) offers training programs on topics such as IT security policy, project management, and e-procurement. The scheme also includes action plans such as setting up ICT training centers and capacity building for ST/SC officers. The Directorate of Skill Development (DSD) was established under the Department of Industries & Commerce to coordinate the mission's skill development initiatives. Capacity building workshop on clean energy transmission was held to discuss issues with utility officials, such as voltage fluctuations, power failures, and delays in obtaining new service connections. Specialized training programmes (STeP), CIO training, Technical training and Thematic workshops. The state government has established State e-Mission Teams (SeMTs) to support e-Governance initiatives. Approximately 11,000 officers were trained, and 258 experts were on boarded to SeMTs. Indian Council of Agricultural Research (ICAR) has undertaken a basic training programme to develop sustainable jhum farming practices for the overall livelihood improvement of the farmers and conservation of natural resources.

Performance Monitoring and Evaluation

The state government has implemented a performance monitoring and evaluation system to track the progress of different departments and public enterprises. This system enables the government to identify areas of improvement, provide feedback, and take corrective action.

Public-Private Partnerships

Tripura has promoted public-private partnerships (PPPs) to leverage private sector expertise, resources, and efficiency. PPPs have been used in various sectors, including infrastructure development, healthcare, and education.

Transparency and Accountability

To ensure transparency and accountability, the state government has implemented various measures, including the Right to Information Act, social audits, and citizen engagement initiatives. These measures enable citizens to participate in the decision-making process, track government expenditures, and hold officials accountable for their actions. By implementing these measures, the state government aims to enhance the performance of its departments and public enterprises, ultimately improving the lives of its citizens.

5.10 Power Sector Reforms and Its Impact on State's Fiscal Health

Power sector has a significant impact on the social and economic progress of an economy. Despite geographical, economic, and infrastructure challenges, Tripura's electricity sector has achieved positive progress. The planned availability of quality and quantity of electricity is the most important driver of the success of social sectors such as health, as well as critical sectors such as agriculture, business, and industry. According to modern science, a citizen's standard of living or level of advancement is determined by how much power they wield. Since its inception on January 1, 2005 under the Electricity Act, 2003, Tripura Electricity Corporation Limited (TSECL) is a nodal agency for generating and distribution of electricity in the state. They took over the existing network and assets of the Power Department to operate and maintain power supply in the state.

ONGC Tripura Power Company Limited (OTPC) or Palatana Power Project is the major force in making Tripura a power surplus state. OTPC has the power generation capacity of 726.6 MW, and ONGC is the major shareholder keeping 50 percent share in their own hands. The other shareholders of the OTPC project are GAIL India Limited (26 percent) and India Infrastructure

Fund II (23.5 percent) and Government of Tripura (only 0.5 percent). The promoters of this project are ONGC and Govt. of Tripura.

Table 5.28 reveals the list of all power generating stations with their installed capacities. From the Table 5.28, it is found that TSECL's 115 MW total capacity is made up of three producing stations: the Gomati Hydroelectric Project, the Baramura Gas Thermal Power Station, and the Rokhia Gas Thermal Power Station. It also comprises 1 MW diesel-powered generating units, which have been operational since independence.

Table 5.28: Power Project Installation and Its Installed Capacity

Name of Project	Unit	Year of Installation	Installed Capacity
Gumti Hydro Electricity Project	Unit-I	1976	5.00 MW
	Unit-II	1976	5.00 MW
	Unit-III	1984	5.00 MW
Baramura Gas Thermal Project	Unit-IV	2002	21.00 MW
	Unit-V	2010	21.00 MW
Rokhia Gas Thermal Project	Unit-VII	2002	21.00 MW
	Unit-VIII	2006	21.00 MW
	Unit-IX	2013	21.00 MW
Total Installed (Hydro + Thermal)			115.00 MW(5 MW standby)

Source: <https://tsecl.in>

Gomati Hydel Project is a minor hydroelectric power plant in Gomati District with 15 MW (5 MW in each unit) capacity. The project's reservoir has an annual energy content of just 60 million units. Typically, two 5 MW units operate at an 8 MW continuous load, with the third unit being kept on standby. The Plant Load Factor (PLF) is around 53.33 percent in theory, using one unit as a standby. Due to availability of sufficient water throughout the year except the monsoon the project has faced a severe crisis.

In the Gas Thermal Project at Rokhia, there are three sets of gas turbines with 21 MW installed capacity each. The life of Unit 1 is over. Unit II has also been problematic ever since it was put into service. It is determined that the expense of reconditioning these units is too high.

Due to extensive use of the first three units in the Gas Thermal Project at Baramura have outlived their typical lifespan, and further life extension appears impossible due to a lack of market-available replacement components and the large financial expenditure required for this purpose.

Presently, there are two 21 MW units operating, with an average PLF of over 95 percent. Under the Availability Based Tariff (ABT) mechanism, the Baramura project has been coordinated with NE Grid. Since these two units are sponsored by NEC, they are regarded as interstate stations, and as such, the neighboring states of Manipur and Mizoram must get 50 percent of the capacity.

Out of 115 MW installed capacity (5 MW standby of Gomati HE Project) in the state comprising of Baramura-42 MW, Rokhia-63 MW and Gomati Hydel project-10 MW, the overall generation of power is 85 MW round the clock, as such, the PLF works out at 74 percent for installed adequate capacity the State based on gas availability.

In 2022-2023, the State's peak demand was 332.70 MW. Three generating plants provide 80-100 MW of own generation. After receiving an increased share from OTPC, Palatana, NEEPCO, and Monarchak power, the state is able to satisfy the whole peak demand.

Table 5.29: Power Generation of the State

Financial Year	No. of power generating Station (State owned)		Installed capacity (MW)		Own electricity generation (MU)				Purchased from central sector grid (MU)	Total power required (MU)
	Hydel	Gas	Hydel	Gas	Hydel	Gas	Auxiliaries	Total own generation		
1	2	3	4	5	6	7	8	9 = (6+7)-8	10	11 = 9+10
2012-13	1	2	15	116	38.73	761.99	7.891	792.829	429.69	1222.519
2013-14	1	2	15	137	34.503	729.198	7.534	756.167	600.614	1356.781
2014-15	1	2	15	137	30.32	726.62	7.48	749.46	1046.52	1795.98
2015-16	1	2	10	105	21.97	701.674	7.171	716.473	1669.829	2386.302
2016-17	1	2	10	105	40.796	625.373	6.539	659.63	1981.473	2641.103
2017-18	1	2	10	105	43.85	592.16	6.23	629.78	2419.35	3049.13
2018-19	1	2	10	105	35.5	613.87	6.39	642.98	2683.17	3326.15
2019-20	1	2	10	105	26.01	686.15	7.04	705.12	2459.42	3164.54
2020-21	1	2	10	105	7.97	539.61	5.45	542.13	2458.79	3000.92
2021-22	1	2	10	105	9.39	569.34	5.76	572.97	2625.48	3198.45
2022-23	1	2	10	105	13.76	550.07	5.6	558.23	2642.53	3200.76

Source: Economic Review of Tripura

From Table 5.29, it is observed that total demand for power has increased over time, though the own generation of power has decreased over the years. It peaked at about 793 MU in 2012-13 and decreased to 550.07 MU in 2022-23. In order to meet the demand for power, the state has purchased from the central power grid. During 2022-23, the state generated power only 558.23 MU out of total demand of 3200.76 MU. The state needs to be self solvent in the generation of power. The total power generated inside the State was 558.23 MU, and the electricity purchased from the Central Sector was 2642.53 MU during 2022-23.

Power Transmission in the State

To understand the status of power transmission, the most important thing is to look into the length of transmission lines and the different types of substation in the state; the information about the updates are given in the following Table 5.30.

From Table 5.29, it is observed that the length of 572.45 circuit km (ckm) of 132 kilovolt (kV) lines has been constructed by 2018, another 44 circuit kilometer (ckm) of 132 kilovolt (kV) lines has been increased by the next 5 year. In the case of the 66 kV line, there is no change in the length of 408 cKm over the last five years. Also, there is no change in case of 33 kV line after 2020; a total of 911 cKm was constructed till March, 2023. But there is year-on-year growth of 4.3 percent and 2.7 percent of 11 kV line and LT line length. Total transmission length line is 54814 cKm as of March 2023, which was 45372.38 cKm in March 2018. The other foremost instrument for the progress of power transmission other than an increase in line length is minimizing transmission loss. Minimizing transmission losses is important for improving the reliability and efficiency of power systems and for reducing the environmental impact of electricity. Transmission losses contribute to higher electricity costs, have environmental implications, and also reduce the downtime or load shedding problem.

Table 5.30: Updates about Transmission lines in Tripura during 2018-2023

Lines (in approx. cKm)	March 2018	March 2019	March 2020	March 2021	March 2022	March 2023
132 kV Line	572.45	572	572	572	572	616
66 kV Line	408	408	408	408	408	408
33 kV Line	868.93	894	911	911	911	911
11 kV Line	16741	17667	18091	18577	18886	19449
LT Line	26782	29302	31802	32443	32901	33430
Total Length of Line	45372.38	48843	51784	52911	53678	54814

Source: Different issues of Economic Review of Tripura

TSECL has taken the following decisions and actions to minimize the transmission losses:

1. With the construction of new substations, most outdated 66-KV lines and their 66-KV transformation capacity will be upgraded to 132-KV.
2. The outdated and derated 66 KV network will be replaced with a 132 KV level throughout the state.
3. Replacing the outdated conductor (where mechanical strength has decreased) with an HTLS conductor improves reliability, voltage profile, and future load management.
4. Using numerical relays instead of outdated or ancient switch gears and faulty electromechanical protection relays.
5. Installing Relays for Distance Protection.
6. Setting up a 132 KV link to create the system's ring-main.
7. The installation of new capacity and sufficient augmentation of transformation capacity to accommodate current and future load increases.
8. Finding the transmission system's weakest points and strengthening them to get the most rewards.
9. To enhance service delivery, lower system losses, and provide more power availability for customers.

Power Distribution in the State

The distribution setup of the state is really progressing and can be committed only by looking at the growth of the number of substations and the number of customers. From Table 5.31, it is clearly observed that over the last 6 years, other Distribution Sub-station numbers are constant. The number of 132 kV Sub-station is constant at 13, the number of 66 kV Sub-station is constant at 14 and 33 kV only changed in 2023 from 48 in 2018 to 61. The increase in growth is 4.6 percent from March, 2018 to March, 2023.

Table 5.31: Status of Sub-stations in Tripura

Sub-station (Nos.)	March 2018	March 2019	March 2020	March 2021	March 2022	March 2023
Distribution Substation	14440	15538	16316	16862	17324	18589
132 kV Sub Station	13	13	13	13	13	13
66 kV Sub Station	14	14	14	14	14	14
33 kV Sub Station	48	48	48	48	48	61

Source: Different issues of Economic Review of Tripura

In Table 5.32, the struggle for sustainable growth of TSECL is very much visible. TSECL has incurred loss from the day of inception to 2021-22. The total income of TSECL has increased consistently from Rs.260.34 crore in 2005-06 to Rs.1605.98 crore in 2021-22, this is due to the consistently increased Revenue from Operation.

Table 5.32: Financial Status of TSECL during 2005-06 to 2021-22

Year	Revenue from Operation	Other Incomes	Total Income	Expenditure	Net Profit / Loss
1	2	3	4 = (2 + 3)	5	6 = (4 - 5)
2005-06	211.09	49.25	260.34	251.53	8.81
2006-07	234.93	34.23	269.16	259.29	9.87
2007-08	264.65	42.83	307.48	276.06	31.42
2008-09	350.87	62.43	413.3	356.02	57.28
2009-10	273.68	66.46	340.15	335.4	4.75
2010-11	305.94	50.68	356.62	452.41	-95.79
2011-12	348.22	79.78	428	548.33	-120.33
2012-13	359.78	47.49	407.27	514.71	-107.44
2013-14	520.45	41.89	562.35	669.07	-106.72
2014-15	688.31	43.32	731.63	811.59	-79.96
2015-16	798.73	33.06	831.79	988.75	-156.96
2016-17	1011.5	41.65	1053.15	1078.59	-25.44
2017-18	1262.78	48.72	1311.5	1287.42	24.08
2018-19	1427.94	70.76	1498.7	1429.55	69.15
2019-20	1468.4	35.11	1503.51	1551.54	-48.03
2020-21	1440.06	28.28	1468.34	1449.64	18.7
2021-22	1562.76	43.22	1605.98	1708.08	-102.1

Source: Annual Audit Reports of TSECL

Table 5.33 shows the selling of power to the final consumers. TSECL is selling power to the domestic consumers, for the commercial purpose, selling to industries, for irrigation and public water and sewage and selling to tea garden. It is observed that TSECL has sold maximum power to the households for their domestic use. TSECL has increased the total selling of power from 380 MU in 2004-05 to 1150.27 MU in 2022-23. Out of the total 1150.27 MU in 2022-23, they have sold to household consumer 640.50 MU for their domestic use, tea garden (200.22 MU), irrigation and public water and sewage (174.07 MU), for commercial purpose (73.16 MU) and industrial customers (50.75 MU).

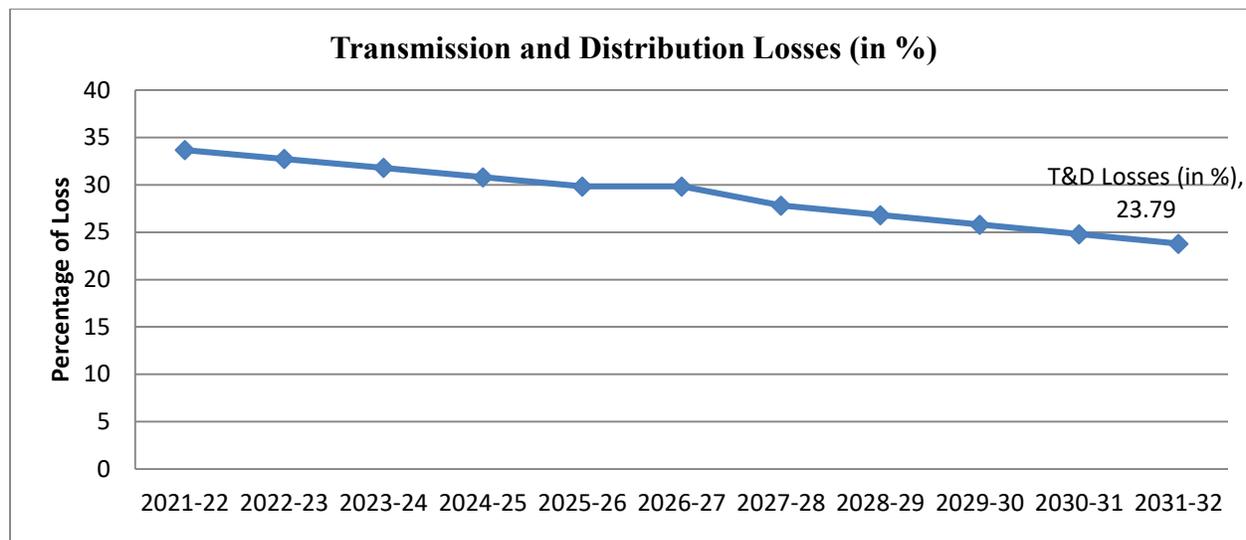
Table 5.33: Power Sold to Final Consumers in the State (in MU)

Financial Year	Sold to ultimate consumers	Domestic Light & Fan	Commercial	Industrial Power	Public Lighting	Irrigation public water & sewage	Tea garden bulk supply & mobile tower
2004-05	380	146.26	33.44	51.3	7.6	129.2	15.2
2005-06	370.69	208.65	34.2	21.26	18.31	21.15	67.13
2006-07	394.6	222.1	36.4	22.63	19.49	22.51	71.46
2007-08	397.81	223.91	36.7	22.82	19.65	22.7	72.04
2008-09	450.85	241.85	41.02	31.8	22.27	68.67	45.25
2009-10	494.56	262.24	46.65	30.21	24.43	84.12	46.92
2010-11	568.83	308.82	54.23	30.76	28.1	85.64	61.29
2011-12	624.17	341.06	60.35	31.39	30.85	76.52	84.03
2012-13	683.05	365.48	67.18	37.99	33.74	98.81	79.85
2013-14	712.27	390.4	64.66	37.07	34.75	97.06	88.34
2014-15	786.11	430.87	71.36	40.91	38.35	107.12	97.5
2015-16	813.06	439.79	74.92	43.01	39.71	113.26	102.37
2016-17	866.56	474.97	78.66	45.09	42.28	118.08	107.48
2017-18	928.01	508.65	84.24	48.29	45.28	126.45	115.1
2018-19	868.23	486.93	57.2	40.1	53.73	93.7	136.57
2019-20	914.22	531.07	71.83	40.12	48.09	100.86	122.25
2020-21	982.33	588.22	72	43.44	46.07	113.94	118.66
2021-22	1099.21	640.38	68.12	52.09	11.49	147.28	179.85
2022-23	1150.27	640.50	73.13	50.75	11.59	174.07	200.22

Source: Economic Review of Tripura 2022-23

From Figure 5.2, it is observed that TSECL steps for minimizing Transmission & Distribution (T&D) Loss, and now it is in the right track. As per the report of the 12th Electric Power Survey of India (2022), it is decreasing around one percent in every year. During the year 2025-26 and 2026-27 losses are same at 29.83%. In 2021-22, the T&D losses is found 33.68 percent and it is expected to decrease to 23.79 percent in 2031-32, according to the 12th Electric Power Survey of India.

Figure 5.2: Transmission and Distribution Losses of TSECL



Source: Report on Twentieth Electric Power Survey of India (Volume-I)

5.11 Suggestions and Recommendations

- The major percentage of internal debt taken by the state come from market loan (SDL), NABARD and through special securities issued to NSSF. NABARD is providing loan for construction of rural infrastructure and the rate of interest is 1.5 percent less than bank rate. It is recommended that the state can take loan from NABARD especially for the construction of rural infrastructure as the rate of interest is comparatively lower.
- The performance of the public sector enterprises is not satisfactory; most of them are making losses and not contributing on the fiscal health of the state. To improve the efficiency of the PSEs, strict monitoring by the appropriate authority is needed and incremental benefit of the employees should be performance based in order to avoid the loss in this sector.
- Merging TUTCL and TRTC into a single entity is recommended for better management and use of each other's resources. Tripura's urban magnitude is not sizable enough and it requires a separate urban transport enterprise. Merging of these two entities could provide more efficiency by earning more profit.
- THHDCL needs to expand its markets across India by distributing its product across all handicrafts shops in India and sell products through e-commerce.
- TTDC needs to expand their markets to increase their margin by developing ways of distribution of their products across all premium tea leaf shops in India. Online selling through

e-commerce can be another option in making more sales as well as more margin for sustainability.

- TJML needs to be dissolved as quick as possible, and present manpower can be absorbed by any other PSU under the Directorate of Industries & Commerce, Govt. of Tripura, such as Tripura Industrial Development Corporation (TIDCL), and all physical assets can also be handed over to TIDCL.
- Since Tripura's reliance on central sources has grown over the past year and its own power output has declined, TSECL needs to investigate other power-generating sources in the state, especially renewable sources. TSECL must implement prepaid meters throughout the states, particularly with government departmental supplies, in order to reduce its losses and enhance its financial health. It must rely on its own resources in the long run for the expansion of machines and transmission lines, in most cases, TSECL has expanded under the central government schemes.

Chapter 6

Grants-In-Aid for Local Bodies

This chapter covers the three Terms of References given by the Finance Commission (viz. TOR 7, 10, and 11). Section 6.1, 6.2 and 6.3 cover TOR # 7, Section 6.4 covers TOR # 10, Section 6.5 covers TOR # 11. Section 6.6 highlights the outcome evaluation of the state finances given to the local bodies and Section 6.7 highlights the recommendations.

6.1 Views of the State regarding Grants-in-Aid to Local Bodies

Section 31 of the Tripura Panchayats Act, 1993 states that, subject to the conditions imposed by the State Government, every Gram Panchayat is required to make reasonable provisions within its area for basic civic amenities such as sanitation, health care, drinking water, maintenance and repair of public streets, and maintenance of community assets vested in Gram Panchayats. For this purpose, the State Government is providing Grant-in-Aid to Panchayati Raj Institutions. Under the 74th Amendment to the Constitution urban local Bodies (ULBs) are delegated significant responsibilities to municipalities, including the preparation of plans for economic development and social justice, as well as the implementation of schemes entrusted to them, including those relating to the 18 items listed in the Twelfth Schedule of the Constitution. The state government has prioritized eight basic services: water supply, drainage, solid waste management, sanitation, housing amenities, roads and bridges, street lighting, and sewerage. The Central Finance Commission grants used to be allocated among the Panchayati Raj Institutions and Sixth Schedule areas on the ratio of 57:43. This is further used to be allocated among the RLBs on the ratio of 70:25:5 i.e. 70 percent to the Gram Panchayat / Village Committee (GP/VC), 25 percent to Panchayat Samiti/ Block Advisory Committee (PS/BAC) and remaining 5 percent to the Zila Parishad / Tripura Tribal Areas Autonomous District Council (ZP/TTAAD Head Quarter). From 2024-25 FY onwards as per recommendation of the State Finance Commission, the fund will be allocated on the ratio of 85:10:5 respectively.

Table 6.1 shows the number of local governing bodies in Tripura, divided into Urban Local Bodies (ULBs) and Panchayati Raj Institutions (PRIs). There is only one municipal corporation namely Agartala Municipal Corporation in Tripura, representing the largest urban local body in the state. There are 13 municipal councils, which govern smaller urban areas of different cities in different districts of the state. Tripura has six Nagar Panchayats, which are responsible for administering

small towns of the state. There are eight Zilla Parishads as district-level rural governing bodies. A total of 35 Panchayat Samitis, operate at the block level within each district.

Table 6.1: Number of Local Bodies in Tripura

ULBs and PRIs	Number of local bodies in Tripura
Municipal Corporation	1
Municipal Councils	13
Nagar Panchayats	6
Zilla Parishads	8
Panchayat Samitis	35
Gram Panchayats (out-side TTAADC)	589
Gram Panchayat (inside TTAADC)	587

Source: Panchayat Department, Government of Tripura

A total of 589 Gram Panchayats operate outside the Tripura Tribal Areas Autonomous District Council (TTAADC) region, managing rural administration. Another 587 Gram Panchayats are located within the TTAADC region, which is a special administrative area for tribal governance. The transfer of resources from the state government to local bodies and institutions have evolved significantly over the last twenty years. Although, the increase in total transfers indicate an expansion of fiscal support, yet recent declines highlight challenges and shifts in policy priorities. Further analysis is recommended to understand the factors influencing these trends and their impact on local governance and development.

The data given in Table 6.2 has reported the transfer of resources from the State Government to Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs), and Autonomous Bodies (TTAADC) from 2004-05 to 2023-24. The data highlights trends, fluctuations, and the relative allocation of funds among these institutions. Table 6.2 also shows that the initial funding for PRIs was modest, starting at Rs.34.02 crore in 2004-05 and reaching a substantial peak of Rs.248.24 crore in 2021-22 and after that it shows again a declining trend. In the year 2023-24, the fund transfer to Panchayat Raj institutions is decreased to Rs.76.44 crore. Allocations to Urban Local Bodies (ULBs) increased significantly over this time, from Rs.11.65 crore in 2004-05 to Rs.533.7 crore in 2020-21 though it has decreased again in the next year. However, in subsequent two years, there has been an increase in fund transfer to the urban local bodies. Tripura's TTAADC, an

autonomous body, had the most fluctuating allocations, with notable spikes in certain years. In case of fund transfer to TTAADC, an increasing trend is observed up to the financial year 2010-11. During 2004-05 the amount of fund transfer to TTAADC was Rs.30.80 crore and it has increased to Rs.130.60 crore during 2010-11. From 2011-12, the amount transfer to TTAADC were very small it fluctuated up to the financial year 2013-14. Thereafter, the amount transferred to TTAADC has increased from 2015-16 though it is fluctuated over the years. In 2023-24, an allocation of fund given to TTAADC is Rs.672.64 crore.

Table 6.2: Transfer of Resources from the State Govt. to Local Bodies and Other Institutions during 2004-05 to 2023-24 (Rs. in Crore)

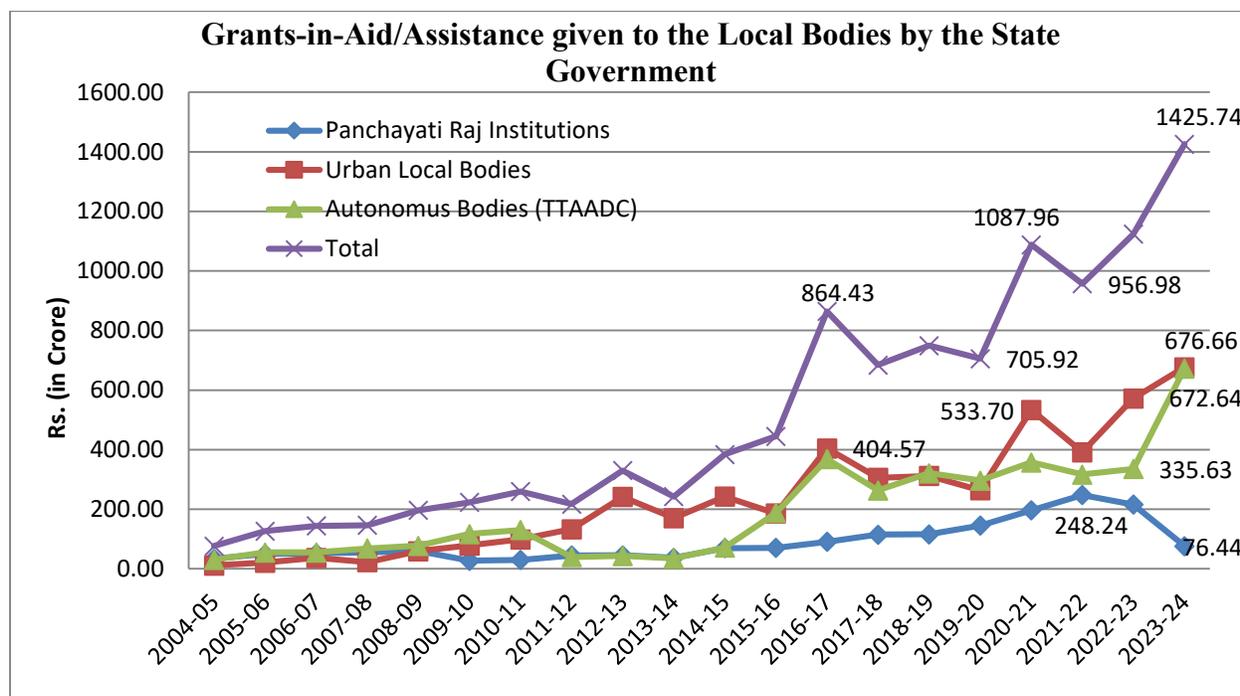
Year	Panchayati Raj Institutions	Urban Local Bodies	Autonomous Bodies (TTAADC)	Total
2004-05	34.02	11.65	30.80	76.47
2005-06	50.00	21.10	55.46	126.56
2006-07	52.00	37.17	55.33	144.50
2007-08	55.17	22.79	68.32	146.28
2008-09	60.00	59.24	77.50	196.74
2009-10	27.57	78.52	117.28	223.37
2010-11	29.93	99.27	130.60	259.80
2011-12	45.04	132.93	39.86	217.83
2012-13	45.36	241.52	43.60	330.48
2013-14	37.12	170.76	34.92	242.80
2014-15	69.88	242.51	71.80	384.19
2015-16	70.77	186.10	187.93	444.80
2016-17	90.98	404.57	368.88	864.43
2017-18	115.27	305.75	263.48	684.50
2018-19	116.08	312.21	321.09	749.38
2019-20	145.63	263.89	296.40	705.92
2020-21	196.79	533.70	357.47	1087.96
2021-22	248.24	391.74	317.00	956.98
2022-23	216.07	571.97	335.63	1123.67
2023-24	76.44	676.66	672.64	1425.74

Source: <https://cag.gov.in/ae/tripura/en>

The total amount of resources allocated increases gradually over time, reaching a peak of Rs.1425.74 crore in 2023-2024 from Rs.76.47 crore in 2004-05.

Figure 6.1 illustrates the shifting priorities of the state, showing brief increases in spending for rural and urban development as well as large resource infusions for independent enterprises. It is found that there is a modest increase of fund transfer to Panchayati Raj Institutions from Rs.34.02 crore in 2004-05 to Rs.248.24 crore in 2020-21, thereafter it has decreased to Rs.76.44 crore in 2023-24.

Figure 6.1: Trends of Grants-in-Aid / Assistance from the State Govt. to Local Bodies over Time (in Rs. Crore)



Source: <https://cag.gov.in/ae/tripura/en>

In case of funding for ULBs, it shows consistency in increase in fund from Rs.11.65 crore in 2004-05 to a peak of Rs.533.7 crore in 2020-21 though it declined in the next year. From 2021-22, again there is a sharp increase in fund transfer to the ULBs. This trend is indicative of rising urbanization and the demand for infrastructure in cities. The trajectory for Autonomous Bodies shows the most significant swings, with consistent growth from 2016 to 2017 and thereafter the fluctuation in trend of fund transfer is observed. From 2022-23, a sharp increase in fund transfer of Rs.672.64 crore to TTAADC is observed.

The overall transfers increased dramatically from Rs.76.47 crore in 2004-05 to a peak of Rs.1425.74 crore in 2023-24. Before 2023-24, a sharp peak was found of Rs.864.43 crore in 2016-17 and Rs.1087.96 crore in 2020-21 and these were due to allocation of more fund to ULBs and

TTAADC. The peak in 2021-22 suggests extraordinary fiscal efforts, possibly driven by post-pandemic recovery or large-scale infrastructure projects.

6.2 Grants-in-Aid to Rural Local Bodies: Recommendations

The revenue expenditure in the state of Tripura has been observed during the last ten years. It is found that the operational costs and service expansion, is growing from Rs.22.03 crore in 2015-16 to Rs.144.40 crore in 2022-23. However, during 2023-24, this expenditure has dropped to Rs.108.92 crore due to a reduction in grants. In the case of capital expenditure, it varied significantly, rising from Rs.5.92 crore in 2015-16 to a high of Rs.36.46 crore in 2022-23. This expenditure category reflects infrastructure investments, which increases till 2022-23; though in 2023-24 the amount of capital expenditures declines to Rs.27.52 crore in the rural local bodies. Total expenditure demonstrated a substantial growth from Rs.27.95 crore in 2015-16 to Rs.180.86 crore in 2022-23, indicating a focus on both operational and developmental spending. In 2023-24, the total expenditure has been Rs.136.44 crore, in line with the decreased revenue from grants.

According to the financial data, Tripura's lowest level of governing bodies heavily depends on outside money; changes in revenue and expenditure may be a reflection of shifting funding priorities. These financial independence of the local governments can be further strengthened by initiatives to stabilize funding and boost their own revenue generation for the betterment of the state.

Table 6.3 shows the revenue and expenditure of Tripura's Gram Panchayat and Village Councils' from 2015-16 to 2023-24 further showing patterns in revenue and spending, highlighting the expanding significance of funds from the federal and state governments in assisting local governance. This report looks at grants, revenue, and expenses within this time frame from 2015-16 to 2023-24.

In recent fiscal year 2023-24, it is found that there is a decrease in receipts and expenditures. A notable fluctuations in capital spending is found, which indicate changes in infrastructural investments. Table 6.3 shows that the limited money received by local governments underscores their reliance on subsidies from the federal government and the state. There is a modest growth of Gram Panchayat's own revenue from Rs.1.66 crore in 2015-16 to Rs.3.75 crore in 2023-24. Despite steady growth, own revenue remains a small fraction of total receipts. Central grants has experienced a general upward trend, rising from Rs.36.28 crore in 2015-16 to a high of Rs.132.13 crore in 2021-22, though it is dropped significantly to Rs.41.44 crore in 2023-24.

Table 6.3: Revenue and Expenditure of Lowest Tier (Gram Panchayat & Village Council) of Local Government in Tripura (Rs. in Crore)

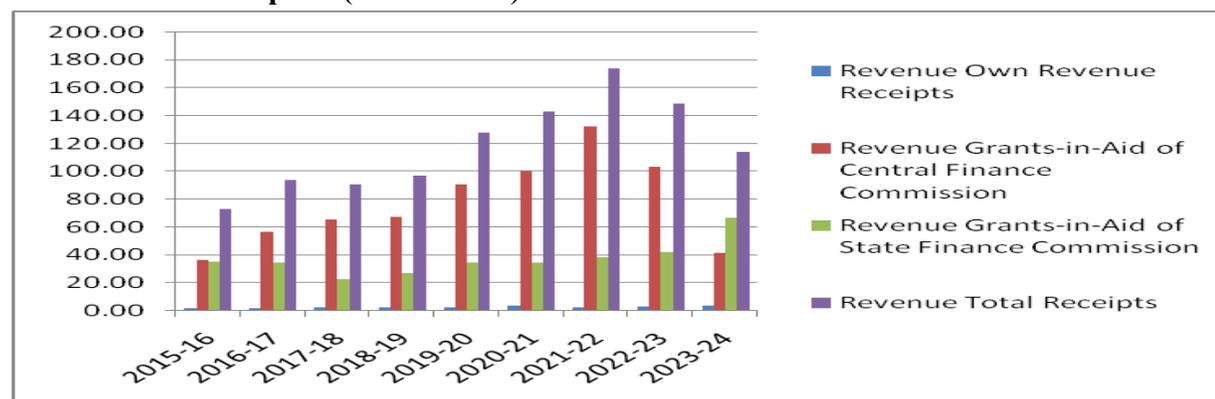
Year	Revenue				Expenditure		
	Own Revenue Receipts	Grants-in-Aid of Central Finance Commission	Grants-in-Aid of State Finance Commission	Total Receipts	Revenue Expenditure	Capital Expenditure	Total Expenditure
2015-16	1.66	36.28	35.04	72.98	22.03	5.92	27.95
2016-17	2.05	56.76	34.61	93.42	69.38	17.85	87.22
2017-18	2.57	65.43	22.64	90.64	79.07	20.44	99.51
2018-19	2.33	67.21	27.28	96.82	87.32	22.63	109.95
2019-20	2.56	90.62	34.48	127.67	124.56	32.33	156.89
2020-21	3.53	100.29	34.48	143.01	36.53	9.24	45.76
2021-22	2.74	132.13	38.65	173.51	134.06	33.81	167.87
2022-23	3.38	102.90	42.04	148.31	144.40	36.46	180.86
2023-24	3.75	41.44	66.41	114.05	108.92	27.52	136.44

Source: Directorate of Panchayats, Government of Tripura

State grants has showed fluctuations but ultimately it has expanded, and increasing from Rs.35.04 crore in 2015-16 to Rs.66.41 crore in 2023-24. The total receipts shows a consistent growth, rising from Rs.72.98 crore in 2015-16 to a peak of Rs.173.51 crore in 2021-22 before a decrease to Rs.114.05 crore in 2023-24.

Figure 6.2 illustrates both the growth and volatility of different types of revenue comes from different heads viz. grants-in-aid from Central Finance Commission and State Finance Commission and with a limited contribution from locally generated funds.

Figure 6.2: Revenue Receipts of Lowest Tier (Gram Panchayat & Village Council) of Local Government in Tripura (Rs. in crore)



Source: Directorate of Panchayats, Government of Tripura

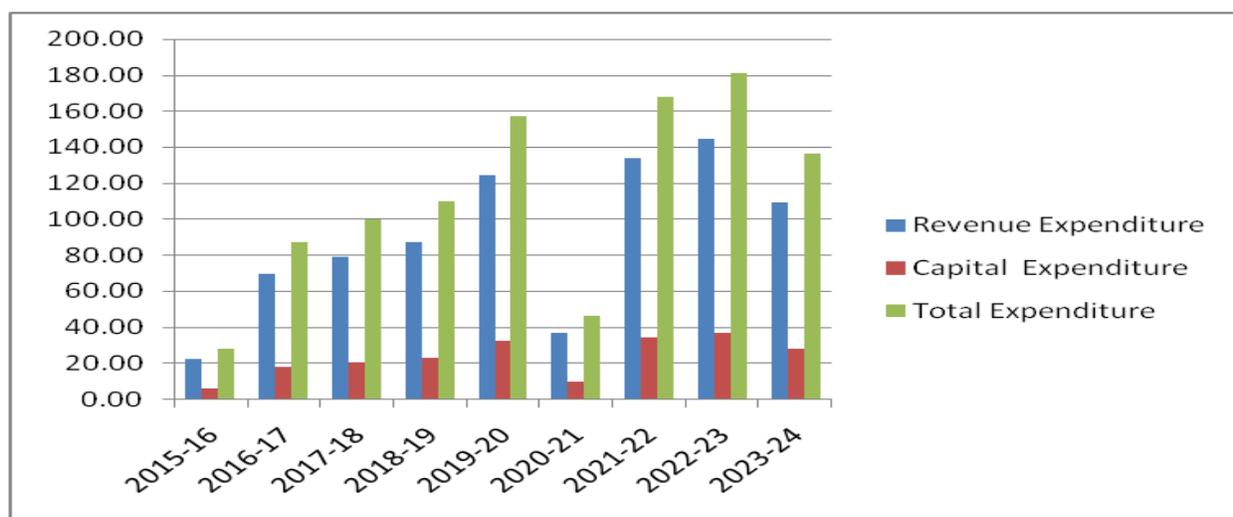
Figure 6.2 reveals the expenditure of the Rural Local Bodies especially for Gram Panchayat and Village committee level (for TTAADC area) from 2015-16 to 2023-24. It is found that the revenue expenditure and capital expenditure in 2015-16 are minimum.

Figure 6.2 has revealed that the revenue and expenditure patterns indicate a heavy reliance on external grants. Peaks in expenditure align with increased grants, especially from the central government. The near-flat graph for own revenue receipts underscores the challenges in local revenue generation, highlighting dependency on external funding. The capital expenditure line fluctuates, suggesting that investments in development projects may not be consistent and are likely dependent on fund availability in any given year.

Tripura's Gram Panchayats and Village Councils rely heavily on federal and state grants to finance both ongoing and capital projects, as shown in Figure 6.2. While revenue expenditure stays more constant since it covers administrative and critical services. Capital expenditure swings indicate that infrastructure projects are given priority when funds are plentiful.

In accordance with Figure 6.3, revenue expenditure shows a steady upward trend from 2015-16 to 2022-23. This growth indicates increasing operational costs and expenses related to local governance, public services, and administrative functions. The revenue expenditure begins at Rs.22.03 crore in 2015-16 and increases steadily to Rs.144.40 crore by 2022-2023 to support local services.

Figure 6.3: Expenditure of Lowest Tier (Gram Panchayat & Village Council) of Local Government in Tripura (Rs. in crore)



Source: Directorate of Panchayats, Government of Tripura

The spending trends of Gram Panchayats and Village Councils in Tripura from 2015-16 to 2023-24 are shown in Figure 6.3. Revenue expenditures and capital expenditures are separated out, and the sum of the two is shown as the total expenditure. Revenue spending is tightly linked to the availability of external money, as evidenced by the fall in 2023-24 (Rs.108.92 crore), which is correlated with a reduction in funding, especially in grants.

The financial trends of Gram Panchayats in Tripura highlights significant reliance on external grants, a declining revenue base post-2019-20, and a need for improved financial autonomy and efficiency. Strengthened local revenue systems and consistent fiscal support are crucial for sustainable rural development. Table 6.4 reveals the revenue and expenditure of Gram Panchayats in Tripura (2015-16 to 2023-24) which provides insights into the financial operations of Gram Panchayats in Tripura, focusing on their revenue sources and expenditure pattern over the years. Revenue of the Gram Panchayat has increased modestly over time, from Rs.1.13 crore in 2015-16 to Rs.2.44 crore in 2023-24. When compared to other sources of income, contributions are continuously low, underscoring reliance on outside funding.

Table 6.4: Revenue and Expenditure of Gram Panchayats of Local Government in Tripura (Rs. in crore)

Year	Revenue				Expenditure		
	Own Revenue Receipts	Grants-in-Aid of Central Finance Commission	Grants-in-Aid of State Finance Commission	Total Receipts	Revenue Expenditure	Capital Expenditure	Total Expenditure
2015-16	1.13	36.28	18.47	55.88	17.07	4.72	21.79
2016-17	1.49	56.76	17.99	76.24	55.19	14.32	69.50
2017-18	1.97	65.43	12.90	80.31	67.31	17.48	84.79
2018-19	1.69	67.21	15.93	84.83	76.01	19.72	95.72
2019-20	1.88	90.62	18.03	110.53	107.93	28.05	135.98
2020-21	2.82	57.16	18.03	82.32	21.05	5.30	26.34
2021-22	1.97	75.31	22.52	99.80	77.24	19.35	96.59
2022-23	2.19	45.73	23.96	71.88	75.53	18.84	94.38
2023-24	2.44	23.62	37.85	66.36	61.10	15.17	76.26

Source: Directorate of Panchayats, Government of Tripura

The Central Government's grants for local government support has reached a peak of Rs.90.62 crore in 2019-20, but then abruptly has decreased to Rs.23.62 crore in 2023-2024. According to the State Finance Commission (SFC), the state's enhanced financial support is shown in the steady increase in grants given to Panchayats, which went from Rs.18.47 crore in 2015-16 to Rs.37.85 crore in 2023-24. Total amount received by 2023-2024, the total of its own revenue, Central Finance Commission grants, and State Finance Commission grants has dropped to Rs.66.36 crore from its peak of Rs.110.53 crore in 2019-20. Revenue expenditures paid for daily operating costs including salaries and administrative charges, which has increased gradually until 2019-20 and reach a peak of Rs.107.93 crore and after that, it is decreased to Rs.61.10 crore in 2023-2024. The capital expenditure has reached a peak in 2019-20 at Rs.28.05 crore, but in 2023-24 it has dropped to Rs.15.17 crore. The sum of revenue and capital expenditures is known as total expenditure. It has peaked at Rs.135.98 crore in 2019-20 and has dropped to Rs.76.26 crore in 2023-24. The expenditure often exceeds revenue, especially in years like 2019-20, indicating reliance on reserves or external borrowing. The post declining trend in total receipts and expenditure in 2019-20 may affect Gram Panchayats' ability to deliver services effectively. Gram Panchayats need to increase and diversify their sources of income in order to lessen their reliance on grants. Better tax collection methods and taking use of regional economic prospects are examples of potential actions. Long-term infrastructure development requires a larger share of capital spending. A reassessment of fiscal policy is necessary to guarantee sufficient support for local governance in light of the reduction in funds, especially from the Central Finance Commission.

Table 6.5 shows the trend of the revenue of village councils under Tripura Tribal Areas Autonomous District Council (TTAADC) during the fiscal years 2015-16 to 2023-24. With an emphasis on revenue sources, spending trends, and general fiscal health, the analysis draws attention to the financial dynamics. Less than 2 percent of overall receipts are coming from village councils under TTAADC, who mostly rely on grants. Until 2022-2023, growth was supported by Central Finance Commission and State Finance Commission funds; however, a steeper drop in Central Finance Commission grants resulted in lower revenue and spending in 2023-2024. With little investment in infrastructure, operational costs account for the majority of spending. In order to make a sustainable development of the village councils, they require more independence and well financial management.

Table 6.5: Revenue Receipts and Expenditure of Village Council of TTAADC in Tripura (Rs. in Crore)

Year	Revenue				Expenditure		
	Own Revenue Receipts	Grants-in-Aid of Central Finance	Grants-in-Aid of State Finance Commission	Total Receipts	Revenue Expenditure	Capital Expenditure	Total Expenditure
2015-16	0.53	0.00	16.58	17.10	4.95	1.20	6.16
2016-17	0.56	0.00	16.62	17.18	14.19	3.53	17.72
2017-18	0.60	0.00	9.73	10.33	11.77	2.96	14.73
2018-19	0.64	0.00	11.35	11.99	11.31	2.91	14.22
2019-20	0.69	0.00	16.45	17.13	16.63	4.28	20.91
2020-21	0.71	43.12	16.45	60.69	15.48	3.94	19.42
2021-22	0.76	56.81	16.13	73.71	56.82	14.46	71.28
2022-23	1.18	57.17	18.08	76.43	68.87	17.62	86.49
2023-24	1.31	17.82	28.56	47.69	47.83	12.35	60.18

Source: Directorate of Panchayats, Government of Tripura

It is found in the TTAADC area, Village Councils have little self-generated income and rely largely on donations. Although Central and State Finance Commission grants are essential, but recent reductions highlight the need for more fiscal independence. Their development and financial viability depend heavily on increased revenue collection and wise investments.

Table 6.6: Revenue and Expenditure of Highest Tier (Zilla Parishad) of Local Government in Tripura (Rs. in Crore)

Year	Revenue				Expenditure		
	Own Revenue Receipts	Grants-in-Aid of Central Finance	Grants-in-Aid of State Finance Commission	Total Receipts	Revenue Expenditure	Capital Expenditure	Total Expenditure
2015-16	0.05	0.00	6.56	6.60	1.46	0.65	2.11
2016-17	0.05	0.00	6.64	6.69	5.10	1.83	6.93
2017-18	0.06	0.00	0.92	0.98	2.98	1.15	4.13
2018-19	0.07	0.00	3.60	3.67	3.15	1.09	4.24
2019-20	0.09	0.00	4.25	4.33	3.61	1.24	4.86
2020-21	0.10	4.08	4.25	5.78	1.37	0.48	1.85
2021-22	0.13	5.38	3.38	8.89	5.61	2.33	7.95
2022-23	0.17	3.27	1.71	5.15	5.01	2.21	7.22
2023-24	0.16	1.69	2.70	4.55	3.86	1.59	5.44

Source: Directorate of Panchayats, Government of Tripura

The financial performance of Tripura's highest level of local government, Zilla Parishads, from 2015-16 to 2023-24 is shown in this table. It highlights developments in fiscal autonomy and resource use by concentrating on their sources of income and spending patterns. The Zilla Parishads in Tripura have a high reliance on grants, little control over their resources, and erratic spending patterns. To ensure their financial sustainability and developmental efficacy, these issues must be addressed through increased revenue generation, judicious grant usage, and good fiscal administration. The revenue of Zilla Parishads has hardly increased from Rs.0.05 crore in 2015-16 to Rs.0.16 crore in 2023-24, and it is still mostly depend on grants. After reaching the peak in 2021-2022, Central Finance Commission grants and State Finance Commission awards shows a steep fall in 2023-2024, bringing total receipts down from Rs.8.89 crore to Rs.4.55 crore. The revenue and capital expenditures of Zilla Parishads is reaching at maximum in 2021-22 and then it is dropped to Rs.5.44 crore in 2023-24. The low level of own revenue receipts indicates a significant reliance on Central Finance Commission grants and State Finance Commission grants. Grant fluctuations, particularly after 2021-2022, caused a drop in overall receipts and expenses. Capital expenditure is subordinated to revenue expenditure, which prioritizes operations above development. Reduced revenue and declining funding pose a danger to Zilla Parishads' ability to remain financially viable. They have to look for new sources and improve tax collection to increase revenue creation. It is imperative that Central Finance Commission grants and State Finance Commission grants remain stable and that infrastructural capital expenditures receive more attention. To make sure funds meet both operational and developmental goals, efficient spending is essential.

6.2.1 TTAADC under Sixth Schedule of Constitution of India

The TTAADC area, an autonomous zone recognized by the sixth schedule of the Indian Constitution, includes the bulk of Tripura. The TTAADC area is around 7,132.56 km², which is approximately 68 percent of Tripura's total area (10,491 km²). It is a large but sparsely populated area of the state. For the socio-economic development, preservation of language and culture of the state, TTAADC Act, 1979 was passed by the Parliament. The TTAADC Act, 1979 came into being in 1982 and District Councils were constituted under the VII Schedule of the Constitution of India. In 1985 with the 49th amendment to the Constitution of India, it was brought under the VI Schedule of the Constitution of India. In Tripura, TTAADC covers 68.10 percent of the Geographical Area, most of which is hilly, forested and less developed. There are 19 indigenous Tribes with diverse

ethnic cultures belonging to TTAADC area. In Tripura, there are two-tier structure viz. Elected Council at Apex level and Village Committees (587 VCs). Tripura is the only North-eastern state where Village Committees are constituted and their functions have been framed under the Village Committee Rules, 2006. Village Committee is performing its duties as like gram panchayat in ADC areas in Tripura under sixth schedule of the constitution. Block Advisory Committees (BACs), which are nominated bodies, have been created for coordinating development work at Block level. There are 40 BACs under the TTAADC area.

The socio-economic condition of people living in TTAADC areas is far below than that of the condition of people in other areas. More investments are required to develop those areas and the people living therein. The primary objective is to empower the indigenous people of the state to govern them and to bring about all round development of the backward people so as to protect and preserve their culture and also to remove the disparities between the tribal and non-tribal people. Table 6.7 shows TTAADC's information of total revenue receipt from 2015-16 to 2023-24. It is found that the major sources of revenue generated from the transfer of fund which is followed by ADC plan grant and share of taxes. Apart from that, some revenue has generated from the excluded area grant and also from miscellaneous fund. Diversifying revenue sources would be crucial for financial stability and long-term development.

Table 6.7: Revenue Receipt of TTAADC (Rs. in crore)

Year	ADC Plan	Share of Taxes	Transfer Fund	Excluded area grant	Finance Commission	Miscellaneous	Total
2015-16	120.00	67.92	275.40	0.00	0.00	4.50	467.82
2016-17	125.00	67.93	249.57	0.00	175.95	8.35	626.80
2017-18	125.02	123.39	249.57	0.00	85.00	8.35	591.33
2018-19	135.00	155.55	221.94	0.00	60.00	8.20	580.69
2019-20	177.53	143.00	237.93	0.00	84.40	7.75	650.62
2020-21	146.30	189.40	226.85	57.20	106.11	9.79	735.65
2021-22	190.00	177.00	215.85	62.92	78.33	10.57	734.67
2022-23	168.02	198.98	223.41	57.20	80.85	9.82	738.28

Source: Compiled from TTAADC Budget Estimates

During 2022-23, total revenue receipt of TTAADC is Rs.738.28 crore, and out of that Rs.223.41 crore has been received from the transfer of fund, Rs.198.98 crore from share of taxes, and Rs.168.02 crore has been received from ADC plan. It is also observed that TTAADC has received the transfer of fund more than Rs.200 crore in every year since 2015-16. From 2020-21 TTAADC has received excluded area grant of more than Rs.57 crore.

Table 6.8 presents the proposed allocation for rural local bodies in the TTAADC area for the years 2026-31. It outlines the revenue and capital assistance for each year, along with justifications for the allocation. The revenue grant is intended to cover operational expenses like salaries, pensions, and administrative costs. It would increase from Rs.700.00 crore in 2026-27 to Rs.1709.00 crore in 2030-31, with a total of Rs.5745.00 crore for the period 2026-31, reflecting rising operational costs. The capital assistance is allocated for infrastructure development, including roads, bridges, water, sanitation, schools, hospitals, and irrigation. It would increase from Rs.1746.00 crore in 2026-27 to Rs.2557.00 crore in 2030-31, total Rs.10661.00 crore for 2026-31, highlighting a growing focus on infrastructure. The proposed capital assistance highlights the importance of infrastructure development. Efficient use of funds is crucial to address infrastructure gaps in rural areas, with regular monitoring and evaluation needed to ensure timely completion and quality of projects. The proposed revenue grant covers operational costs, but efforts should focus on enhancing local revenue generation within TTAADC areas. Exploring innovative taxation and user fees can help reduce reliance on external grants.

Table 6.8: Proposed Allocation (Rs. in Crore) for Rural Local Bodies (for TTAADC Area only)

Year	Proposed Revenue Grant	Justification	Proposed Capital Assistance	Justification
2026-27	700.00	Salary, Increment,	1746.00	Creation of infrastructure such as roads, bridges, drinking water, sanitation, schools, hospitals, irrigation facilities etc.
2027-28	875.00	New Recruitment,	1921.00	
2028-29	1094.00	Promotion, Gradation,	2113.00	
2029-30	1367.00	Pension, Retirement	2324.00	
2030-31	1709.00	benefit and bearing	2557.00	
2026-31	5745.00	Administrative cost	10661.00	

Source: TTAADC

To improve governance, in addition to more funding, local organizations should participate in capacity building initiatives that emphasize project design, execution, and financial management. Growing administrative and infrastructure requirements are reflected in the proposed allocations. A long-term financial strategy that makes use of government subsidies and PPPs will improve financial stability. Long-term sustainability for TTAADC and an improvement in quality of life can be achieved by concentrating on infrastructure and effective revenue management.

Table 6.9 suggested funding for Rural Local Bodies during the XV and XVI Finance Commissions. The entire amount allotted under XV FC for the years 2021-2022 to 2025-2026 is Rs.746 crore. The proposed funding of Rs.1216 crore for the XVI FC spans 2026-27 to 2030-31 and will increase progressively each year.

The planned funding for Rural Local Bodies under the XV and XVI Finance Commissions for the years 2021-2022 and 2030-2031 is contrasted in the table. With a larger allocation suggested under the XVI Finance Commission than the XV, this table shows a predicted rise in financing for Rural Local Bodies in the upcoming years. The allocation for the XV Finance Commission (2021-22 to 2025-26) begins at Rs.141 crore in 2021-22 and rises progressively each year. For this time frame, a total of Rs. 746 crore has been allocated under the XV FC.

The planned allocation under the XVI Finance Commission Allocation (2026-27 to 2030-31) starts at Rs.199 crore in 2026–27 and keeps increasing each year. For this time frame, a total of Rs.1216 crore has been allocated under the XVI FC.

Table 6.9: Proposed Allocation for Rural Local Bodies (Rs. in Crore)

FY	Allocation under XV FC (Rs.Crore)	FY	Proposed Allocation under XVI FC (Rs. Crore)
2021-22	141	2026-27	199
2022-23	147	2027-28	219
2023-24	148	2028-29	241
2024-25	157	2029-30	265
2025-26	153	2030-31	292
Total	746		1216

Source: Supplied by the Govt. of Tripura

State has proposed 30 percent hike in 2026-27 from last financial year of the 15th Finance Commission and there after the state has proposed 10 percent CAGR addition in the following years.

6.3 Grants-in-aid to Urban Local Bodies: Recommendations

Table 6.10 provides a comparison of the total funds transferred to Urban Local Bodies (ULBs) and their corresponding utilization from 2004-05 to 2023-24. It further breaks down the funds transferred and utilized across three types of ULBs; Municipal Corporations, Municipal Councils, and Nagar Panchayats.

Table 6.10: Transfer of Fund to All Urban Local Bodies and its Utilization (Rs. in Crore)

Financial Year	Total Amount Transfer to ULBs	Total Amount Utilized by ULBs	Total Amount Transfer to all Municipal Corporation	Total Utilized by all Municipal Corporation	Total Amount Transfer to all Municipal Councils	Total Utilized by all Municipal Council	Total Amount transfer to all Nagar Panchayat	Total Utilized by all Nagar Panchayat
2004-05	26.92	26.41	0.00	0.00	15.22	15.22	11.70	11.19
2005-06	31.16	30.34	0.00	0.00	15.71	15.71	15.45	14.62
2006-07	37.12	36.97	0.00	0.00	19.11	19.11	18.01	17.85
2007-08	45.99	45.42	0.00	0.00	25.53	25.53	20.46	19.89
2008-09	80.66	80.26	0.00	0.00	43.39	43.39	37.27	36.87
2009-10	89.65	83.26	0.00	0.00	32.17	31.77	57.47	51.49
2010-11	99.27	43.38	0.00	0.00	12.92	12.77	30.07	30.61
2011-12	104.33	99.22	0.00	0.00	52.32	50.92	52.01	48.30
2012-13	215.82	213.13	0.00	0.00	166.93	166.33	48.89	46.81
2013-14	314.47	298.99	0.00	0.00	240.18	233.27	74.29	65.72
2014-15	246.58	235.16	140.80	140.80	79.06	70.12	26.72	24.24
2015-16	307.48	295.13	148.80	148.80	101.51	90.44	57.18	55.89
2016-17	308.69	288.29	143.06	143.06	123.71	111.45	41.93	33.79
2017-18	203.37	195.48	122.27	122.27	57.72	53.77	23.39	19.45
2018-19	214.11	201.04	120.46	120.46	68.89	57.16	24.76	23.42
2019-20	202.87	192.96	115.73	115.73	62.67	54.54	24.48	22.70
2020-21	176.75	137.42	48.42	48.42	75.11	67.48	23.22	21.52
2021-22	231.72	202.46	26.34	26.34	154.72	127.66	50.66	48.46
2022-23	287.30	274.63	47.65	47.65	183.16	178.45	56.49	48.53
2023-24	311.83	278.19	55.65	55.65	200.85	173.54	55.34	49.00

Source: Compiled from the data collected from Directorate of Urban Development, Govt. of Tripura and Agartala Municipal Corporation

The overall sum sent to ULBs has been rising over time, reaching a high of Rs.311.83 crore during 2023-2024. Over time, more money has been moved to these councils, and while utilization was constantly high, it did not always keep pace with the flow. Although they received a smaller share of the funding, utilization demonstrates a consistent use of the resources allotted. A greater dependence on these transfers for operations is evident from the general rise in both the amount of money moved to ULBs and their use. In certain years, especially in the earlier portion of the data, there was a discrepancy between the amount transferred and its complete consumption, which suggested inefficiencies or utilization delays. The majority of the fund has been used during the past few years, especially in Municipal Corporations and Municipal Councils.

It is important to ensure that funds are consistently used in line with allocations that would increase the effectiveness of urban governance. Strengthening financial planning and execution mechanisms is essential in Nagar Panchayats and Municipal Councils, where utilization gaps appear, so that the overall efficiency of the ULBs could increase.

Table 6.11 presents the composition of resources for the Agartala Municipal Corporation (AMC) over the years, categorized into Revenue Receipts and Capital Receipts. It breaks down the components of both types of receipts and the different sources of income for the AMC. Municipal corporations get the state's share of taxes collected by the state government. Although they vary from year to year, revenue receipts are generally steady. Revenue receipts are steadily increasing, especially from state grants and personal taxes. Consistent development has been observed in own tax income, which is increased significantly from Rs.2.18 crore in 2010-11 to Rs.13.89 crore in 2023-24.

Table 6.11: Different Heads and Composition of Resources of Agartala Municipal Corporation (Rs. in Crore)

Year	Revenue Receipts				Capital Receipts					Income Receipt
	Own Tax Income	Other Income	State Share of Taxes	Total	State Grants &Subsidy	Central Grants &Subsidy	Deposit Work	Others	Total	
2006-07	2.25	3.98	10.93	17.16	2.19	1.53	3.87	0.77	3.87	25.52
2007-08	2.43	3.12	11.12	14.24	4.38	5.23	3.89	0.89	3.89	31.06
2008-09	3.32	4.17	13.64	16.96	2.31	21.91	3.24	2.29	0.00	50.88
2009-10	3.3	3.78	14.01	21.09	6.68	2.57	5.42	1.77	5.42	37.53
2010-11	2.18	3.73	8.67	0	5	36.52	0.81	1.27	0.00	58.18
2011-12	4.80	5.39	17.43	17.43	7.70	56.36	1.55	2.80	0.00	96.03
2012-13	4.85	5.19	20.89	30.93	22.2	101.16	2.27	4.89	7.16	161.45
2013-14	6.17	6.09	26.69	38.95	29.85	62.59	3.07	10.99	14.06	145.45
2014-15	6.19	6.38	22.19	34.76	24.49	73.25	1.32	10.7	12.02	144.53
2015-16	8.03	8.98	40.51	57.52	26.4	25.78	12.75	13.35	26.10	135.8
2016-17	6.7	6.4	20.15	33.25	36	71.85	11.08	3.79	14.87	156.14
2017-18	8.36	6.97	44.34	59.68	39.08	25.07	3.72	10.05	13.77	137.60
2018-19	21.49	0.83	35.12	57.44	21.24	24.02	1.07	39.02	40.09	142.79
2019-20	27.92	0.93	42.00	70.84	16.98	20.65	8.65	27.45	36.10	144.58
2020-21	11.85	19.66	41.80	73.31	31.71	37.50	2.44	22.71	25.14	167.66
2021-22	9.99	10.47	26.04	46.50	33.95	31.84	3.39	96.76	3.39	212.44
2022-23	11.93	18.05	47.65	77.63	66.50	11.49	5.19	26.92	32.10	187.72
2023-24	13.89	11.37	55.65	80.91	39.37	81.27	9.40	56.46	65.86	267.41

Source: Compilation from the Annual Reports of the Agartala Municipal Corporation

State and central government grants for capital receipts have varied greatly, with some years receiving larger grants than others, particularly 2012-13 (Rs.101.16 crore) and 2020-21 (Rs.73.25 crore). The effort of the diversification of revenue sources to improve and stabilize income from sources like own taxes and non-tax revenues should continue. Optimizing capital receipts, ensuring effective use of grants, and exploring additional funding sources (like PPPs) for capital projects will help meet future infrastructural demands. Monitoring and Efficiency with fluctuating state and central grants, a more predictable funding model or alternative funding sources could provide greater financial stability.

Table 6.12 outlines the composition of expenditure incurred by the Agartala Municipal Corporation (AMC) from 2006-07 to 2023-24. The expenditures are categorized into two Revenue Expenditure and Capital Expenditure and further subdivided into different heads, which provide insights into how funds are allocated and utilized across various sectors. Establishment, administrative, developmental, and planned scheme expenses are among the ongoing operating costs that are covered by revenue expenditure.

Table 6.12: Category-wise Incurred Expenditure of Urban Local Bodies (Rs. in Crore)

Year	Revenue Expenditure		Capital Expenditure			Total expenditure
	Establishment	Administrative	Developmental Plan	Deposit Work	Others	
2006-07	7.44	5.12	8.61	0.9	1.45	23.52
2007-08	8.26	4.22	11.36	0.65	0.75	25.25
2008-09	9.23	6.55	12.43	0.51	1.1	29.82
2009-10	13.54	4.23	32.48	1.07	0.99	52.31
2010-11	10.25	4.5	40.27	0.65	0.73	56.39
2011-12	13.99	9.55	43.09	1.3	1.25	69.18
2012-13	14.87	11.38	139.09	3.44	1.17	169.96
2013-14	25.83	9.26	72.86	1.61	1.84	111.41
2014-15	23.81	9.95	127.52	1.72	1.46	164.47
2015-16	30.53	15.04	77.55	13.4	3.1	127.81
2016-17	28.75	11.44	65.69	12.63	3.1	120.85
2017-18	39.42	10.66	89.33	3.95	7.02	150.40
2018-19	40.10	3.93	70.35	1.02	1.03	116.44
2019-20	36.80	45.06	68.01	2.93	1.86	154.66
2020-21	43.87	6.62	39.12	1.37	34.64	125.62
2021-22	46.26	12.27	88.61	1.35	45.39	193.87
2022-23	65.57	26.72	105.10	6.00	16.12	219.51
2023-24	66.74	14.75	89.72	6.73	87.67	265.62

Source: Compilation from the Annual Reports of the Agartala Municipal Corporation

Non-recurring investments in infrastructure, deposit works, and other projects are referred to as capital expenditures. Operational and administrative expenses have been the main drivers of revenue expenditure's steady increase. Developmental expenditures increased significantly between 2017 and 2018, indicating a focus on growth projects. While overall spending increased gradually from Rs.23.52 crore in 2006-07 to Rs.265.62 crore in 2023-24, capital expenditure for infrastructure varied but peaked at Rs.139.09 crore in 2012-13, showing AMC's growing responsibility. It is important to mention that the year 2012-13 recorded a substantial rise in both revenue and capital expenditure, a total of Rs.169.96 crore, largely due to significant developmental investments. In the year 2021-22 and 2022-23 also saw significant jumps in total expenditure, with Rs.193.87 crore and Rs.219.51 crore respectively, reflecting the ongoing increase in both revenue and capital expenditure, especially in developmental activities.

The steady increase in revenue and administrative expenses requires an emphasis on efficiency; making sure that resources are used effectively for development is essential. According to the significance of capital investment, infrastructure deficiencies must be filled through ongoing capital expenditure, but this should be controlled to prevent wasteful spending. By means of raising spending and enhancing tax and other income production, revenue mobilization could help maintain financial stability and lessen dependency on outside funding. Keeping an eye on the effective use of funds for operational and developmental objectives should be ensured by strict oversight and monitoring of the income and capital expenditure heads.

Table 6.13 outlines the proposed financial allocations for urban local bodies in the state of Tripura over a five-year period during the year 2026-31, categorized into three key components are viz. Tied Grants, Untied Grants, and Other Grants. State has proposed a 30 percent hike in 2026-27 from last financial year of the 15th Finance Commission and thereafter the state has proposed a 10 percent CAGR addition in the following years.

The allocations are planned for improving infrastructure and addressing urban developmental needs. These amounts are proposed especially for essential urban services, such as storm water drainage, solid waste management, sewage, sanitation, and water supply. Rs.59.04 crore is proposed for tied fund during 2026-2027 to Rs.86.43 crore in 2030-2031; the allocation demonstrates a consistent annual growth. A total of Rs.361.42 crore is proposed for this category throughout the course of the five years.

Table 6.13: Proposed Allocation for Urban Local Bodies (Rs. in Crore)

Item	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Tied (For Water supply, sanitation, sewage and solid waste management, storm water drainage etc.)	59.04	64.95	71.43	79.57	86.43	361.42
Untied (Construction of road, drains, footpaths, street light, burial and cremation grounds etc.)	39.36	43.30	48.63	52.39	57.63	241.31
Any other form of grant (For construction State Specific project)	50.00	55.00	60.50	66.55	73.20	305.25

Source: Supplied by the Govt. of Tripura

These grants proposed for urban local bodies to work on the projects like building roads, sidewalks, drainage, streetlights, and burial and cremation grounds. During 2026-2027, the fund has been proposed of worth Rs.39.36 crore, further they have proposed expenditure for the untied grants of Rs.57.63 crore for the financial year 2030-2031. Urban authorities are able to handle context-specific demands thanks to the total amount of Rs.241.31 crore allotted under this category. These grants will give urban local bodies the freedom to work on projects such as building roads, sidewalks, drainage, streetlights, and burial and cremation grounds. In 2026-2027, the funds will be worth Rs.39.36 crore; by 2030-2031, they will grow to Rs.57.63 crore. Urban authorities will be able to handle context-specific demands thanks to the total amount of Rs.241.31 crore allotted under this category.

This category will cover state-specific projects, potentially including large-scale infrastructure or development initiatives unique to the region's needs. The allocation will increase from Rs.50 crore in 2026-27 to Rs.73.20 crore in 2030-31, reflecting an annual growth trajectory. The total funding for this component will stand at Rs.305.25 crore over the five-year period. The combined allocation for all three categories will sum up to Rs.907.98 crore for the five-year period. The consistent year-on-year growth in funding across all categories will highlight the government's commitment to urban development and sustainable infrastructure improvements in Tripura.

It is essential to ensure the timely completion of projects with high-quality outcomes by providing local authorities with training in effective project execution and financial management. To

encourage creative and efficient use of funds, performance-based allocations should be introduced to recognize and reward urban local governments. Additionally, a robust monitoring system must be established to track progress and outcomes, ensuring accountability and transparency in fund utilization.

6.4 Analysis on Contingent Liabilities

Table 6.14 presents an overview of the contingent liabilities of the Government of Tripura over 18 years, highlighting the maximum amount guaranteed, outstanding guarantees, and their relationship with revenue receipts. The data provides insights into the state's financial obligations and the burden of guarantees on its revenue.

Table 6.14: Contingent Liabilities faced by the Government of Tripura during 2004-05 to 2021-22

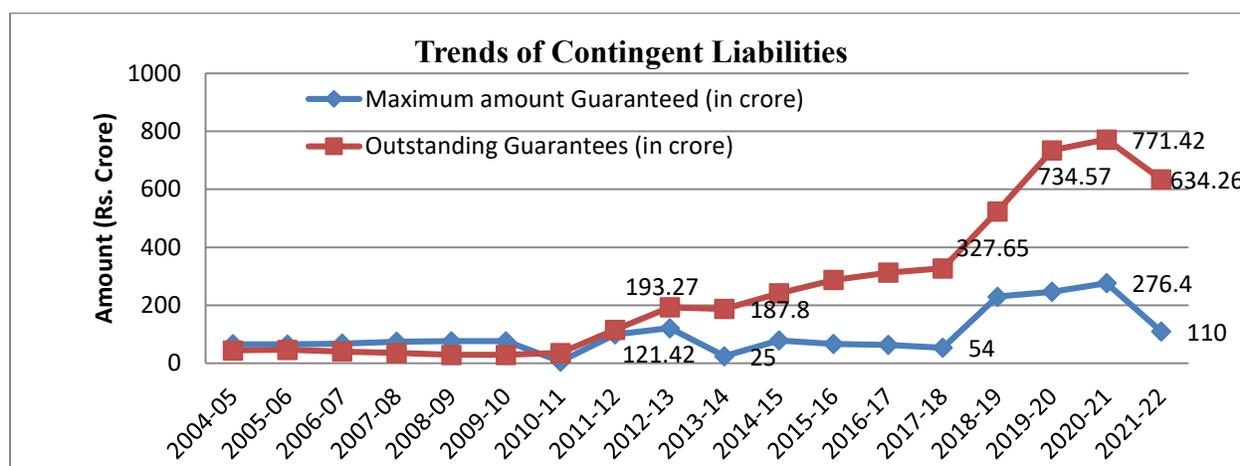
Year	Maximum amount Guaranteed (Rs. Crore)	Outstanding Guarantees (Rs. Crore)	Outstanding guarantees as percentage of revenue receipts	Maximum amount Guaranteed as a percentage of revenue receipts
2004-05	66.1	44.89	1.74	2.57
2005-06	65.37	46.98	1.55	2.16
2006-07	67.96	40.89	1.23	2.04
2007-08	74.66	35.64	0.96	2.02
2008-09	76.66	29.53	0.72	1.88
2009-10	76.66	29.54	0.67	1.74
2010-11	6.1	35.64	0.69	0.12
2011-12	99.99	115.72	1.79	1.54
2012-13	121.42	193.27	2.74	1.72
2013-14	25	187.8	2.45	0.33
2014-15	79	241.48	2.61	0.86
2015-16	67	287.78	3.05	0.71
2016-17	64	312.53	3.24	0.66
2017-18	54	327.65	3.25	0.54
2018-19	230	523.67	4.35	1.91
2019-20	246.75	734.57	6.68	2.24
2020-21	276.4	771.42	5.8	2.08
2021-22	110	634.26	3.6	0.62

Source: <https://cag.gov.in/ac/tripura/en>

The maximum amount guaranteed, representing the government's upper limit of liabilities, fluctuated over the years and peaked at Rs.276.4 crore in 2020-21. Outstanding guarantees increased consistently from Rs.44.89 crore in 2004-05 to Rs.734.57 crore in 2019-20, before slightly declining to Rs.634.26 crore in 2021-22. The outstanding guarantees as a percentage of revenue receipts peaked at 6.68 percent in 2019-20, highlighting a significant fiscal burden that year. The maximum amount guaranteed as a percentage of revenue receipts peaked at 2.57 percent in 2004-05 and has since remained below 2.5 percent, indicating controlled fiscal exposure in recent years. Both maximum guaranteed amounts and outstanding guarantees were initially low, reflecting limited fiscal risks, but while the percentage of outstanding guarantees relative to revenue receipts declined from 1.74 percent in 2004-05 to 0.67 percent in 2009-10, indicating improved fiscal discipline, it saw a notable increase from 2011-12 onwards, signaling growing fiscal stress. Outstanding guarantees is reached at maximum of Rs.771.42 crore in 2020-21, with their percentage relative to revenue receipts reaching critical levels during 2018-20 before easing in 2021-22, while the maximum guaranteed amount relative to revenue receipts remained stable, reflecting careful fiscal planning.

Figure 6.4 illustrates the contingent liabilities of the Government of Tripura over the years. It presents the maximum amount guaranteed and outstanding guarantees along with their percentages relative to revenue receipts. These metrics highlight the financial obligations and the burden of guarantees on state revenue. The maximum amount guaranteed, representing the government's highest liability limits annually, peaked at Rs.276.4 crore in 2020-21 before declining to Rs.110 crore in 2021-22. Outstanding guarantees, representing liabilities yet to be discharged by the government, grew from Rs.44.89 crore in 2004-05 to a peak of Rs.771.42 crore in 2020-21, before slightly reducing to Rs.634.26 crore in 2021-22. Outstanding guarantees as a percentage of revenue receipts peaked at 6.68 percent in 2019-20, indicating fiscal strain, before declining to 3.6 percent in 2021-22. The maximum amount guaranteed as a percentage of revenue receipts peaked at 2.57 percent in 2004-05 and fell below 1 percent in 2021-22. Outstanding guarantees more than doubled in 2012-13 to Rs.193.27 crore, with a steady rise in the percentage relative to revenue receipts, signaling increased fiscal pressure. The guarantees escalated sharply in 2018-19 and 2019-20, before slightly reducing in 2021-22, though still higher than earlier years.

Figure 6.4: Trends of Contingent Liabilities from 2004-05 to 2021-22 (Rs. in Crore)



Source: Drawn from <https://cag.gov.in/ae/tripura/en>

The significant rise in outstanding guarantees and their proportion to revenue receipts in recent years highlights the need for prudent financial management, while the declining percentage of maximum guarantees suggests efforts to cap new liabilities, emphasizing the importance of monitoring contingent liabilities to avoid fiscal strain.

The government should assess the risks associated with issuing guarantees and prioritize projects with high economic returns. Establish a robust monitoring system for contingent liabilities is necessary to ensure regular tracking and accountability. Publishing detailed reports on guarantee usage and risks can enhance fiscal transparency. To mitigate the impact of guarantees on revenue, the government should focus on expanding revenue streams through economic reforms and investments in growth sectors. Prepare contingency plans to manage liabilities that may materialize, ensuring that unexpected fiscal shocks do not disrupt development priorities.

6.5 Subsidies given by the States (other than central subsidies) and Costs-Benefits Analysis

Table 6.15 provides a comprehensive overview of the subsidies provided by the Government of Tripura over the years, including their absolute amounts and their proportions relative to revenue receipts and revenue expenditure. It is observed that subsidies given by the state have fluctuated significantly, starting at Rs.5.86 crore in 2006-07 and peaking at Rs.145.83 crore in 2020-21. The most dramatic increase is occurred in 2013-14, when subsidies has increased to Rs.104.18 crore from Rs.37.57 crore in 2012-13. This ratio remained below 1 percent for most years, with exceptions in 2013-14 (1.36 percent) and 2014-15 (1.57 percent), indicating higher fiscal support

during this period. In recent years, the percentage has declined, reaching 0.88 percent in 2022-23, signaling a reduction in subsidy intensity relative to revenue. The proportion of subsidies to revenue expenditure followed a similar trend, peaking at 1.95 percent in 2014-15 before gradually declining to 0.82 percent in 2021-22. The ratio reached an anomalously high 4.16 percent in 2019-20, possibly due to extraordinary circumstances requiring heightened fiscal intervention.

Table 6.15: Subsidy by the State Government (Rs. in Crore)

Year	Subsidies	Subsidies as a percentage of Revenue Receipts	Subsidies as a percentage of Revenue Expenditure
2006-07	5.86	0.18	0.24
2007-08	8.59	0.23	0.31
2008-09	6.56	0.16	0.21
2009-10	6.12	0.14	0.15
2010-11	11.07	0.21	0.25
2011-12	12.62	0.19	0.26
2012-13	37.57	0.53	0.72
2013-14	104.18	1.36	1.75
2014-15	145.50	1.57	1.95
2015-16	133.93	1.42	1.70
2016-17	102.13	1.06	1.15
2017-18	116.57	1.16	1.13
2018-19	133.19	1.11	1.12
2019-20	556.62	5.06	4.16
2020-21	145.83	1.10	1.01
2021-22	132.27	0.75	0.82
2022-23	161.80	0.88	0.91

Source: <https://cag.gov.in>

During the period 2012-15 there was a sharp increase in subsidies, reflecting the government's focus on welfare programs and economic support. The rise in subsidy levels could indicate efforts to address developmental gaps or economic shocks during this period. While subsidies remain a critical component of fiscal policy, their proportion to revenue receipts and expenditure has decreased in recent years, suggesting improved fiscal discipline. However, the high ratios observed in specific years from 2013-15 and 2019-20 highlight the need for better management to avoid undue pressure on state finances. The decline in subsidies as a percentage of revenue in 2021-22 may reflect a shift in government priorities or improved targeting of welfare schemes. Focuses on

ensuring subsidies are directed to the most vulnerable sections of the population, maximizing their impact while minimizing fiscal strain.

Table 6.16 presents the explicit subsidies provided by the government in Tripura across various departments from the year 2008-09 to 2022-23. The subsidies are allocated to different sectors, including tribal welfare, welfare of SC/OBC/minorities, agriculture, food & civil supplies, industries, cooperation, horticulture, and power in the state Tripura for their different developmental activities.

Table 6.16: Department-wise Explicit Subsidies given by the Government (Rs. in Crore)

Year	Tribal Welfare Department	Welfare of SC,OBC& Minorities Department	Agriculture Department	Food, Civil Supplies & Consumer Affairs Department	Industries & Commerce Department	Co-operation Department	Horticulture Department	Power Department (TSECL)
2008-09	1.95	2.21	2.38	0	0	0	NA	25
2009-10	1.78	1.06	2.64	0	0	0.64	NA	127
2010-11	3.31	1.99	5.77	0	0	0	NA	93
2011-12	2.63	3.13	6.86	0	0	0	0	40
2012-13	4.28	3.66	3.86	25.3	0.45	0	0	40
2013-14	4.75	3.45	6.9	48.1	0	40	1	NA
2014-15	4.16	2.5	9.05	66.8	0	0.18	0.8	62
2015-16	4.11	2.39	6.85	51.6	0	0	0	69
2016-17	6.17	5.16	1	49.6	0	0.17	0	40
2017-18	6.99	5.95	7.6	65.8	0	0.28	NA	30
2018-19	0	0	59.8	53.1	0	0.25	0	20
2019-20	NA	NA	28.56	27.5	NA	0.6	0	0
2020-21	NA	NA	58.02	42.8	0	0.3	NA	40
2021-22	NA	NA	16.34	40.0	10.6	1.2	NA	47
2022-23	NA	NA	17.44	48.8	4.08	3.21	NA	73

Source: Comptroller and Auditor General of India, "Audit Report on State Finances" various issues (2006-2023)

From Table 6.16, it is observed that Food, Civil Supplies & Consumer Affairs Department consistently received significant subsidies though there is a fluctuation over the years. During 2014-15, Food, Civil Supplies and Consumer affairs received a maximum of Rs.66.8 crore and after that it decreases. During 2022-23, this department has received Rs.48.8 crore from the government. In case of Agriculture, there is a huge fluctuation observed in receiving the subsidies

from the government. The department has received highest amount of subsidy (Rs.59.8 crore) during 2018-19; though in the next year the department it has received Rs.28.56 crore and in 2020-21 the department has received it again a substantial amount of Rs.58.02 crore. The lowest subsidy is recorded Re.1 crore in 2016-17. Co-operation Department & Horticulture Department has received very limited subsidies. During 2013-14, this department has received Rs.40 crore subsidy from the government. Cooperative society at the state level and at the grass root level receives this amount to conduct the programme. In 2013-14, 20 fishermen cooperative societies have received this assistance for fish production The Power department (TCECL) has received subsidy a substantial amount though the fluctuation is observed in receiving the subsidy over time. During 2009-10, the power department has received a maximum of Rs.127 crore and at present in 2022-23 the department has received Rs.73 crore. Both Tribal Welfare & Welfare of SC/OBC/Minorities departments received subsidies consistently from 2008-09 to 2017-18 but after that data are not available. The highest subsidy of Rs.6.17 crore has been given to the Tribal Welfare department in 2016-17 while SC/OBC/Minorities has received Rs.5.95 crore as subsidy in the same year. The subsidies given to the Horticultural department is negligible.

It is important to establish robust mechanisms to evaluate the effectiveness of subsidy programs and their alignment with development goals. The enhanced revenue receipts through diversified economic activities to accommodate future subsidy is required without compromising fiscal stability. To maintain budgetary stability and promote the well-being of its community, the Government of Tripura must efficiently oversee the distribution of funds and make sure that development priorities are met.

6.6 Outcome Evaluation of the Local Bodies in the Context of Recommendations of the Previous Finance Commissions

- In accordance with the recommendations of the Fifteenth Finance Commission, funds are allocated under two categories: tied and untied funds. Tied funds can be utilized for drinking water and sanitation purposes. While both types of funds are essential, the restrictions on tied funds should be relaxed to facilitate the implementation of developmental activities across panchayat areas.
- The decentralization initiatives have been taken by the state. As per the recommendations of the XV Finance Commission, the local bodies are spending the fund for the development of

their local area. The local bodies are receiving more fund under tied classification and less under untied classification.

- In 2022-23, Rs.147 crore (Rs.58.80 crore untied and Rs.88.20 crore tied) were allocated to Rural Local Bodies (RLBs) under the 15th Finance Commission grants.
- In 2021-22, Rs.4.99 crore was spent on the Chief Minister Model Village Scheme, Rs.4.26 crore person-days were generated under MGNREGA, and Rs.1092.89 crore was available for MGNREGA initiatives.
- The Pradhan Mantri Gramin Awaas Yojana (PMAY-G), launched in 2016-17, selects beneficiaries based on Socio-Economic and Caste Census (SECC) 2011 data.
- Under NRLM, 4,63,642 rural women were mobilized into 50,860 SHGs across 58 blocks in 8 districts. In 2022–23, 770 SHG-led micro food units received Rs.282.24 lakh in seed capital under the PMFME (Pradhan Mantri Formalization of Micro Food Processing Enterprises) scheme in collaboration with the Department of Industries & Commerce.
- Tripura Urban Planning and Development Authority (TUDA) is established to look after the Lighthouse project at Agartala, Township project at Agartala, ADB project for urban infrastructural development in 7 district headquarter and 13 ULBs etc.
- Agartala Smart City has been emphasizing on various developmental works for providing better quality of life. As per Economic Review 2022-23, the central share of Rs.453.24 crore has been received and Rs.51.04 crore has been received as state share. A total of 63 projects have been undertaken under Smart City Mission amounting to Rs.1020.73 crore. Till date 52 projects have been completed.
- In the Agartala Municipal Corporation, light and sound system at Ujjayanta Palace has been constructed. 50 percent work has been completed for renovation and restoration of Ujjanta Palace project.
- Model Degree Colleges have been established in Govt. Degree College, Kanchanpur (TTAADC region), Govt. Degree College, Santirbazar (Rural area), and Govt. Degree College, L.T Valley (TTAADC area) sites, resulting in a rise in the GER of ST and SC students in the state.
- Construction of the Twichakma JB School building under I/S Watloktwuthu is underway. This building project has been approved for Rs.26.00 lakhs out of a total of Rs.35.625 lakhs.

- TTAADC is in charge of 42 boys' and girls' hostels, residential schools, and Ashram schools. In the fiscal year 2022–2023, Rs.10 lakhs were spent for this purpose.
- The majority of residential schools, hostels, and TTAADC schools lack sufficient furnishings. The Khumpui Academy hostel has been furnished with enough equipment for the fiscal year 2022-2023. This furniture was purchased for a total of Rs.15.00 lakhs.
- In the fiscal year 2022-2023, PWD and TTAADC used Rs.546.90 lakh of transfer money (PWD, R&B) (Spill over Fund 2021-22 & Current Year money) to construct and upgrade 24 roads within TTAADC territories.
- For the construction, maintenance, and upgradation of various office buildings, utility buildings, etc., including internal Electrifications & Sanitary Works, as well as the creation of drinking water sources within TTAADC areas, a total of Rs.957.48 Lakh has been used from various fund sources, including the Excluded Area Fund, Revenue Fund, Interest Money, PDF Fund, and 15th FC grant (Spill over Fund 2021-22 & Current Year).
- In order to address the lack of hostel space for ST students, PWD and TTAADC have taken up the construction of three hostel buildings at Women's College (Agartala), Fatikroy Govt College, and Gandacherra Degree College on the grounds of the Tribal Welfare Fund. Once all three hostel buildings are finished, 200 ST students will be able to attend classes there each year. In addition, construction has been started and finished on the three school buildings at Narengkami (West), Nakasa Orang Basti (Khowai), and Indurail J.B. School (North) in all respects. The Khumulwng Park tourist bungalows are finished. While the construction of the indoor sports hall at Eklavya Model Residential School in Khumulwng is finished, the staff QTR at Karbook is still ongoing.
- Using money from the NITI AAYOG, TTAADC has completed ten (10) double-storied office building projects for Sub Zonal Offices at different locations in 2022-23.
- The PWD Wing of TTAADC has taken on deposit work from several TTAADC departments. One building has been taken over and work is underway to upgrade Kherengbar Hospital to accommodate 150 beds during this fiscal year.
- The Executive Engineer, Engineering Wings of Agriculture & Horticulture, Department, TTAADC, received funding from the Sports & Youth Affairs Department of TTAADC for the construction of two Synthetic Football Play Ground Astro Turfs at Khumulwng and Baijal Bari (Khowia), TTAADC, for a total of Rs.10.7 crore.

- Since 2014, 50 percent of seats in all three tiers of the Panchayati Raj system and TTAADC Village Committees in Tripura have been reserved for women representatives.

6.7 Recommendations

On the basis of the satisfactory performance and evaluation of the previous Finance Commission, the following recommendations are given for both Rural Local Bodies (RLBs) and Urban Local Bodies (ULBs) in the Table 6.17 and Table 6.18.

Table 6.17: Allocation Recommended for Rural Local Bodies (RLBs) in Tripura (Rs. in Crore)

FY	Allocation under XV FC (in Rs. Crore)	FY	Proposed Allocation under XVI FC (in Rs. Crore)
2021-22	141	2026-27	199
2022-23	147	2027-28	219
2023-24	148	2028-29	241
2024-25	157	2029-30	265
2025-26	153	2030-31	292
Total	746		1216

Source: Author's Recommendation

Table 6.18: Recommended Allocation for Urban Local Bodies (ULBs) in Tripura (Rs. in Crore)

Item	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Tied (For Water supply, sanitation, sewage and solid waste management, storm water drainage etc.)	59.04	64.95	71.43	79.57	86.43	361.42
Untied (Construction of road, drains, footpaths, street light, burial and cremation grounds etc.)	39.36	43.30	48.63	52.39	57.63	241.31
Any other form of grant (For construction State Specific project)	50.00	55.00	60.50	66.55	73.20	305.25
Total	148.4	163.25	180.56	198.51	217.26	907.98

Source: Author's Recommendation

The recommended amount of 30 percent hike in 2026-27 is based on the last financial year of the 15th Finance Commission and there after 10 percent CAGR is proposed in addition for the following years for both RLBs and ULBs.

Table 6.19: Recommended Allocation for TTAADC in Tripura (Rs. in Crore)

Year	Proposed Revenue Grant	Justification
2026-27	700.00	Salary, Increment, New Recruitment, Promotion, Gradation, Pension, Retirement benefit and bearing Administrative cost
2027-28	875.00	
2028-29	1094.00	
2029-30	1367.00	
2030-31	1709.00	
2026-31	5745.00	

Source: TTAADC

Some suggestions and recommendations are given in order to improve the development of the local bodies in Tripura.

- Village councils should diversify revenue sources through improved taxation and fees, supported by capacity building. Declining Central Finance Commission grants call for stable financial support and efficient resource use. Greater focus on capital expenditure and infrastructure projects is essential for sustainable growth.
- A long-term financial strategy that makes use of government subsidies and PPPs will improve financial stability. Long-term sustainability for TTAADC and an improvement in quality of life can be achieved by concentrating on infrastructure and effective revenue management.
- It is suggested that the effort of diversification of revenue sources is needed to improve and stabilize income of the ULBs. Optimizing capital receipts, ensuring effective use of grants, and exploring additional funding sources (like PPPs) for capital projects will help meet future infrastructure demands. Monitoring and Efficiency with fluctuating state and central grants, a more predictable funding model or alternative funding sources could provide greater financial stability.
- Keeping an eye on the effective use of funds for operational and developmental objectives, it should be ensured by strict oversight and monitoring of the income and capital expenditure heads.
- A strong monitoring mechanism must be built to track progress and outcomes, ensuring accountability and transparency in money use.
- The increase in outstanding liabilities will put pressure on the debt burden which may affect the sustainable development of the state. The government should assess the risks associated

with issuing guarantees and prioritize projects with high economic returns. A robust monitoring system for contingent liabilities is suggested to ensure regular tracking and accountability.

- To mitigate the impact of guarantees on revenue, the government should focus on expanding revenue streams through economic reforms and investments in growth sectors. A plan is needed to manage the contingent liabilities that may materialize, ensuring that unexpected fiscal shocks do not disrupt development priorities.
- To maintain budgetary stability and promote the well-being of its community, the Government of Tripura must efficiently oversee the distribution of funds and make sure that development priorities are met.
- Additionally, an emergency fund for maintenance purposes should be allocated as a portion of the funds to cover operational expenditures. The funds under the Panchayat Development Plan (PDP) should be increased to enhance the functioning of panchayats and ensure the provision of essential civic services effectively.
- In accordance with the recommendations given by the XV Finance Commission, the state has collected more revenue under the heads of land revenue and stamps and registration duty through charging higher rate. The stamp duty and registration charges for purchasing a property in Tripura is presently 5 percent based on the valuation of property.⁴

⁴ Source: <http://registration.tripura.gov.in>

Chapter -7

Financing of Disaster Management

This chapter contains six sections. Section 7.1 discusses about the disaster profile of the state. Sections 7.2 and section 7.3 analyze state disaster response fund and state disaster mitigation fund. Section 7.4 focuses about the role and activities of the disaster management department. Section 7.5 and 7.6 highlight the views of the state and recommendations.

7.1 Disaster Profile of the State

Tripura is situated in the northeastern part of under sub-Himalayan region. Tripura is vulnerable to both natural and man-made disasters, such as earthquakes, floods, landslides, cyclones, and prolonged dry spells. Earthquakes, floods, cyclone, landslides, hailstorm, lightening, dry spells and human induced hazards such as epidemics, fire and road accidents are major hazards of the state. The state is located in Seismic Zone-V with a zone factor of 0.36, which clearly signifies the severity of earthquake hazards in the region and due to that there is a higher possibility of big earthquakes with a Richter scale of 8 or above. Tripura is located between the co-ordinates 22.933°N to 24.333°N latitude and 91.15°E to 92.333°E longitude. A very large number of moderate to strong magnitude earthquakes took place within the state boundary and its 100 km radius around it. The state is very vulnerable to earthquakes. Significant earthquakes happened in Shillong and Assam with Richter scales greater than 8 hit the state in 1897 and 1950. On January 3, 2017, the Dhalai district in the state experienced a mild earthquake with a magnitude of 5.7 on the Richter scale. This resulted in 7263 houses getting damaged and more than 3000 buildings and houses getting partially affected.

The state receives a comparatively high average annual rainfall of 212.2 cm, with an average of 92 wet days. Rain normally arrives in the state in late April and lasts until October. The state has 10 major rivers (Longai, Juri, Deo, Manu, Dhalai, Khowai, Haora, Gumti, Muhuri and Fenni) that originate in the hill ranges and are rain fed and ephemeral in nature. Floods occur frequently throughout the state and can be disastrous. Every year, during the regular monsoon season, Agartala and other ULBs face urban floods as well as transitory flooding in the plains and valleys. Nonetheless, the floods are occurring outside of the monsoon season due to what appear to be elevated climate change risks. Recently, the state has seen the onset of a new occurrence where severe, unseasonal rains have caused huge water logging and extensive crop destruction. Many

flood incidents occurred in the state in the last one decade, resulting in property damage and fatalities. During 2015 to 2017 flood affect 20 fatalities, 28 injuries, 34111 damaged houses, and 463 relief camps that sheltered 127360 people of 36,233 families. The state has received a memorandum requesting help of Rs.1500.00 crores from the Government of India, since the State Disaster Response Fund (SDRF) was unable to cover the necessary cash to repair the damage. In the year of 2018 wherein all districts were affected and the State incurred a loss of about Rs.1300 Crore including all sectors.

The state has a history of being impacted by cyclones originated in the Bay of Bengal and make landfall in either Bangladesh or West Bengal. The state witnesses a high intensity winds and rainfall as the cyclonic systems make their way inland and gradually dissipate. Regarding cyclone vulnerability, the state's wind speed can reach up to 55 m/s (198 km/h), which is only achieved when cyclonic winds penetrate Bangladesh and invade the state. Recent cyclones impacting Tripura include Sidr (2007), Mahasen (2013), Fani (2019), Amphan (2020), Jawad (2021), and Sitrang (2022). These cyclones caused heavy rains, strong winds, crop destruction, infrastructure damage, uprooted trees, blocked roads, and injuries. It also has an impact on the state due to "Kal Baishakhi" (April-May) happened every year with extensive damage to dwellings, infrastructure (including roads, bridges, and power), agricultural, and the forest sectors. During the monsoon season, Tripura experiences landslides, notably on the national highway, which serves as the state's lifeline; it is also susceptible to moderate to severe lightning and thunder strikes, which result in a considerable number of fatalities in the state.

Landslide is a natural hydro-geological hazard in which earth material is dislodged under the influence of gravity triggered by intense rainfall, earthquake, volcanic activity, changes in groundwater and anthropogenic activities. The occurrence of landslides is common in geodynamically sensitive zones and areas affected by frequent earthquakes and other tectonic activities. Around 73.2 percent area of the state is found to be under low landslide susceptible zones during the pre-monsoon season, around 62 percent area is prone to landslides with moderate susceptibility during monsoon season and 68.5 percent area comes under landslides with low susceptibility zones during the post-monsoon season.

Climate change vulnerability is another important concern for the state. Tripura's weaknesses are already under stress from climate change, which is made worse by the state's proximity to Bangladesh, a climate-sensitive area. Greater frequent cyclones, hot waves, droughts, higher

winds, and greater flooding are all predicted for the state. Deforestation, decreased agricultural production, and land degradation are already signs of these climate impacts in a society that depends on agriculture and natural resources.

Socio-economic vulnerability during Covid-19 pandemic was not only national disaster but also a world-wide disaster. Socio-economic vulnerability also affects Tripura especially during the Covid-19 pandemic situation. The state face a high newborn mortality rate of 27 per 1,000 people and a lack of emergency readiness, which shows the deficiency in healthcare system of the state. In terms of fatalities, West Tripura was the state most impacted by COVID-19, followed by Sepahijala. The necessity of a robust framework to manage upcoming public health emergencies was brought to light by the COVID-19 pandemic. Despite accounting for about half of the population, socio-cultural obstacles continue to make women and gender minorities more susceptible to disasters.

In accordance with the Disaster Management Act of 2005, the Tripura government established the SDMA, SEC, DDMA, SDRF, and EOC; acquired key equipment; created Disaster Management Plans; and identified nodal training institutes and other organizations and enterprises depending on need. Together with the central government and line departments, the state government is also putting numerous programs and schemes into action based on the needs of the state. The State Disaster Response Fund and the State Disaster Mitigation Fund, which were introduced by the Finance Commission, are also being utilized to effectively carry out disaster management initiatives throughout the State.

Operation of Control Room/ Emergency Operation Centres (EOC):

- The state has 24x7 State and District Control Rooms (EOCs) functioning round the clock in the Secretariat and DM & Collectors Offices respectively.
- State EOC receives daily weather information / warnings from IMD and CWC and shares to the District EOCs. Daily situation report is being issued at 5PM.
- Toll Free telephones are working in State EOC (**1070**) and District EOCs (**1077**).
- Doppler Rader at IMD-Agartala station is being linked with State EOC for sharing now (warning of severe thunderstorm, cyclones before one hour of the incident).
- HAM Radio Stations have been installed in the State Emergency Operation Centre (SEOC) and 8 District Emergency Operation Centres (DEOCs).

A lot of disasters happen frequently and impact most districts, especially floods, cyclones, and heavy rains. Deaths, injuries, and relocation have all resulted from disasters, which have also caused substantial economic harm to houses, farms, and infrastructure. Every district is susceptible to flooding, whereas some areas, such as Gomati, Dhalai, and West Tripura, are regularly hit by lightning, thunderstorms, and landslides. The data underscores the necessity for robust disaster management and mitigation strategies in Tripura, especially to address recurring natural calamities and minimize their devastating effects.

Table 7.1 summarizes the different natural disasters and calamities that have affected Tripura recently, describing the harm and consequences they have caused in a number of different areas during 1822 to 2023.

Table 7.1: Various Natural Calamities and Its Devastating Effect in Tripura

Natural Disasters	Major events in the recent past.	Types of Damages
Earthquake	<ul style="list-style-type: none"> • Tripura Earthquake • Mizoram Earthquake 6.1 magnitude (2021) • Tripura Earthquake 5.7 magnitude (2017) • Manipur Earthquake of 6.7 magnitude (2016) • Sikkim Earthquakes of 7 magnitude (2015) • Assam Earthquake of magnitude 8.6 (1950) • Great Shillong Earthquake-Mw 8.7 of 1897 	<ul style="list-style-type: none"> • Few deaths. • Landslides in several places. • Houses fully and partially damaged. • Diversion of river beds.
Floods	<p>Almost all districts of the state are vulnerable to floods and flooding events in the past are:</p> <ul style="list-style-type: none"> • North Tripura (2021, 2020, 2019, 2018, 2017, 2008, 2006, 2005) • South Tripura & all districts (2021, 2020, 2019, 2018, 2017, 2004) • West Tripura (2021, 2020, 2019, 2018, 2017, 2003) • Dhalai (2022, 2021, 2020, 2019, 2018, 2017, 2006, 2004, 2003, 2001) • Across districts (2021, 2020, 2019, 2018, 2017) 	<ul style="list-style-type: none"> • Lives lost • Large number of houses damaged • Loss of crops and loss of horticulture • Damages of infrastructures severely • Loss of live stocks
Cyclone	Cyclone Sitrang (2022), Cyclone Jawad (2021), Cyclone Amphan (2020), Cyclone Fani (2019), Cyclone Mahasen (2013), West and South Tripura (2012), West Tripura (2011, 2010, 2003, 2002), North Tripura (2005), Dhalai district (2003, 2002, 2001).	No loss of lives, some injury Extensive damage to houses and property, Damage of crop damage Trees and electric poles uprooted;

Landslide	Gomati (2023, 2021), Khowai (2023), North Tripura (2022), West Tripura (2022).	2 persons lost lives, damage to houses and property, roads blocked, trees uprooted.
Fire	West Tripura (2023, 2022, 2020), Dhalai district (2022, 2021, 2020), South Tripura (2023, 2021, 2017), North Tripura (2022, 2021).	Some lives were lost. Injury and extensive loss to houses and business establishments.
Extreme Rainfall and Storm	Dhalai, Gomati, Khowai, North Tripura, Sepahijala, Unakoti, West Tripura (2023, 2022, 2021, 2019, 2018, 2017, 2016, 2015, 2013).	Lives lost; population displacement, large number of houses damaged, crops lost, infrastructures severely damaged.
Thunderstorm	Khowai, Unakoti, North Tripura (2023), Dhalai, Gomati (2022), North Tripura (2021), Gomati, Dhalai, Sepahijala (2020).	Lives lost injury, population displacement, house damage, crops damage and infrastructure damage, roads blocked.
Drowning	West Tripura, Unakoti, Gomati, Khowai (2023, 2022, 2021, 2020).	Lives lost injury.
Lightning	South Tripura, Sepahijala (2023), Khowai, Dhalai, Unakoti (2022, 2021), Gomati (2021, 2020, 2017, 2016).	Lives lost (Human and Livestock); injury, large number of houses damaged.
Bus Accident	Bishalgarh bus accident (2023). Dhalai Bus accident (2018). Belonia bus accident (2016).	25 persons were injured. 30 people were injured. 6 deaths and 15 injured.

Source: Tripura Disaster Management Authority, Govt. of Tripura

It is observed that before 1850, only two incidents happened with more than 6 Richter scale. In between 1850 to 1900 three incidents happened and out of that one was 7.5 Richter scale in 1869, one more than 6 and other less than 6. From 1900 to 1950, 7 incidents happened; and most of these are closure to 6 Richter scale except one which was in 7.6 Richter scale in 1918.

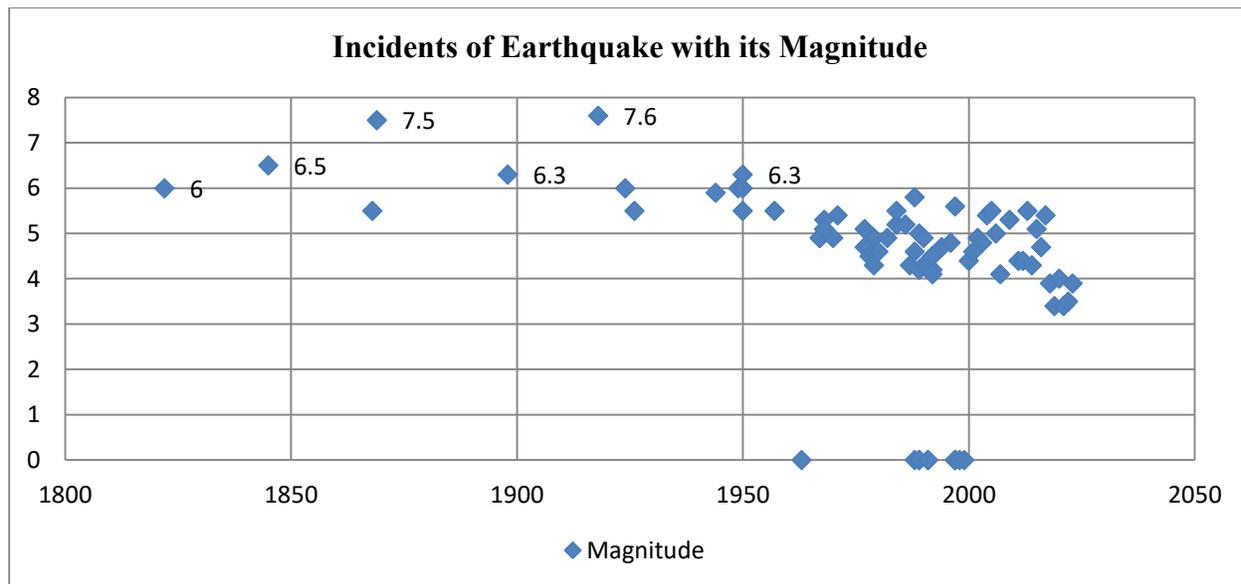
An earthquake that happened in 2017 with a magnitude of 5.7 resulted in landslides in multiple locations, the loss of life, complete or partial property damage, and changes to riverbeds. The years 2017 through 2021 and 2024 saw a significant amount of crop loss, housing damage, and livestock loss due to flooding. Sitrang (2022), Jawad (2021), Amphan (2020), and Fani (2019) were among the cyclones that damaged crops and property, uprooted trees, and obstructed highways. Landslides in several parts of the state resulted in fatalities as well as destruction of homes and infrastructure. Fire incidents mostly occurred in West Tripura, Dhalai, South Tripura, and North Tripura caused lives lost and injuries and destruction of houses and business establishments.

Throughout the state, areas such as Dhalai, Gomati, Khowai, Sepahijala, and Unakoti district saw severe rainfall and storms that resulted in fatalities, population relocation, and significant damage to homes, crops, and infrastructure.

The various locations were impacted by thunderstorms. There were fatalities and injuries in Khowai, Gomati, North Tripura, Unakoti, Dhalai, and Sepahijala, which also showed serious damage to homes, crops, and obstructed highways.

In addition, drowning is a common occurrence in West Tripura, Unakoti, Gomati, and Khowai, which has resulted in fatalities and numerous injuries. Lightning strikes, which were particularly common in South Tripura, Sepahijala, Khowai, Dhalai, Unakoti, and Gomati, killed people and livestock and seriously damaged and injured a lot of property.

Figure 7.1: Magnitude of Earthquake Incident in Tripura during 1822 – 2023

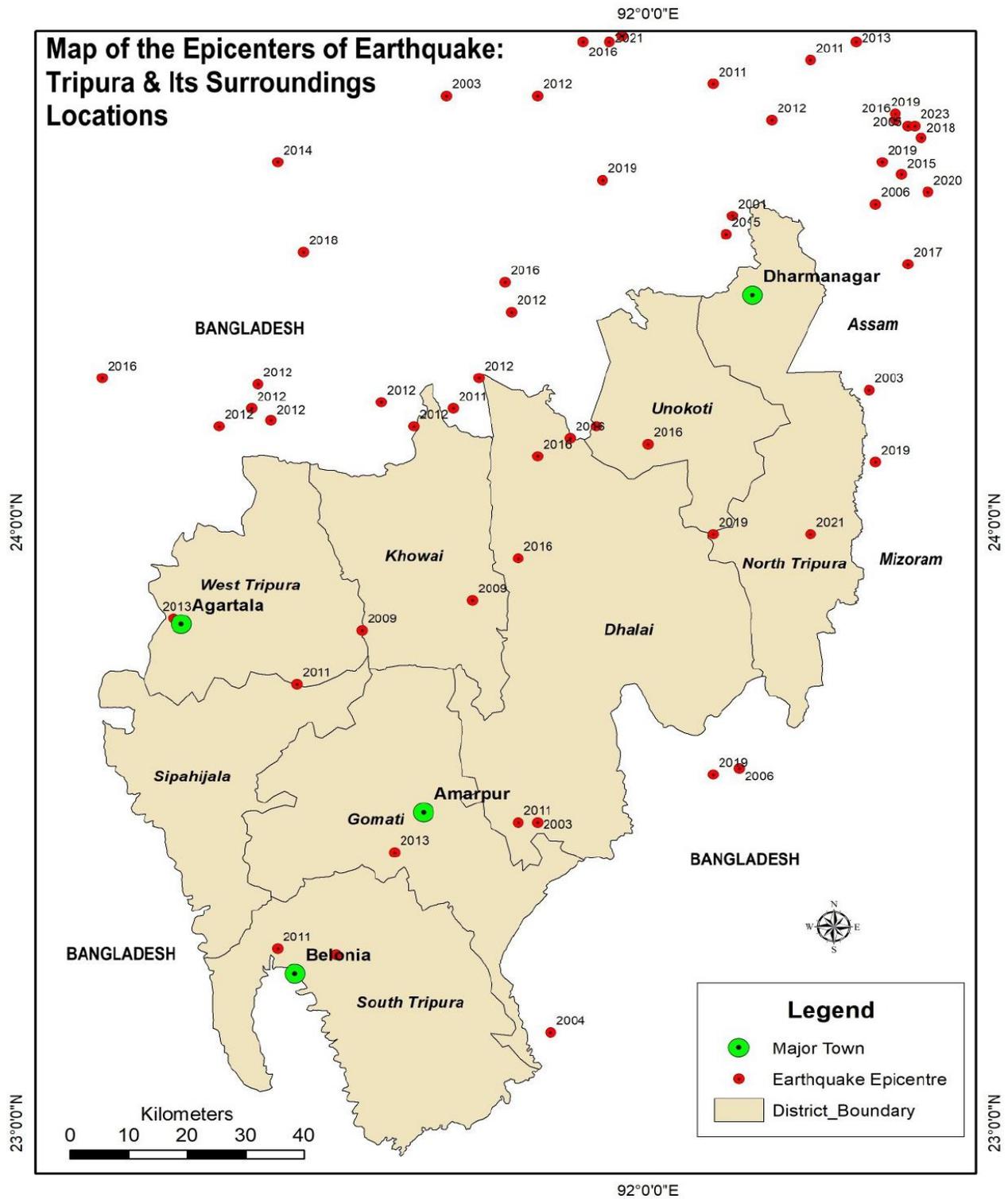


Source: Data compiled from Tripura Disaster Management Authority (www.tdma.tripura.gov.in/history-disaster-tripura) and Indiastat

After 1950 to 2000, 49 earthquake incidents happened in Tripura and all of these incidents were less than 6 magnitudes; and out of that 9 incidents are above 5 magnitudes and remaining 40s are less than 4 Richter scale. The highest magnitude was 5.8 in 1988, followed by 5.6 in 1997. After 2000 to 2023, 21 earthquakes happened and all were less than 6; out of that 7 are with more than 5 Richter scale, else less than 4 Richter scale.

A map of the epicenters of earthquake happened over different period in the state and its surrounding area is given in the next page in order to explore the gravity of the situation.

Figure 7.2: Map of the Epicenters of Earthquake in Tripura & Its Surrounding Locations



Source: Author's drawn

Table 7.2 shows the devastating effect of floods in Tripura during 2001-2020. It is observed that the incidents of flood happened in 2018 experienced with very high devastating impact in Tripura. During this year 40963 houses were damaged and 22 human lives and 3905 cattle dead. The total damage valuation Rs.946.18 crore and out of that public utilities damaged Rs.805.95 crore and houses damaged of Rs.115.95 crore.

Table 7.2: Devastating Effect of Floods in Tripura during 2001-2020

Year	Damage Value of Crops (Rs.Crore)	No. of Houses Damaged	Damaged Value of Houses (Rs. crore)	No. of Cattle Lost	No. of Human Lives Lost	Public Utilities Damaged (Rs.crore)	Total Damages (Rs. crore)
2001	9.19	11731	8	2669	4	11.32	28.52
2002	4.7	13408	7.34	109	5	2.94	14.97
2003	1.56	16062	0.04	3	1	2.69	4.29
2004	4.78	16063	2.13	51	4	2.62	9.52
2005	3.6	1112	0.13	6	6	1.89	5.62
2006	1.71	352	0.17	4	5	2.39	4.26
2007	4.96	7958	0.89	25	5	0.02	5.87
2008	3.18	1077	0.21	22	7	0.02	3.41
2009	1.01	928	0.32	32	10	3.05	4.38
2010	3.88	10457	0.99	9	14	0.08	4.95
2011	5.86	653	0.6	29	14	1.05	7.5
2013	2.16	3338	1.85	0	4	0.2	4.22
2014	1.45	2045	2.97	20	0	0.54	4.96
2015	247.91	3255	20.74	21	1	42.12	310.76
2016	89.12	455	0.24	-	3	-	89.36
2017	14.39	24682	20.55	193	17	97.89	132.82
2018	24.28	40897	115.95	3905	22	805.95	946.18
2019	2.61	44963	81.71	15	1	353.33	437.65
2020	137.72	163	0.2	0	0	0	137.92
Total	564.07	199599	265.03	7113	123	1316.78	2157.2

Source: Central Water Commission, & Ministry of Jalshakti, Govt. of India (Collected from IndiaStat)

It is observed that floods are a repeated natural disaster in Tripura, causing extensive damage to human life, infrastructure, and livelihoods. Table 7.2 highlights the damages of crops, damages of housing, livestock loss, human fatalities, and the financial impact on public utilities.

The overview of flood impact during the year 2001 to 2020, Tripura experienced significant flood-related damages reported total damages at amounted Rs.2,157.2 crore.

The damages in accordance with different categories are noted where crops damages reported worth Rs.564.07 crore, a total of about 199,599 houses were damaged, with an estimated loss of Rs.265.03 crore, livestock loss reported 7,113 cattle, 123 lives were lost due to flood-related incidents and public utilities damages valued at Rs.1,316.78 crore. There was a substantial loss of crop in 2015; it recorded a highest crop damage value of Rs.247.91 crore. The trend indicates that floods increasingly affected agricultural productivity in recent years, possibly due to extreme weather events. The housing damage were mostly in 2018, it recorded with 40,897 houses damaged, causing losses valued at Rs.115.95 crore. The livestock losses peaked in 2018, with 3,905 cattle lost. The cumulative impact on livestock (7,113 lost over 20 years) underscores the economic vulnerability of rural households reliant on livestock for their livelihoods. The incident like floods in 2018 resulted in 22 deaths, reflecting the ongoing risk to human life during major flood events. The public utilities sustained the highest losses in 2018 (Rs.805.95 crore) and 2019 (Rs.353.33 crore). The total damage peaked in 2018 at Rs.946.18 crore, followed by Rs.437.65 crore in 2019, emphasizing the devastating scale of these events. The financial burden of flood damage has grown significantly since 2015. The year 2018 and 2019 has marked catastrophic years for the state. Damage to public utilities and housing has escalated, accounting for a significant proportion of total losses. Improved early warning systems and disaster preparedness may have contributed to the reduction in fatalities, particularly in recent years.

It is important to strengthen flood defenses, housing structures, and public utilities. It is important for providing insurance and compensation for crop and livestock losses to support rural communities. It is necessary to enhance flood forecasting and dissemination of alerts to reduce human casualties. Conducting awareness campaigns and disaster drills to better equip residents in flood-prone areas.

7.2 State Disaster Response Fund (SDRF)

As mandated in the Disaster Management Act, 2005 the state has constituted a State Disaster Response Fund (SDRF). The Finance Commission recommended the following grants amount for the State Disaster Response Fund which is mentioned below.

Table 7.3 provides details of the recommended grant amount to the Finance Commission of India for the State Disaster Response Fund (SDRF) during the year 2015-16 to 2024-25. The data

underscores the evolving financial strategies to ensure the state is equipped to handle diverse disaster-related challenges effectively. Additional investigation is necessary to comprehend the factors that impact yearly variations, such as particular calamities or economic factors.

Table 7.3: Grants of Finance Commission for State Disaster Response Fund (SDRF)

Year	Grants recommended by FC (in Rs. Crore)
2015-16	28.00
2016-17	29.00
2017-18	30.60
2018-19	32.40
2019-20	34.20
2020-21	68.00
2021-22	54.40
2022-23	56.80
2023-24	60.80
2024-25	63.20

Source: Finance Commission of India

According to the data given by the Disaster Management, Tripura has made considerable efforts over the years to lessen the effects of natural catastrophes, demonstrating its changing disaster management procedures. Sustaining this upward trend and reducing further losses would need sustained investment in community awareness initiatives, robust infrastructure, and early warning systems.

Table 7.4 summarizes the utilization of State Disaster Response Fund (SDRF) used in Tripura and the effects of the several natural disasters that occurred from 2011 to 2023. The amount of financial aid given has fluctuated greatly over time, with the largest award in 2019 being Rs.444.80 crore and the lowest in 2023 at Rs.0.73 crore. In 2018, a total of Rs.396.54 crore, which reflects the substantial damage and catastrophe response demands. A total of Rs.444.80 crore in aid was provided in 2019, which was the highest amount of resources used, perhaps as a result of significant damage to homes and infrastructure in 465 villages. In 2017, the aid amount was Rs.81.40 crore, which represents a notable increase in comparison to previous years. With major increases in 2011 (38 lives lost) and 2013 (24 lives lost), the number of fatalities has varied over the years.

On the other hand, fewer people have been injured in recent years, which suggest improved disaster management. Livestock losses were particularly severe in years like 2011, with 3,633 livestock

lives lost, and 2018, with 406 cattle deaths. This highlights the vulnerability of agricultural livelihoods during disasters.

Table 7.4: Utilization of Resources under SDRF during 2011 to 2023

Year	Assistance provided (in Rs. Crore)	Loss and damage
2011	11	<ul style="list-style-type: none"> • 288435 population affected and 38 lives lost • 5666 houses damaged • 3633 livestock lives lost • 6342 ha cropped areas damaged.
2012	12.3	<ul style="list-style-type: none"> • Human lives lost • livestock lost, and cattle lives • damage of crops • dwelling houses and • critical infrastructures
2013	4.54	<ul style="list-style-type: none"> • 93901 population affected and 24 lives lost • 25550 houses damaged • 7 livestock lives lost • 30.06 lakh ha cropped area damaged
2014	4.5	<ul style="list-style-type: none"> • 27 lives lost • 9129 houses damaged • 154.4916 ha cropped areas damaged and 11 livestock lost
2015	8.61	<ul style="list-style-type: none"> • 8 lives lost and 14 injured • 4614 houses damaged and 3 livestock loss
2016	24.92	<ul style="list-style-type: none"> • 1 live lost and 8 injured • 2347 house damaged • 20 livestock loss
2017	81.40	<ul style="list-style-type: none"> • 8 live lost and 9 injured • 4639 house damaged • 3 livestock loss
2018	396.54	<ul style="list-style-type: none"> • 4 persons died and 6 injured • 2 lakh people affected and 406 cattle died • 34012 houses damaged
2019	444.80	<ul style="list-style-type: none"> • 8 persons died and 22 persons injured • 1.46978 population affected from 465 affected villages • 44963 houses damaged and 30 animal life lost
2020	37.9735	<ul style="list-style-type: none"> • 5 persons died and 16 persons injured • 11199 houses damaged
2021	6.156	<ul style="list-style-type: none"> • 6 persons died and 9 persons injured • 2301 houses damaged
2022	2.6057	<ul style="list-style-type: none"> • 5 persons died and 6 persons injured • 1221 houses damaged
2023	0.7316	<ul style="list-style-type: none"> • 423 houses damaged

Source: Tripura Disaster Management Authority, Govt. of Tripura

The number of homes damaged in 2019 was the greatest ever, with 44,963 homes suffering damage overall. The similar incident happened in 2018, with reports indicating that 34,012 homes were affected, indicating widespread calamities. A total of 5,666 houses were damaged in 2011, demonstrating the severity of the disasters earlier in the decade. Housing damage has significantly reduced, with only 423 houses affected in 2023, likely due to improved mitigation strategies. Cropped area damage was extensive in years like 2013 (30.06 lakh ha) and 2011 (6,342 ha), signifying the agricultural sector's vulnerability to disasters.

Major disaster years like 2018 and 2019 saw the highest financial allocations, corresponding to the intensity of damages in terms of housing, human lives, and livestock losses. There is a noticeable decline in both human casualties and property damage post-2019, indicating the success of disaster preparedness initiatives. While earlier years reported significant damage to agricultural land, recent years show a reduction in such losses, reflecting changes in disaster impact or improved mitigation measures. The year 2023 recorded the least impact, with financial assistance of only Rs.0.73 crore and no reported human casualties. This could be attributed to reduced disaster frequency or effective prevention mechanisms.

7.3 State Disaster Mitigation Fund (SDMF)

The State Disaster Mitigation Fund (SDMF) was established under Section 48 (1) (c) of the DM Act 2005. This fund is solely for the purpose of mitigation initiatives for catastrophes covered by the State Disaster Response Fund (SDRF), National Disaster Response Fund (NDRF) guidelines, and State-specific local calamities notified by the State Governments. The Mitigation Fund will be utilized to support local and community-based activities that decrease risks and promote environmentally friendly settlements and livelihood patterns. The 15th Finance Commission has suggested that 20 percent of the State Disaster Risk Management Fund (SDRMF) be allocated to SDMF. The national government will give 90% of the cash to the SDMF, with the state contributing 10 percent.

Table 7.5: Grants Received for SDRF and SDMF from XV Finance Commission (in Rs. Crore)

Types of Grants	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Grants in Aid for State Disaster Response Fund	54.4	56.8	60.8	63.2	67.2	302.40
Grants in Aid for State Disaster Mitigation Fund	13.6	14.20	15.2	15.8	16.8	75.6

Source: Disaster Management, Govt. of Tripura

Table 7.5 shows the grants given by the Central Govt. for disaster management with particular attention to the State Disaster Response Fund (SDRF) and the State Disaster Mitigation Fund (SDMF) during 2021-22 to 2025-26. It contains the overall amount allotted for the SDMF, the release of the Center's part of the SDMF, and statistics on aid grants for both funds. It is observed that SDRF and SDMF fund is given as 80:20 ratio. It is also found that SDMF fund increases over time.

Table 7.6 explains the preparedness and mitigation measures taken by the different agencies or departments of the state. Most of the preparedness and mitigation activities are done by the PWD, Rural Development (RD), Urban Local Bodies (ULBs), Food supply and Civil department and Health department.

Table 7.6: Disaster Preparedness and Mitigation Measures by Agencies in Tripura

Sl.	Agencies	Activities	Remarks
1	PWD (R&B)	Pre-construction Planning to ensure disaster resistant structures. Alternative exit routes in buildings. Survey of disaster prone areas and taking adequate safety measures.	Awareness generation, conducting training & workshops for the staff and volunteers (All agencies)
2	PWD (DWS)	Avoid highly earthquake prone areas while making bunds for water bodies, Water from different sources to be tested to ensure uninterrupted supply of drinking water	Awareness generation, conducting training & workshops for the staff and volunteers (All agencies)
3	RD	Dwelling houses constructed under IAY are to be assigned with retrofitting to be able to withstand earthquakes, Supplement other agencies in construction of roads, canals, water bodies, shelters .To include Disaster risk assessment in MGNREGA social audits.	Construction of roads, canals, water bodies, shelters
4	Urban Local Bodies	Restrict unplanned construction specially in high risk areas	
5	Food & Civil supplies	Ensure adequate stock of essential commodities	Stockpile of food items
6	Health	Ensure prevention and surveillance measures, Maintain adequate stock of drugs and equipment at all levels of the health care system.	Awareness program, first aid training, mock drill, first aid box distribution

Source: Disaster Management, Govt. of Tripura

7.4 Role and Activities of Disaster Management Department

The National Disaster Response Force (NDRF) was established in 2006 with eight battalions and became a dedicated disaster response unit under the unified command of the DG NDRF in 2008. In 2021, the Civil Defense Corps is initiated in Agartala Municipal Corporation and later it is expanded to all districts, training 3,000 volunteers by 2023. First Aid Teams, comprising ASHA workers, nurses, and trained volunteers, operate at village, block, and district levels. Search and Rescue Teams function at village, block, and police station levels, with state or armed forces providing support for extensive rescue operations. In the state, Block Executive Officers (BDOs) oversee the transportation and storage of vital goods through a variety of programs at various stages. Records and equipment for disaster aid are managed by teams at the block and village levels. Block teams' Transport Service keeps track of vehicles in case of crises. Teams with assistance from NGOs, the police, and health care handle the disposal of the humans and animals. For minor situations, village volunteers assist, while teams at police stations or block headquarters are prepared for fire emergencies. To supervise disaster assistance coordination, district authorities establish teams and Quick Response Team (QRTs).

Action Plan Taken by the State

In order to prevent and manage thunderstorms, lightning, squall dust, hailstorms, and strong winds, the Govt. of India has published the guidelines for taking action plans. The Disaster Management authority of the state Tripura is concentrated in enhancing forecasting, assessment, and readiness while reducing negative effects by working in tandem with several agencies.

The State Action Plan on Forest Fires in Tripura places a major emphasis on awareness campaigns on high-risk fire zones and close communication between forest authorities, communities, and alarm systems. In order to address multifaceted climate change vulnerabilities, Tripura's State Action Plans on Climate Change (SAPCC) emphasizes the importance of addressing both sectoral and cross-sectoral concerns, such as poverty, resource access, and social inequality. India's National Action Plan on Climate Change (NAPCC) and Sustainable Development Goals (SDGs) are in line with Tripura's 2010-created SAPCC, which has been upgraded for 2021–2030 to satisfy Intended Nationally Determined Contributions (INDC) mitigation and adaptation targets. Increase in funds for development initiatives in climate-vulnerable sectors, such as agriculture, water resources, the Himalayan area, coastal regions, health, and disaster management, would help us better adapt to the changing climate.

A suitable location for the installation of five vertex rain gauges (made of plastic) has not yet been reported; the issue has been brought to the Disaster Management Cell of the Revenue Department of the Government of Tripura for the appropriate guidance. Initiatives target susceptible industries like agriculture, water, health, and disaster management in an effort to improve climate resilience. In line with SDG targets, National Mission on Sustainable Agriculture, Mission for Integrated Development of Horticulture, RKVY and National Livestock Mission as well as state-level initiatives seek to save people in the state.

By 2030, the State Action Plan on Climate Change aims to preserve the ecosystem through thorough risk assessment, risk management, risk insurance, and other insurance options that prioritize water availability and the reduction of disaster-related losses in terms of property and human life.

The state has taken different Disaster Management Plans developed by the Revenue Department which are given in the following:

- Flood Management Plan of West Tripura District (2017-18)
- Disaster Management Plan for Industry and Commerce Department (2016-17)
- Disaster Management Plan for Fisheries Department (2016-17)
- Disaster Management Plan for Animal Resources Development Department (2016-17)
- Disaster Management Plan for Health & Family Welfare Department (2016-17)
- Disaster Management Plan for Science, Technology & environment (2016-17)
- Disaster Management Plan for Rural Development Department (2016-17)
- Agriculture Disaster Management Plan 2016-17
- Flood Management Plan for PWD (Water Resources), 2016-17
- District Disaster Management Plan (2016-17) for Dhalai, Gomati, Khowai, North Tripura

Action of the State to fulfill the Mitigation Plan (Execution of the Plan to mitigate the disaster)

- Institutional Framework & Techno Legal Regime
- Revenue Department is the nodal department for DM in the State
- Directorate of RR & DM has been set up and strengthened
- Identification of nodal officer, Additional Nodal Officer in each departments and constitution of QRTs in vital dept.

- Sections which are applicable to the State under Disaster Management Act 2005 adopted in Tripura
- State Disaster Management Plans
- State Disaster Management Guidelines
- Funding provisions and norms
- SIPARD has been identified as a nodal training institution for imparting theoretical training on Disaster Management.
- Central Training Institute as the Nodal Institute for imparting practical training on First Aid & Search and Rescue.
- NIT-Agartala has been identified as the nodal training institution for Engineers Training.
- CWTIT is meant for training and CB for Masons and artisans
- NDRF Team stationed at Agartala has been identified for carrying out on-campus and off campus trainings.
- Master Trainers for specialized trainings have been identified.
- 10% of SDRF is being used annually for training, capacity building, Equipment, EOCs, and awareness generation purposes.
- Annual training plan – as per TNA document
- Identified persons for training – annually
- Database of trained personnel

7.5 Views of the State

In order to carry out the state's catastrophe plan, the government has provided future financial projections. Table 7.7 depicts a comprehensive financial strategy for Tripura's disaster management, striking a balance between short-term response needs and long-term risk reduction efforts. Over a five-year period, it emphasizes resource allocation and proactive planning to build disaster resilience. The estimated budgetary needs for disaster management initiatives in the State of Tripura during a five-year period (2026–2027 to 2030–31) are shown in this table. In order to meet the overall consolidated financial requirement, the funds are divided into three main categories: Specific Need-Based Projects/Schemes, State Disaster Mitigation financial, and State Disaster Response Fund (SDRF).

Table 7.7: Requirement of Fund Proposed for Disaster Management (in Rs. Crore)

Year	Funds requirement for SDRF	Funds requirement for SDMF	Specific need based projects/ schemes	Total
2026-27	600.00	670.00	1500.00	2770.00
2027-28	600.00	410.00	1010.00	2020.00
2028-29	600.00	360.00	1010.00	1970.00
2029-30	600.00	365.00	1010.00	1975.00
2030-31	600.00	400.00	1010.00	2010.00
Total	3000.00	2205.00	5540.00	10745.00

Source: Revenue Department, Govt. of Tripura

Three main components make up the proposal's funding requirements: the State Disaster Response Fund (SDRF), which is scheduled to receive a fixed yearly allocation of Rs. 600.00 crore over the course of five years, for a total of Rs.3,000.00 crore. This fund will help pay for emergency disaster response plans. The yearly allocation for the State Disaster Mitigation Fund (SDMF) fluctuates, beginning at Rs.670.00 crore in 2026–2027, dropping to Rs.360.00 crore by 2028–2029, and then somewhat rising to Rs.400.00 crore by 2030–2031 years later. A total of Rs.2,205.00 crore has been proposed as the budget for this component. This fund will assist to mitigate the emergency disaster.

Table 7.8 shows a detail of particular need-based disaster risk management projects that the concern department has suggested. The state's emphasis on enhancing emergency response services, infrastructure development, and technology improvements to increase resilience against natural catastrophes is reflected in this comprehensive strategy.

Table 7.8: Lists Specific Need Based Projects Submitted by the Revenue Department, Govt. of Tripura

Sl.	Lists of Specific Need Based Projects/Schemes	Proposed Amount (Rs. Crore)
1	Retrofitting of existing critical and lifeline buildings	1500.00
2	Construction of Technology Demonstration Units in all 23 sub-divisions	350.00
3	Strengthening of Fire & Emergency Services @Rs.100 crore per year	500.00
4	Construction of one multipurpose Disaster Resistant shelter in each 58 RD Blocks (@Rs.15 Crore x 58 nos.)	870.00
5	Construction of 2 multipurpose Disaster Resistant shelters in each 19 ULBs and 4 in Agartala Municipal Corporation (@Rs.15 Crore x 42 nos.)	630.00

6	Weather monitoring system: Installations of Automated Weather Stations at 240 locations	140.00
7	Permanent concrete embankments and dredging of five rivers (Haora, Manu, Khowai, Dhalai and Feni)	500.00
8	Development of Decision Support System (DSS) in the State and all District EOCs	190.00
9	Construction of dedicated State and 8 District Emergency Operation Centres and equipping with high end communication, command and control systems in all 8 districts	500.00
10	Installation of early warning system of earthquakes in important establishments	250.00
11	Installation of lightning detection and early warning system in lightning prone areas	110.00
Total Amount Submitted		5540.00

Source: Revenue Department, Govt. of Tripura

7.6 Recommendations

In accordance with the importance of the state, the recommended fund requirements for disaster management in Tripura over the financial years 2026-27 to 2030-31 shown in Table 7.9. The State Disaster Response Fund (SDRF), the State Disaster Mitigation Fund (SDMF), and particular need-based projects/schemes are the three parts into which the allocation is divided.

State Disaster Response Fund (SDRF) a consistent annual allocation of Rs.600 crore is recommended, totaling Rs.3,000 crore over five years from the year 2026-27 to 2030-31. The total allocation for this component is Rs.750.00 crore. The State Disaster Mitigation Fund (SDMF) requirement initially is recommended Rs.150 crore in 2026-27 and after that it is recommended to continue for the following years.

Specific Need-Based Projects/Schemes are targeted initiatives like disaster-resilient infrastructure, early warning systems, and other priority projects. A steady annual allocation needed at an amount of Rs.600 crore is recommended for these projects across all five years, resulting in a total of Rs.3,000 crore for the state.

Total recommended funds over the five years is Rs.6750.00 crore, distributed as follows; SDRF (Rs.3,000 crore), SDMF (Rs.750 crore), Specific Projects/Schemes (Rs.3,000 crore). As per the previous Finance the recommended allocation of SDRF and SDMF fund is 80:20 out of the total SDRMF. The expected requirement for SDRF remains constant, ensuring predictable support for disaster response. A consistent investment in specific need-based projects highlights the importance of building long-term disaster resilience.

The SDMF allocation reflects a phased approach, with higher requirements initially to address critical mitigation needs. The SDMF requirements are needed Rs.1,350 crore in 2026-27 and it is recommended to continue for the next following years.

Table 7.9: Recommendation for Required of Fund for Disaster Management (in Rs. Crore)

Year	Funds requirement for SDRF	Funds requirement for SDMF	Specific need based projects / schemes	Total
2026-27	600	150	600	1350
2027-28	600	150	600	1350
2028-29	600	150	600	1350
2029-30	600	150	600	1350
2030-31	600	150	600	1350
Total	3000	750	3000	6750

Source: Author's Recommendation based on Requirement submitted by Revenue Department, Govt. of Tripura

Justifications for requirement of fund for the need based project

Table 7.10 provides a summary of the recommended specific need-based projects for disaster management in Tripura, proposed by the Revenue Department. These projects are aimed at strengthening disaster preparedness, mitigation, and response capabilities across the state. The project, like retrofitting existing critical and lifeline buildings like hospitals, schools, and government offices to withstand disasters is needed. A total of Rs.600 crore is recommended as per the need to strengthen essential infrastructure of the state.

In view of enhancing the capacity of fire and emergency services for effective disaster response, a total of Rs.500.00 crore (@₹100 crore per year) is recommended for strengthening of fire & emergency services of the state. It is important to construct disaster-resistant shelters like one shelter each in 38 Rural Local Bodies (RLBs), 1 in Agartala Municipal Corporation, and 3 for Urban Local Bodies (ULBs), totaling 42 shelters (@₹15 crore per shelter). A total of Rs.630 crore is recommended to provide safe havens during disasters for vulnerable populations.

It is crucial to suggest spending Rs.500 crore in river dredging and permanent concrete embankments for the five major rivers viz. the Haora, Manu, Khowai, Dhalai, and Feni in order to lower the risk of flooding. Among the five rivers, the Haora (53 km), Gomati (95 km), and Feni (22 km) must be taken into account for the required dredging. A total of Rs.340 crore has been suggested for dressing, with a scientific calculation indicating that Rs.2 crore is needed for each kilometer of dredging.

Table 7.10: Recommended Specific Need Based Projects for Disaster Management in Tripura

Sl.	Specific Need Based Projects/Schemes Submitted by Revenue Department, Tripura	Proposed Amount (Rs. Crore)
1	Retrofitting of existing critical and lifeline buildings	600.00
2	Strengthening of Fire & Emergency Services @Rs.100 crore per year	500.00
3	Construction of 1 multipurpose Disaster Resistant shelters in each 38 RLBs and 1 in Agartala Municipal Corporation and 3 for ULBs (@Rs.15 Crore x 42 nos.)	630.00
4	Permanent concrete embankments and dredging of five rivers (Haora, Manu, Khowai, Dhalai and Feni)	500.00
5	Construction of dedicated State and 8 District Emergency Operation Centres and equipping with high end communication, command and control systems in all 8 districts	500.00
6	Installation of Weather Monitoring & Early Warning system of Cyclone & Heavy Raining	270.00
Total Recommended Amount for Specific Projects		3000.00

Source: Author's Recommendation based on Requirement submitted by Revenue Department, Govt. of Tripura

An estimated Rs.500 crore is required for the development of emergency operation centers (EOCs). To increase the effectiveness of disaster management coordination and reaction, a State Emergency Operation Center and eight District Emergency Operation Centers must be established and outfitted with cutting-edge communication and command equipment. It has recommended an amount of Rs.270 crore to install systems to monitor weather and provide early warnings for cyclones and heavy rainfall to enhance disaster forecasting and preparedness in the state. The total recommended allocation for these specific need-based projects is Rs.3,000 crore to build a robust and inclusive disaster management framework.

Chapter 8

Grants-In-Aid for State-Specific/ Sector-Specific Project

8.1 Introduction

This chapter is focused on the Grants-in-aid and state specific project. This chapter is divided into several sections viz. Needs and Justifications for state specific projects (Section 8.2), Lists of state specific projects submitted by the different departments of the Govt. (Section 8.3) and Recommendations for state specific projects (Section 8.4).

Table 8.1 shows the details of the financial grants allocated for the period 2021-22 to 2025-26, based on the specific needs of states as determined by the 15th Finance Commission, with a total grant of Rs.875 crore for the five-year period.

Table 8.1: State-Specific Grants Sanctioned by 15th Finance (in Rs. Crore)

2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
0	175	175	263	262	875

Source: Main Report of the XV Finance Commission (pp.325)

Table 8.1 indicates a fluctuating pattern in the allocation of grants over the years, with an initial period of no grants in 2021-22, followed by steady increases, and then a slight decrease in the final year. These state-specific grants are aimed at addressing specific challenges faced by individual states and are part of the broader fiscal framework managed by the Finance Commission.

The table shows that no grant was sanctioned in 2021-22, Rs.175 crore was sanctioned in 2022-23 and 2023-24, Rs.263 crore in 2024-25, and Rs.262 crore in 2025-26. The total grant amount for the entire period from 2021-2026 is Rs.875 crore.

8.2 Need/ Justification for State Specific/ Sector Specific Project

The state has taken lots of schemes/projects as state specific scheme for the development of social sector. The schemes taken by the state are following:

Vidyajyoti Schools Project:

The Government of Tripura has accorded approval to convert 100 existing Government High and Higher Secondary schools to "Vidyajyoti Schools" with state-of-the-art facilities for providing quality education on 26.10.2021. This scheme has been launched by Hon'ble Prime Minister of India on 4th January 2022 in Vivekananda Maidan, Agartala, from 2022-23. These schools are declared as 'Specified Category School' under Section 2(p) of the Right of Children to Free and

Compulsory Education Act-2009 with effect from 2022-23. These schools have been switched over from TBSE to CBSE. Later 25 schools are added in this project. Online Portal for admission in Class XI in 100 Vidyajyoti Schools has been opened for the academic year 2022-23, in which 20,337 students applied online from all over Tripura. This year, more than 25 Schools are included in that Portal. Online admission in Class XI for 125 Vidyajyoti Schools for the academic session 2023-24 is completed, in which 16,013 students applied. Administrative approval and expenditure of 1st installment of the amount Rs.126 crore out of Rs.252 crore have been sanctioned under scheme for Special Assistance to States for capital expenditure for the work of renovation of 100 Vidyajyoti Schools along with development of sports infrastructure is being implemented. 9 numbers of 100 seated hostels for Vidyajyoti schools have been sanctioned by DoNER, Government of India Administrative approval and expenditure sanction has been issued for the said work.

Super-30 Project:

This scheme was introduced in 2020-21 to facilitate 30 meritorious Class X Board examination-passed students (belonging to Govt. and Govt. Aided Schools) to prepare themselves for engineering and medical entrance examinations. Selected students get the opportunity of coaching in the class coaching centers outside the State as per their choice. Coaching fees, as well as the cost of stay and food, are being borne by the Department. The success of Supper 30 is given in the following Table 8.2.

Table 8.2: Status of Super-30 Scheme Launched by the State Govt.

Particulars	Status
Joint Entrance crackers of 2022 (selected in 2020-21).	IIT -01, Medical -06 & NIT -05
Joint Entrance crackers of 2023 (selected in 2021-22)	IIT-04, Medical-02 & NIT-01 (Counseling still going on)
27 students in 2022-23 are selected.	They are pursuing 2nd year coaching.

Source: Economic Review of Tripura, 2022-23

Free Bi Cycle to all Girls students of Class IX:

To motivate the girls students of Class IX belonging to BPL and Antyodaya families, this state specific scheme has been launched by the state govt. in 2013. During this period govt. has provided 5000 bi-cycle to the girls students. However, from 2018 Bi-Cycles have been distributed to all girl students reading in Class-IX irrespective of income bar under this state specific scheme. In

academic year 2022- 23, total 44673 bicycles have been distributed to the girl students reading in class IX in academic year 2020-21 and 2021-22. The state has incurred expenditure of Rs.17.10 crore under this scheme during 2022-23.

Saksham Tripura Project:

The Department of Education, Tripura has introduced the Saksham Tripura project to foster inclusive education in government-aided schools. The project has been initiated in 2021 and aimed to cultivate an inclusive environment by providing specialized educators, training and mentoring to teachers, principals, and stakeholders. This project has been implemented in 400 schools in the first phase wherein 100 Special Educators are engaged to take care of the Children with Special Needs (CwSNs) in the ratio of 1:4 (One Special Educator for 4 Schools). There are 6 Mentors and 1 Project Coordinator to mentor, monitor and track the progress of the project.

Asian Development Bank Funded Scheme for Power Sector Development:

State has signed an agreement with Asian Development Bank (ADB) for implementation of Tripura Power Distribution Strengthening and Generation Efficiency Project funded at a cost of Rs.2,175 crore. To upgrade distribution network, to reduce frequency and duration of power interruptions throughout the State and to convert Open Cycle generating Plant to Combined Cycle for increasing the Generating capacity work. With a contract value of Rs.672 crore, has already been awarded under the scheme and the rest part is under process of awarding at the moment. The work has been already initiated against the awarded projects under the scheme.

Asian Development Bank Funded Scheme for Tourism Development:

Tourism Department has planned for different tourism infrastructure development works under action plan for the financial year 2023-24 which constitutes Asian Development Bank (ADB) funding at Neermahal, Kasba Kalibari Temple, Chaturdash Devta Bari Temple, Chabimura Unakoti destinations.

8.3 Proposed List of State-Specific/ Sector Specific Project for Funding

The different departments of the state government have submitted their requisition for the state specific grants for the upcoming five years. This section highlights these requisitions department-wise.

Department of Education:

Table 8.3 outlines two state-specific education projects submitted by the Department of Education. In case of the department of higher education, a project for establishing new general degree

colleges, a National Law University, and developing infrastructure for the Tripura Institute of Technology (TIT) and an existing general degree college, with a funding amount of Rs.750.00 crore. The secondary education expects a project aimed at the infrastructure development of 68 high and higher secondary schools across various districts in Tripura, with a funding amount of Rs.541.25 crore.

Table 8.3: Need for a State-specific Project Submitted by Department of Education

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Higher Education	For setting up New General Degree Colleges, National Law University and infrastructural development for Tripura Institute of Technology, existing general degree college.	750.00
2	Secondary Education	For Infrastructure Development of 68(sixty eight) High & H.S. Schools under different Districts of Tripura.	541.25

Source: Collected from Department of Education, Govt. of Tripura

With an emphasis on developing secondary and higher education capability, both programs seek to strengthen Tripura's educational system. The state can boost overall social and economic development, expand employment possibilities, and improve educational performance by improving infrastructure and educational resources.

PWD Department

Table 8.4 outlines three significant projects under the Public Works Department (PWD) in Drinking Water Supply (DWS), Water Resources (WR), and Building, aimed at improving infrastructure and addressing issues related to water supply, irrigation, flood management, and healthcare facilities in the state. The healthcare and infrastructure development project includes the development of the New Capital Complex and the construction of 617 quarters for doctors in district and sub-divisional hospitals, primary health centers, and community health centers. The allocated funding for this project is Rs.1791.00 crore.

Table 8.4: Need for a State-specific Project Submitted by the PWD Department

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	PWD (DWS)	For water supply arrangements, Modernization of monitoring and distribution system in rural areas.	455.46
2	PWD (WR)	For constructing Minor Irrigation Storage (MI) schemes and Small Bore Tube Wells (SBTW) across the state and Flood Management Programme to safeguard river and cherra banks from erosion and building, raising, small bore tube well and strengthening embankments to protect low-lying areas from inundation.	4967.60
3	PWD (Building)	For development of New Capital Complex and Construction of 617 Quarters for Doctors in District/ Sub-Divisional Hospitals, Primary Health Centres/ Community Health Centres.	1791.00

Source: Collected from Public Works Department, Govt. of Tripura

Urban Development Department

The Urban Development Department (UDD) project highlighted in the table has a funding of Rs.305.25 crore. Enhancing urban infrastructure and livability is the goal of this project, which involves erecting office and ward buildings in Urban Local Bodies (ULBs), developing open spaces and water bodies/lakes, and creating recreational areas.

Table 8.5: Need for a State-specific Project Submitted by the Urban Development Department

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	UDD	Construction of Specific Projects like 1. Construction of Commercial Complex. 2. Development of Open spaces. 3. Development of Water Bodies/Lakes. 4. Creation of Recreational spaces. 5. Construction of office Building and ward office at ULBs.	305.25

Source: Collected from Urban Development Department, Govt. of Tripura

Department of Sports & Youth Affairs:

Table 8.6 shows the project of the Sports and Youth Affairs department with a budget of Rs.153.50 crore. The project includes construction of tennis courts and hostels in seven districts, indoor halls

in eight districts, and a stadium at the DDSSC site. These programs are essential to the state's efforts to promote sports, support youth development, and upgrade facilities for recreational and athletic training.

Table 8.6: Need for a State-specific Project Submitted by Department of Sport & Youth Affairs

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Youth Affairs & Sports	For setting up Indoor hall in eight districts, stadium at DDSSC complex, hostel and Tennis court facility in seven districts of the state.	153.50

Source: Collected from Department of Sport & Youth Affairs, Govt. of Tripura

Rural Development & Planning Department:

The Rural Development and Planning Department proposes Rs.10.17 crore for a new Tripura Space Applications Centre building, Rs.119.58 crore for block-level staff quarters, and Rs.51.80 crore for the Tripura Centre for Rural Entrepreneurship Development and Research, emphasizing improved infrastructure, governance, and rural innovation to advance regional development.

Table 8.7: Need for a State-specific Project Submitted by Department of Rural Development & Planning

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Planning (P&C) Department	For the Construction of new building for Tripura Space Applications Centre.	10.17
2	Rural Development	For Construction of different Block level staff quarters.	119.58
3	RD (Panchayat)	Setting up the Tripura Centre for Rural Entrepreneurship Development and Research (TCREDR)	51.80

Source: Collected from Department of Rural Development & Planning, Govt. of Tripura

The Rural Development and Planning Department proposes Rs.10.17 crore for a new Tripura Space Applications Centre building, Rs.119.58 crore for block-level staff quarters, and Rs.51.80 crore for the Tripura Centre for Rural Entrepreneurship Development and Research, emphasizing improved infrastructure, governance, and rural innovation to advance regional development.

Transport Department:

Table 8.8: Need for a State-specific Project Submitted by Department of Transport

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Transport	Setting up Multi-storied building at TRTC's land in Battala, Agartala DR) and Extension and development of Kailasahar Airport.	706.00

Source: Collected from Department of Transport, Govt. of Tripura

The Transport Department proposes Rs.706.00 crore for a multi-storied building at Battala, Agartala, to enhance urban infrastructure and revenue generation, and for upgrading Kailasahar Airport to boost connectivity, trade, and tourism. Sustainable design, improved transport links, commercial use of the building and stakeholder involvement are key to maximizing the impact of these projects.

Department of Home & General Administration:

Table 8.9 outlines the following projects: Rs.1432.93 crore for a new police headquarters, housing, and roads in RK Nagar under Home (Police); Rs.20.04 crore for a new sub-jail at Mohanpur under Home (Jail); Rs.15.50 crore for fire stations and workshops under Home (Fire); Rs.296.63 crore for sports infrastructure, veterinary labs, and offices under ARDD; and Rs.30.00 crore for a new building for the Tripura Public Service Commission under GA (P&T). These projects enhance safety, public service efficiency, veterinary services, and infrastructure development, contributing to improved governance and better living standards in Tripura.

Table 8.9: Need for a State-specific Project Submitted by Department of Home & General Administration

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Home (Police)	For the construction of police headquarter building, housing for police, roads in RK Nagar For the construction of police headquarter building, housing for police, roads in RK Nagar	1432.92
2	Home (Jail)	Construction of 1(one) New sub Jail at Mohanpur Sub Division under West Tripura Dist.	20.04
3	Home (Fire)	For permanent construction of fire station in Chailengta, Belonia, Tripura Fire Service Central Workshop and reconstruction of fire station in Sabroom, Khowai	15.50
4	GA (P&T) [TPSC]	Proposal for New Building Construction	30.00

Source: Collected from Department of Home & General Administration, Govt. of Tripura

Department of Revenue & Disaster Management:

The project of a total of Rs.5540 crore is submitted by the Department of Revenue & Disaster for disaster resilience projects, which include installing 240 Automated Weather Stations, erecting shelters, bolstering fire services, and renovating structures. The financing also supports the construction of embankments, river dredging, emergency operation centers in eight districts, a state-wide decision support system, and early warning systems for lightning and earthquakes in high-risk locations.

Table 8.10: Need for a State-specific Project Submitted by Department of Revenue & Disaster Management

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Revenue	The initiatives focus on enhancing disaster resilience through retrofitting critical buildings, constructing disaster-resistant shelters, and strengthening fire services. Key measures include installing 240 Automated Weather Stations, developing a state-wide Decision Support System (DSS), and establishing advanced Emergency Operation Centres in 8 districts. Additional efforts include dredging and embankment construction along five rivers, as well as implementing early warning systems for earthquakes and lightning in vulnerable areas.	5540

Source: Collected from Department of Revenue & Disaster Management, Govt. of Tripura

Department of Industry & Commerce:

The project of a total of Rs.157.91 crore is proposed by the Department of Industry & Commerce to build new office structures for the District Industries Centers in the five districts of Tripura (North, Unakoti, Khowai, Sepahijala, and South). To promote industrial growth and skill development in the state, it also focuses on creating a Center of Excellence and a Future Skill Training Center in Agartala, as well as developing land for the Santirbazaar Industrial Estate.

Table 8.11: Need for a State-specific Project Submitted by Department of Industry & Commerce

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Industries & Commerce.	For constructing new District Industries Centre office buildings in North, Unakoti, Khowai, Sepahijala, and South Tripura districts, developing land for the Santirbazaar Industrial Estate, and establishing a Centre of Excellence and Future Skill Training Centre in Agartala.	157.91

Source: Collected from Department of Industry & Commerce, Govt. of Tripura

Department of Tourism & Forest:

The Department of Tourism & Forest proposes Rs.1800.00 crore for upgrading tourism sites like Sepahijala and Neermahal, Rs.13.83 crore for building ICA office buildings, and Rs.294.03 crore for eco-tourism and forest infrastructure development at various locations in Tripura. These projects aim to enhance tourism, administration, and environmental sustainability.

Table 8.12: Need for a State-specific Project Submitted by Department of Tourism & Forest

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Tourism	For various construction, infrastructural development and upgradation at Sepahijala Wildlife Sanctuary, Neermahal, Chabimura and Maharani Site Development.	1800.00
2	ICA	The proposed projects involve the construction of District ICA Office buildings at three locations: Unakoti District in Kailasahar, West Tripura District in Agartala, and North Tripura District in Agartala. These buildings aim to enhance administrative infrastructure and improve the functioning of the Information and Cultural Affairs (ICA) Department in the respective districts.	13.83
3	Forest	For upgradation of the existing Bambusetum at Anandanagar, West Tripura, and developing 'LEGACY PARK' at the remediated legacy waste site in Hapania, Agartala. And formation of eco-tourism at Jampui Hill in Vangmun/Jampui, Sitacherra in the West District, and Dumboor Reservoir in the Dhalai District. Additionally, the infrastructure of the Forest Department is set for upgradation, alongside the development of various eco-tourism activities at Bettlingship, Phuldungsei. Project proposals have also been drafted for eco-tourism sites at Jampui Hill, Sita Chara, and Dumboor Reservoir Island to further enhance the region's tourism potential.	294.03

Source: Collected from Department of Tourism & Forest, Govt. of Tripura

Department of Agriculture & Allied Sector:

Table 8.13 outlines state-specific projects proposed by the Department of Agriculture & Allied Sector. A total of Rs.206.65 crore for constructing office buildings for fisheries at various levels and developing the Tripura Fisheries Training Institute (TFTI) and the Tripura Fisheries Development Board (TFDB) are needed. Agriculture & Farmers Welfare: Rs.135.00 crore for reconstructing 300 sub-seed stores in phases. Co-operation: Rs.19.75 crore for building offices for the Registrar of Co-operative Societies, DRCS, and TSCU. Food & Civil Supplies: Rs.26.65 crore for constructing new godowns and composite quarter complexes.

Table 8.13: Need for a State-specific Project Submitted by Department of Agriculture & Allied Sector

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Fisheries	For Constructing office buildings for the Fishery Department at various levels, including Circle (Fishery Assistant), Block (Fishery Officer), Sub-Division (Superintendent of Fisheries), and Circle (Deputy Director of Fisheries). Additionally, plans focus on developing the Tripura Fisheries Training Institute (TFTI) and constructing a state-level office building for the Tripura Fisheries Development Board (TFDB).	206.65
2	Agriculture & Farmers Welfare	For re-construction of existing 300 sub-seed store in phase manner (@60 nos/annum)	135.00
3	Co-operation	For construction of O/o the Registrar of Co-operative Societies, Tripura, office of the DRCS, Sepahijala, Administrative building of TSCU, Commercial building of TSCCF Ltd	19.75
4	ARDD	For establishment of sports infrastructure laboratories at Veterinary Hospitals & Dispensaries, College of Veterinary Science & AH under Central University and construction of Administrative Office in state, district and block level and also construction for residential quarters for the official of ARDD.	296.63

Source: Collected from Department of Agriculture, Govt. of Tripura

Department of Social Welfare:

The Department of Social Welfare has proposed state-specific projects, which are included in Table 8.14. For a number of projects, including women's markets, training programs, a Braille press, skill development for people with impairments, cultural centers, drug misuse prevention, and modernizing Anganwadi Centers, the Social Welfare and Social Education Department

received Rs.128.60 crore. For the construction of market stalls, a rest house, sports facilities, and a dining room at nearby schools, OBC Welfare is requesting a total of Rs.3.71 crore. A total of Rs.374.00 crore was allocated by SC Welfare for the development of ecotourism, residential schools, hostels, and the renovation of SC market complexes and hostels.

Table 8.14: Need for a State-specific Project Submitted by Department of Social Welfare

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	SW & SE	For establishing dedicated women's markets and cooperative stores, along with training and capacity-building programs for women focusing on entrepreneurship, business management, financial literacy, marketing, vocational training, digital literacy, and e-commerce. For setting up the Tripura Central Braille Press at the state government printing press and establishing a Life Skill and Skill Development Institute for persons with disabilities, including a shelter home for abandoned individuals. Additional projects aim to develop a Cultural and Sports Development Centre and special schools in all eight districts for persons with disabilities. Plans also include strengthening DDRC infrastructure, implementing an integrated drug abuse and HIV prevention initiative, developing an egg-producing farm for Anganwadi Centers, setting up a THR manufacturing unit for Anganwadi, and modernizing AWCs in Tripura.	128.6
2	OBC Welfare	For construction of a double-storied market stall at Kadamtala Bazar and a double-storied, 12-bedded rest house with a boundary wall near the motor stand. Additionally, an indoor sports hall for badminton and a gym is planned at the Bargul High School ground. Furthermore, a mid-day meal dining room and kitchen will be developed at Ashwini Kumar Roaja Para S.B. School to enhance facilities for students.	3.71
3	SC Welfare	For the re-development of four water bodies for eco-tourism and the establishment of eight Dr. B.R. Ambedkar Model Residential Schools (one per district) for classes VI to XII. Also for setting up a 200-seated Bhagini Nivedita Chhatrinibash for SC college/university girls, a 20-seated Dr. B.R. Ambedkar Memorial Hostel for SC boys, and a 100-seated SC Girls' Hostel at Fatikroy Govt. Degree College, Unakoti. Plans also involve reconstructing two 100-seated and nine 50-seated old SC hostels, along with constructing four double-storied market complexes.	374.00

Source: Collected from Department of Social Welfare, Govt. of Tripura

Department of Tribal Welfare:

A total of Rs.96.04 crore is proposed by the Tribal Welfare department for the projects to upgrade the TTAADC area's roads, establish electricity cables, build a food godown, build tiny stadiums and auditoriums, and add schools.

Table 8.15: Need for a State-specific Project Submitted by Department of Tribal Welfare

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Tribal Welfare	Proposals include constructing four additional classrooms at St. John's H.S. School in Raya Bari, eight mini stadiums with grandstands, and a 1000-seater auditorium at Garia Academy in Atharabuyila, Killa, Gomati. Additionally, projects include constructing a 5000 MT food godown, improving roads, and installing 11kV power cables in the TTAADC area, along with a 1000-seater auditorium at Raya Bari near the Catholic Church.	96.04

Source: Collected from Department of Tribal Welfare, Govt. of Tripura

Department of Power:

The Power department placed its budget of Rs.1017.39 crore for installing solar power plants in government offices and rural areas and Rs.8390.00 crore for upgrading power stations, installing solar panels, replacing overhead lines, and installing a combined gas turbine.

Table 8.16: Need for a State-specific Project Submitted by Department of Power

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1	Power (TREDA)	Installation of Solar photovoltaic power plants in govt. offices, rural villages and gram panchayat/village council offices.	1017.39
2	Power (TSECL)	Up-gradation of 132 KV power station, Installation of Solar panel Replacement of Overhead line by underground cable Installation of Combined gas turbine	8390.00
3	Food, Civil Supplies	For construction of 07(seven) no. of New Godowns and 35 nos. Composite Quarter complex.(for 60 MT Weigh Bridges)	26.65

Source: Collected from Department of Power, Govt. of Tripura

Department of Tribal Welfare & TTAADC

A total of Rs.2260.64 crore was demanded by TTAADC for a number of projects, such as skill training centers, infrastructure development, museum upgrades, aquaculture water body

construction, medical facilities, educational infrastructure, and fostering social, cultural, and economic advancements in tribal areas.

Table 8.17: Need for a State-specific Project Submitted by Department of Tribal Welfare and TTAADC

Sl.	Name of the Department	Description of the Project	Amount (Rs. Crore)
1.	Tribal Welfare	Proposals include constructing four additional classrooms at St. John's H.S. School in Raya Bari, eight mini stadiums with grandstands, and a 1000-seater auditorium at Garia Academy in Atharabuyila, Killa, Gomati. Additionally, projects include constructing a 5000 MT food godown, improving roads, and installing 11kV power cables in the TTAADC area, along with a 1000-seater auditorium at Raya Bari near the Catholic Church.	96.04
2.	Tribal Welfare (TTAADC)	<ul style="list-style-type: none"> • For infrastructure development like skill development training center with residential facilities, Hi-Tech Nursery Facility Strengthening Exotic Pig Breeding Farms • Upgrading the Tripura Tribal Museum and establishing cultural academies • Construction of new water bodies for aquaculture, and pisciculture knowledge centers are being developed. • Construction of vertical extensions of the Secretariat Main Building and EC office, construction of a new Council Bhawan • Medical facilities are being improved with Twikormo Hospital (20-bedded PHC) and quarters at Kherengbar Hospital. • Educational infrastructure includes eight Ashram Schools for ST students and five 400-seated Khumpui Academy Residential Schools. • Upgradation of loads and communication facilities • Improvement of living standards, improvement of livelihood, and promote cultural and economic development in tribal areas. Construction of pisciculture knowledge centers, support economic plantation crops for farmers, and promote sustainable self-employment through mushroom cultivation. 	2260.64

Source: Collected from Department of Tribal Welfare, Govt. of Tripura

8.4 Recommendations for the State-specific Projects

Based on the state-specific project mentioned in the previous section, this section recommends department-wise need based project.

Table 8.18 shows the recommended projects submitted by the Home Department of the state. The infrastructure for public safety and law enforcement in Tripura is being deliberately strengthened by this all-inclusive investment plan. A substantial investment in the infrastructure and operational capacity of the Home Department, the total cost of the projects of Rs.1236 crore is recommended. A permanent fire station, proposed at a cost of Rs.13 crore, is essential for strengthening disaster response and public safety infrastructure, ensuring rapid and effective emergency services. The construction of a new centralized police headquarters, with an estimated cost of Rs.100 crore, is critical for streamlining administration and enhancing operational efficiency in law enforcement.

Table 8.18: Recommended Projects Home Department

Sl.	Specific Need Based Projects/Schemes Submitted by Home Department, Tripura	Proposed Amount (Rs. Crore)
1	Permanent construction of Fire Station	13.00
2	Construction of new Police Headquarters Building	100.00
3	Construction of Housing for Police/TSR (Construction of Type-II, Type-III, Type-IV and Type -V Quarters)	730.00
4	Construction of new (i) Police Buildings (21 Police Stations,01 SDPO office-cum-residences)	78.50
5	Construction of new (i) TSR BN(HQr) (ii) Boundary walls in BN (HQr) (iii)Internal Roads in BN HQr (iv) GO's mess /Officer's mess and SO's mess in BN HQr (V) Women SI Cadet/mess in KTDs PTA and (Vi) M.I Room/Community Hall (Darbar)/Single-Storeyed Building /Admn.Building in TSR BN HQr.	237.00
6	For purchase of vehicle for Tripura Police	40.00
7	Projected Plan for purchase fo Law & Order Equipment & Equipment's for Tripura Police.	8.00
8	Construction of internal roads at different location of 2nd BN TSR HQR at RK Nagar	1.5
9	Construction of New SP (North) office building at Batarashi, Dharmanagar	9
10	Construction of B+G+4 storied building for Agartala traffic unit near Stable Ground, Bhutura/SH-Building portion include water supply and sanitary installation	19
Total Projected Cost		1236.00

Source: Collected from Department of Home & Affairs, Govt. of Tripura

Table 8.19 shows the recommended projects for agricultural and allied sector. In order to develop the agricultural sector and associated sectors, the Revenue Department of Tripura has suggested several important projects, with a particular emphasis on veterinary care, education, and seed conservation. A strategic investment is needed in agriculture and related fields, so a total cost of Rs.165 crore is recommended. These programs are intended to enhance veterinary care, advance research and education, and boost agricultural output, all of which will aid in Tripura's socioeconomic growth.

To improve livestock health, ensure early illness identification, and improve veterinary care in the area, laboratories at veterinary hospitals and dispensaries must be established (at a cost of Rs.50 crore). By strengthening the state's animal husbandry industry, this project will improve rural livelihoods, livestock productivity, and public health outcomes (such as the prevention of zoonotic diseases).

Table 8.19: Recommended Projects for Agriculture & Allied Sector

Sl.	Specific Need Based Projects/Schemes Submitted by Agriculture & Allied Sector Department, Tripura	Proposed Amount (Rs. Crore)
1	Establishment of Laboratories at the Veterinary Hospitals & Dispensaries.	50.00
2	Establishment of College of Veterinary Science & AH under Central University.	55.00
3	For re-construction of existing 300 sub-seed store in phase manner(@60 nos/annum)	60.00
Total Projected Cost		165.00

Source: Collected from Department of Agriculture, Govt. of Tripura

To address the demand for qualified experts in animal health, research, and rural development, Central University must establish a College of Veterinary Science & Animal Husbandry, which will cost Rs.55 crore. By addressing the skill shortage in veterinary care, this institution will help the expansion of the allied agricultural industry overall, promote veterinary science research, and contribute to capacity building.

The quality, availability, and prompt delivery of seed to farmers are all impacted by the phased reconstruction of the current 300 sub-seed stores (at a cost of 60 per year, or Rs.60 crore). In order to improve storage efficiency, 300 sub-seed stores will be gradually reconstructed. Better seed preservation, increased agricultural output, and regional food security will all be facilitated by

upgraded seed storage facilities, which will facilitate the prompt and effective delivery of high-quality seeds to farmers.

Table 8.20 outlines two critical infrastructure projects proposed for the Public Works Department (PWD). These projects aim to address essential gaps in administrative and healthcare infrastructure, with a total proposed cost of Rs.1335 crore. The projects will address long-standing gaps, modernize state governance, and ensure equitable healthcare delivery across Tripura. Development of New Capital Complex (Rs.1000 crore) is needed for housing state administrative offices, improving governance, and ensuring efficient coordination between departments. This project is necessary to provide a modern, integrated administrative hub that meets the growing demands of state governance. It will facilitate better public service delivery by centralizing government functions in a single location. The project also aligns with urban planning goals, creating infrastructure that reflects the state's aspirations for growth and modernization.

Table 8.20: Recommended Projects for Public Works Department

Sl.	Specific Need Based Projects/Schemes Submitted by Public Works Department, Tripura	Proposed Amount (Rs. Crore)
1	Development of New Capital Complex	1000.00
2	Construction of 617 Quarters for Doctors in District/ Sub-Divisional Hospitals, Primary Health Centres/ Community Health Centres	335.00
Total Projected Cost		1335.00

Source: Collected from Public Works Department, Govt. of Tripura

Construction of 617 Quarters for Doctors in District/Sub-Divisional Hospitals, Primary Health Centres (PHCs), and Community Health Centres (CHCs) (Rs.335 crore) is an urgent need for housing facilities for healthcare professionals, particularly in rural and semi-urban areas, to retain and attract skilled medical personnel. The lack of adequate housing for doctors in healthcare facilities has been a barrier to consistent service delivery in underserved areas. It is important to provide 617 residential quarters to ensure better working conditions, leading to improved healthcare access and patient outcomes in district hospitals, sub-divisional hospitals, PHCs, and CHCs. This initiative supports the state's objective of strengthening its healthcare infrastructure and addressing rural healthcare disparities.

Four key projects suggested in Table 8.21 for the Urban Department are listed in the table. These projects, which have a proposed expenditure of Rs.200 crore are in view to improve urban

infrastructure, environmental sustainability, and the standard of living for locals. These initiatives are essential to Tripura's sustainable urban development. Through the construction of water bodies, business complexes, parks, and governance infrastructure, the Urban Department is meeting the fundamental demands of better public services, economic growth, and environmental preservation.

Table 8.21: Recommended Projects for Urban Department

Sl.	Specific Need Based Projects/Schemes Submitted by Urban Department, Tripura	Proposed Amount (Rs. Crore)
1	Development of Water Bodies/Lakes	10.00
2	Construction of Commercial Complex	80.00
3	Creation of Recreational spaces	20.00
4	Construction of office Building and ward office at ULBs	90.00
Total Projected Cost		200.00

Source: Collected from Department of Urban Development, Govt. of Tripura

The construction of water bodies and lakes, which will cost Rs.10 crore, is essential for boosting groundwater recharge, conserving the environment, and improving urban aesthetics. By tackling water management concerns and developing environmentally friendly recreation areas, this initiative will also support sustainable urban design.

To improve the local economy, provision for making contemporary business infrastructure, and generation of employment, the construction of a commercial complex (costing Rs.80 crore) is essential. By acting as a center for economic activity, this project will encourage entrepreneurship and boost the amount of money generated for the Urban Local Bodies (ULBs).

The establishment of recreational spaces, such parks and playgrounds, is necessary to raise the standard of living in cities by providing locations for recreation, exercise, and social interaction (Rs.20 crore). These regions make cities more livable and appealing while also improving the emotional and physical health of locals.

Construction of Office Buildings and Ward Offices at ULBs (Rs.90 crore) for Urban Local Bodies is critical for strengthening local governance and service delivery. This infrastructure will enable better coordination, accessibility, and responsiveness in addressing the needs of urban residents, thereby improving municipal services. Total Projected Cost of Rs.200 crore is aimed at creating a

balanced urban development framework that combines environmental sustainability, economic growth, recreational opportunities, and improved governance.

In order to enhance community engagement by involving local communities in planning, prioritize sustainability in stadiums and infrastructure projects, and upgrade training facilities, especially for youth and women. Table 8.22 outlines three proposed projects for the Tribal Welfare Department with a total cost of Rs.22.93 crore for 2024-25. These include constructing additional classrooms at St. John's H.S. School (Rs.0.52 crore), building two mini stadiums with grandstands (Rs.9.39 crore), and constructing a 5000 MT food storage, improving roads, and installing 11kV power cables in the TTAADC area (Rs.13.03 crore).

Table 8.22: Recommended Projects for Tribal Welfare Department

Sl.	Specific Need Based Projects/Schemes Submitted by Tribal Welfare Department, Tripura	Proposed Amount (Rs. Crore)
1	Construction of 4 (four) additional class rooms of ST John's H.S. School at Raya Bari under Killa sub-zone during the year 2024-25	0.52
2	Construction of 2 (Two) Nos. for Mii Stadium with Grand Stand during the year 2024-25	9.39
3	Construction of 5000 MT capacity Food Storage , IMP of roads and providing and laying fitting fixing of 11kv power cable in TTAADC area during the year 2024-25	13.03
Total Projected Cost		22.93

Source: Collected from Department of Tribal Welfare, Govt. of Tripura

Table 8.23 presents a list of proposed projects by the TTAADC with a total projected cost of Rs.524.78 crore. As it is important to establish a Handloom & Skill Development, Support for handloom weavers Rs.11.79 crore and training facilities Rs.10.00 crore are recommended for funds. In order to draw attention in government and development organizational support, it is crucial to highlight the potentiality for job creation, education, healthcare, and economic growth. Funding of Rs.40.00 crore is required for cultural and educational infrastructure, while Rs.50.00 crore is required for schools of the ST students.

Table 8.23: Recommended Projects for TTAADC

Sl.	Specific Need Based Projects/Schemes Submitted by TTAADC	Proposed Amount (Rs. Crore)
1	Handloom weavers of cluster, at 3 (three) Nos. Sub-Zone under Sepahijala & Unokoti Zone, TTAADC	11.79
2	Construction of skill development Training With Residential facility at Khumulwng, TTAADC, Head Quarter Complex.	10.00
3	Island Eco-Park, Raisyabari Range, Under 82- Miles Forest Division, TTADC	5.13
4	Construction of Residential composite training hall in 1 st floor of existing Principal Veterinary officer, TTAADC, H/Q Complex, Khumulwng.	5.00
5	Strengthening of Exotic Pig Breeding Farm at Nabinchhara and B.C. Manu, TTAADC	5.00
6	Construction of 4 Nos. double storied Dy. Principal Veterinary Office building cum Farmers/Animal Husbandry Knowledge Centre at Gomati, Sepahijala, Khowai and Unokoti Zone. TTAADC.	10.00
7	Up gradation of Tripura Tribal Museum cum Heritage Centre, Khumulwng, TTAADC.	16.00
8	Establishment of Pisciculture Knowledge Centre at 3 (three) Nos. Zonals H/Q under TTAADC.	4.80
9	Construction of Retail Fish Market shed along with cold storage and water pump at different locations in TTAADC in each Zone.	4.50
10	Creation of New water body and inputs cost for fresh water aqua culture at different Sub-Zone areas in TTAADC @ Rs.5.00 Hac. per sub-Zone.	20.00
11	Construction of Principal Officer, ICA H/Q Building & Conference Hall, at Khumulwng.	10.00
12	Construction of 4 Nos. Cultural Academy at Zonal Head Quarter Level under TTAADC.	40.00
13	Construction of 4 (four) Nos. newly created Inspector of Schools along with conference hall under TTAADC at Raisiyabari, Anandabazar, Hokutwisa & Manikpur.	5.00
14	Const. of 9(nine)Nos. all weather roads under Khowai, Gomati, Dhalai, North, Kaladepa, Unakoti, West, Sepahijala and South Zone under TTAADC.	62.08
15	Const. of composite office building for Zonal Head Quarter at Gomati, Sepahijala, Khowai, Kaladepa, North and Rajkandi, TTAADC	60.00
16	Vertical extension of the existing Secretariat Main Building including lift provision (3 rd floor) at Khumulwng, TTAADC.	4.38
17	Vertical extension of the existing EC (OWD) office building (2 nd floor) and construction of Annex CE,PWD office building TTAADC.	5.47

18	Const. of Assistant Engineer Sub-Divisional Office building (15 Nos. @ Rs. 43.00 crores) under TTAADC.	3.53
19	Const. of Quarter for A/E /office staff (38 units Type-iii @ Rs. 32.50 crores and Type-ii 38 Nos @ Rs. 26.65 crores.	22.48
20	Modernization of Khumulwng Stadium including beautification surrounding stadium.	10.00
21	Renovation of Conference Hall at PO's building, Khumulwng.	1.00
22	Renovation of internal electrification in all old office building under TTAADC Head quarter Complex, Khumulwng.	15.00
23	Const. of 3 rd floor of Kherengbar CHC, Khumulwng. TTAADC.	10.00
24	Const. of Twikormo Hospital 20 bedded PHC.	2.00
25	Const. of Type- II (G+2)Quarter at Kherengbar Hospital TTAADC, H/Q Complex. Khumulwng.	7.60
26	Const. of Type-III(G+2) Quarter at Kherengbar Hospital, Khumulwng.	7.08
27	Const. of Type-IV (G+2) quarter at Kherengbar Hospital, Khumulwng.	6.43
28	Coaching and allied schemes(Higher study for one time financial assistance to Students).	0.74
29	Establishment of Heritage Village under TTAADC.	10.00
30	Total 4800 Sq.ft for 3 (three) floor const. building along with attached Toilet & Conference in 2 nd Floor.	0.96
31	Establishment of Old aged Home at Takarjala.	3.00
32	Establishment of Orphan Home at North & Dhalai Dist. TTAADC.	2.70
33	Const. of CDPO office for Dumbur Nagar,	8.00
34	Establishment of Drugs rehabilitation Center at North and Dhalai.	2.70
35	Infra Development of Orchard with the im of advancing revenue generation	7.42
36	Generation of sustainable self employment with economic development among Tribal unemployed youth through commercial cultivation Masroom	30.00
37	Const. of 4 Nos. of 300 seated (100 boys & 200 Seated girls) Ashram Schools for ST Students.	50.00
38	Const. of 5 Nos. 400 Seated Khumpui Academy (Residential Schools) Building at Nairengkami, Patichari, Rajkandi, Raishyabari and Tuisan para under TTAADC.	25.00
39	Farmer's ensure income generation through cultivation of economic plantation crops	20.00
Total Projected Cost		524.78

Source: Collected from TTAADC, Khumlung

The fund requirement for healthcare facilities includes Rs.2.00 lakh for Twikormo Hospital and Rs.10.00 lakh for the Kherengbar Hospital expansion. Funds needed for road construction is

Rs.62.08 lakh and for expansion of office building is Rs.60.00 lakh. Funding required for pisciculture centers is Rs.4.80 lakh and economic plantations is Rs.20.00 lakh.

In order to enhance more revenue and maintain better fiscal health, more priorities should be given and accordingly the spending on the projects for tourism and forest is recommended. Table 8.24 outlines six projects with a total investment of Rs.110 crore, aimed at boosting eco-tourism, conserving biodiversity, and leveraging Tripura's natural and cultural heritage for sustainable economic growth.

Table 8.24: Recommended Projects for Tourism & Forest

Sl.	Specific Need Based Projects/Schemes Submitted by Tourism & Forest Department, Tripura	Proposed Amount (Rs. Crore)
1	Upgradation of Existing Old Bambusetum at Anandanagar-West Tripura.	3.00
2	Development of 'LEGACY PARK' at remediated Legacy Waste Site at Hapania, Agartala	2.50
3	Development of Various Eco-Tourism Activities at Bettlingship, Phuldungsei.	2.50
4	Project proposal for Ecotourism sites in Tripura at Jampui Hill	30.00
5	Project Ecotourism sites in Tripura at Sita Chara	12.00
6	Project proposal for Ecotourism sites in Tripura at Dumboor reservoir Island.	60.00
Total Projected Cost		110.00

Source: Collected from Department of Tourism & Forest, Govt. of Tripura

The existing Old Bambusetum at Anandanagar, West Tripura, has to be upgraded for Rs.3 crore in order to support biodiversity and the sustainable use of bamboo resources. Additionally, this project seeks to promote local enterprises and craftspeople by educating tourists and scholars about the ecological and economic value of bamboo.

In order to turn a remediated waste site, it is crucial to develop a "LEGACY PARK" at Hapania, Agartala (costing Rs.2.5 crore). This will not only reuse a previously underutilized area but also highlight trash management success stories. The park will be used as a place for pleasure and education to raise public awareness of environmental issues.

In order to showcase the area's natural beauty and draw adventure seekers, it is crucial to develop a variety of ecotourism activities in Bettlingship, Phuldungsei (costing Rs.2.5 crore). This project

will maintain the area's ecological integrity while giving local populations access to new sources of income.

The improvement of Jampui Hill, which is valued for its natural beauty and cultural significance and has enormous potential for ecotourism, requires a project proposal for ecotourism sites in Tripura (Rs.30 crore). Sustainable infrastructure will be incorporated into the planned development to draw tourists, strengthening the local economy and safeguarding the environment.

Sita Chara (Rs.12 crore) is the project proposal for ecotourism sites in Tripura. Its distinctive environment and wildlife make it a perfect place for ecotourism operations. The project's main goal is to provide eco-friendly amenities and nature paths while striking a balance between visitor involvement and environmental preservation.

A project proposal Rs.60 crore is proposed for ecotourism sites in Tripura at Dumboor Reservoir Island as it has enormous potential to become one of Tripura's most popular ecotourism destinations. As a model for ecotourism in the state, the project incorporates water-based activities, sustainable tourism infrastructure, and wildlife preservation.

Table 8.25 shows a proposed project with a Rs.100 crore budget for the development of land for the Santirbazaar Industrial Estate. The construction of the Santirbazaar Industrial Estate is a crucial step in turning Tripura into an industrial center that will boost up employment as well as economy for the long-term sustainable growth and make the economy self dependent. In this regard, the development of land is essential.

Table 8.25: Recommended Projects for Industry & Commerce

Sl.	Specific Need Based Projects/Schemes Submitted by Industry & Commerce Department, Tripura	Proposed Amount (Rs. Crore)
1	Development of land for Santirbazaar Industrial Estate	100.00
Total Projected Cost		100.00

Source: Collected from Department of Industry & Commerce, Govt. of Tripura

The construction of an industrial park in Santirbazaar will give businesses a dedicated space and aid in the expansion of Tripura's production and manufacturing industries. Through the attraction of new industries and the facilitation of the expansion of small and medium companies (SMEs), the development of this industrial cluster will create job possibilities, particularly for the local community. It will support the development of infrastructure, which is essential for the industrialization and urbanization of the state and includes improved roads, power supplies, water systems, and waste management.

An atmosphere that is conducive to business will be fostered in the area by the industrial park, which will attract both international and domestic investment. By strengthening the state's industrial base, this strategy will lessen reliance on other areas for commodities and encourage economic self-sufficiency.

Table 8.26 outlines various social welfare projects aimed at addressing the needs of marginalized groups, women, specially-abled individuals, and students in Tripura. The state has some responsibility for the welfare of the state especially for the section who are lagging behind. These initiatives, with a total proposed investment of Rs.190 crore, are essential for promoting inclusive development, social equality, and improving the overall welfare of the state. These social welfare projects are vital for Tripura's inclusive development. The focus on empowering women, ensuring better educational opportunities for marginalized groups, and improving the quality of life for specially-abled individuals is essential. Through these initiatives, Tripura can make significant strides in promoting social equality, fostering human capital, and advancing overall state development.

Table 8.26: Recommended Projects for Social Welfare

Sl.	Specific Need Based Projects/Schemes Submitted by Social Welfare Department, Tripura	Proposed Amount (Rs. Crore)
1	For Establishment of Dedicated Women's Markets and Cooperative Stores	5.00
2	Setting up of Tripura Central Braille Press at Tripura Government printing press.	10.00
3	Infrastructure for specially abled Children	5.00
4	Infrastructure Development &: Strengthening of DDRCs:	5.00
5	Modernization of AWCs in Tripura.	27.00
6	Establishment of 04 (four) Nos. Dr. B.R. Ambedkar Model residential School for class VI to XII @1 for each dist.	100.00
7	Establishment of 200 seated Bhagini Nivedita Chhatrinibash No-2 for SC girls students studying in College/University;.	8.00
8	Establishment of 100 seated SC Girls Hostel at Fatikroy Govt. Degree College, Unikoti.	4.00
9	Re-construction of 02 Nos. existing old structure Govt. SC hostels (100 seated).	8.00
10	Re-construction of 09 Nos. existing old structure Govt.SC hostels (50 seated)	18.00
Total Projected Cost		190.00

Source: Author's Recommendation based on Requirement submitted by the Department, Govt. of Tripura

Table 8.27 lists some suggested initiatives for Tripura's electricity sector reform. These programs are intended to meet particular needs in the state, emphasizing infrastructure improvement, a more dependable electricity supply, and the expansion of renewable energy potential. The urgency and significance of these reforms for the state's power sector are highlighted by the fact that each project proposal relates to a specific need as reported by the Tripura Revenue Department. The proposed funding allocation reflects a commitment to addressing critical power sector needs in Tripura, advancing sustainability, and ensuring reliable energy for both urban and rural populations.

Table 8.27: Recommended Projects for Power Sector Reforms

Sl .	Dept.	Specific Need Based Projects/Schemes Submitted by Power Department, Tripura	Proposed Amount (Rs. Crore)
1	Power (TREDA)	Installation of 50 MWp Solar photovoltaic Power plants in Govt Offices	300.00
2	Power (TREDA)	Design, Manufacture, Supply, installation & commissioning of 1KWp grid connected solar photovoltaic power plants at 1 crore families under 300 rural villages in Tripura.	650.00
3	Power (TREDA)	Installation of 2 MWp Solar photovoltaic Power plants at Gram Panchayat/village council Offices in Tripura.	67.39
4	Power (TSECL)	Up-gradation of 132 KV Suryamaninagar Sub-Station of TSECL into 400 KV Sub-station	204.00
5	Power (TSECL)	Development of Pump Storage project in the State of Tripura.	1200.00
6	Power (TSECL)	Replacement of Overhead Line By Under Ground Cable for reliable and quality power supply under Agartala Municipal Corporation	1000.00
7	Power (TSECL)	Replacement of Overhead Line By Under Ground Cable for reliable and quality power supply under Dharmanagar Municipal Council	169.00
8	Power (TSECL)	Replacement of Overhead Line By Under Ground Cable for reliable and quality power supply under Udaipur Municipal Council.	284.00
9	Power (TSECL)	Replacement of Overhead Line By Under Ground Cable for reliable and quality power supply under Khumulwng TTAADC Headquarter.	25.00
Total Amount of Money Recommended for Power Sector Reforms			3899.39

Source: Author's Recommendation based on Requirement submitted by the Department, Govt. of Tripura

Promotion of Renewable Energy: To access renewable energy sources, a number of projects are advised, such as the installation of solar photovoltaic power plants. This is in line with international

initiatives to lower carbon emissions and improve the sustainability of energy generation. With the ability to supply thousands of homes and government buildings with affordable, clean energy, the construction of smaller solar power units in rural areas and the installation of 50MW solar power plants in government buildings are essential milestones in increasing green energy access in Tripura.

Economic and Environmental Impact: Investing in these projects will have major positive effects on the economy and the environment in addition to improving the power industry. Solar energy will lessen reliance on fossil fuels, and improved infrastructure will cut transmission losses, making the power system more efficient. Long-term financial savings and environmental advantages will result from these investments, which will support Tripura's sustainable development.

Funding Justification: The suggested measures for full breadth and scale are reflected in the overall requested sum of Rs.3,899.39 crore for these power sector changes. In order to achieve the state's goal of a modernized, sustainable, and dependable electricity sector, the money is necessary. In addition to enhance the power supply, these projects will also boost local economy, create jobs, and advance the state's larger developmental objectives.

Table 8.28: Recommended Projects for Disaster Management Department

Sl.	Specific Need Based Projects/Schemes Submitted by Revenue Department, Tripura	Proposed Amount (Rs. Crore)
1	Retrofitting of existing critical and lifeline buildings	600.00
2	Strengthening of Fire & Emergency Services @Rs.100 crore per year	500.00
3	Construction of 1 multipurpose Disaster Resistant shelters in each 38 RLBs and 1 in Agartala Municipal Corporation and 3 for ULBs (@Rs.15 Crore x 42 nos.)	630.00
4	Permanent concrete embankments and dredging of five rivers (Haora, Manu, Khowai, Dhalai and Feni)	500.00
5	Construction of dedicated State and 8 District Emergency Operation Centres and equipping with high end communication, command and control systems in all 8 districts	500.00
6	Installation of Weather Monitoring & Early Warning system of Cyclone & Heavy Raining	270.00
Total Recommended Amount for Specific Projects		3000.00

Source: Author's Recommendation based on Requirement submitted by Revenue Department, Govt. of Tripura

Table 8.28 outlines disaster management projects in Tripura with a total proposed funding of Rs.3000 crore, aimed at improving preparedness, mitigating risks, and enhancing safety. These investments are crucial for strengthening infrastructure, emergency response systems, and long-term disaster resilience.

Retrofitting of Existing Critical and Lifeline Buildings (Rs.600 crore) such as hospitals, schools, and government offices will ensure they are resilient to earthquakes, floods, and other disasters.

To strengthen of Fire & Emergency Services, an amount of Rs.500 crore is recommended annually to uplift the state's response capability.

To construct the Multipurpose Disaster-Resistant Shelters, an amount of Rs.630 crore is recommended for 42 locations across the state, including rural and urban areas. These shelters are crucial for protecting vulnerable populations, ensuring their safety, and providing emergency refuge during disasters.

Moreover, to construction of Emergency Operation Centres (EOCs), an amount of Rs.500 crore is recommended at the state and district levels which can further centralize disaster response operations.

For installation of Weather Monitoring & Early Warning System, Rs.270 crore is recommended, which could provide timely alerts, allowing for evacuation and mitigation measures before a disaster strikes. This system will significantly reduce the impact of natural disasters by enabling preparedness and saving lives through advanced forecasting.

Chapter 9

Outcome Evaluation of State Finances in the Context of Recommendations of the 14th & 15th Finance Commissions

This chapter contains three sections and it covers the Terms of Reference 12. Section 9.1 highlights the terms of reference of the previous two Finance Commissions. Section 9.2 discusses the progress and efforts made by the state as per the recommendations of the previous Finance Commissions. Section 9.3 highlights the conclusions.

9.1 Terms of Reference of the 14th & 15th FC

This section discusses the terms of references of the previous Finance Commissions and fund received from the centre for the same.

9.1.1 Terms of Reference of the 14th Finance Commission

- i. Estimation of revenue capacities of State, and Measures to improve the Tax-GSDP ratio during the last five years. Suggestions for enhancing the revenue productivity of the tax system in the state
- ii. Analysis of the state's own non-tax revenues and suggestions to enhance revenues from user charges and profits from departmental enterprises and dividends from non-departmental commercial enterprises.
- iii. Expenditure pattern and trends separately for Non-Plan and Plan, Revenue and Capital, and major components of expenditure there under. Measures to enhance the allocative and technical efficiency in expenditures during the last 5 years. Suggestions for improving efficiency in public spending.
- iv. Analysis of Deficits – Fiscal and Revenue along with Balance of Current Revenues for Plan financing.
- v. The level of Debt-GSDP ratio and the use of debt (i.e whether it has been used for capital expenditure or otherwise). Composition of the state's debt in terms of market borrowing, Central government debt (including those from bilateral/multilateral lending agencies routed through the Central government), liabilities in public account (small savings, provident funds etc) and borrowings from agencies such as NABARD, LIC etc.
- vi. Implementation of FRBM Act and commitment towards targets. Analysis of MTFP of various departments and aggregate.

- vii. Analysis of the States' transfer to urban and rural local bodies in the state. Major decentralization initiatives, Reforms undertaken under JNNURM conditionalities.
- viii. Impact of State Public Enterprises finances on the States' financial health and measures taken to improve their performance and/or alternatives of closure, disinvestment etc.
- ix. Public Expenditure and Financial management (PEFM Reforms implemented in the State.
- x. Impact of Power Sector Reforms on States' fiscal health. In case reforms have not been implemented, the likely outcome on the States' fiscal health.
- xi. Analysis of contingent liabilities of the state.
- xii. Subsidies given by the states (Other than Central subsidies), its targeting and evaluation.

9.1.2 Terms of Reference of the 15th Finance Commission

The Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of government, in the following areas:

- i. Efforts made by the States in expansion and deepening of tax net under GST;
- ii. Efforts and Progress made in moving towards replacement rate of population growth;
- iii. Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;
- iv. Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;
- v. Progress made in increasing tax/non-tax revenues, promoting savings by adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;
- vi. Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;
- vii. Provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services;
- viii. Control or lack of it in incurring expenditure on populist measures; and
- ix. Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation.

9.1.3 Grants Received by the State

Table 9.1 shows the receipt of sanctioned grants from 15th Finance Commission. The state has received six types of grants viz. post devolution deficit grant, grants for rural local bodies, grants

for urban local bodies, grants in aid for state disaster response fund, grants in aid for state disaster mitigation fund and health sector grant. The Finance Commission has sanctioned the maximum fund for post devolution deficit grant, followed by grants for rural local bodies. The Finance Commission has also sanctioned a sizable amount in order to improve the health sector.

Table 9.1: Grants Received and Recommended From XV Finance Commission (Rs. in Crore)

Types of Grants	2021-22	2022-23	2023-24	2024-25*	2025-26*
Post Devolution Revenue Deficit Grant	4546	4423	4174	3788	2959
Grants for Rural Local Bodies	141	147	103.6	157	153
Grants for Urban Local Bodies	72	21	148	81	82
Grants in Aid for State Disaster Response Fund	54.4	56.8	60.8	63.2	67.2
Grants in Aid for State Disaster Mitigation Fund	13.6	14.20	15.2	15.8	16.8
Health Sector Grant	84.08		170	94	99
Total	4911.08	4662.00	4716.00	4199.00	3043.00

Source: Collected from the Ministry of Finance, Govt. of Tripura

Note: * indicates the value recommended by the XV Finance Commission. This fund is yet to release.

Table 9.2 shows the pre-devolution revenue deficit or surplus of the state during 15th Finance Commission period. It is found that pre-devolution deficit increases over time. It increases from Rs.9209.00 crore in 2021-22 to Rs.10419.00 crore in 2024-25.

Table 9.2: Pre-Devolution Revenue Deficit (+) / Surplus (-) (Rs. in Crore)

2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
9209.00	9610.00	10011.00	10419.00	10553.00	49802.00

Source: Main Report of the XV Finance Commission (pp.325)

Table 9.3: Grants Received and Sanctioned as Centrally Sponsored Schemes (Rs. in Crore)

Types of Grants	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Central Assistance / Share	3253.89	3404.45	5170.78	4363.32	NA	NA
Externally aided projects - grants for Centrally Sponsored Schemes	58.07	74.43	451.19	1002.96	NA	NA
Total (Gross)	3311.97	3478.88	5621.96	5366.28	NA	NA
Deduct Refund	--	-3.48	--	--	NA	NA
Total (Net)	3311.97	3475.4	5621.96	5366.28	NA	NA

Source: Collected from the Ministry of Finance, Govt. of Tripura

Table 9.3 shows the grants sanctioned and received by the state. As per the report, Ministry of Finance, Govt. of Tripura, the state has received Rs.5366.28 crore during 2024-25 financial year as centrally sponsored scheme. Table 9.4 shows the other grants received by the state. During the last financial year the state has received of Rs.533.20 crore as other grants.

Table 9.4: Other Transfer / Grants to States / UT with Legislatures (Rs. in Crore)

Types of Grants	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Central Pool of resources for North East Region	12.68	----	2.91	4.54	NA	NA
Grant to Inland Water Transport Authority of India (NLCPR)	2.91	----	----	---	NA	NA
Schemes for North Eastern Council – Special	13.11	---	---	---	NA	NA
ADB Assistance NESRIP (EAP) (R&B)	---	----	3.29	---	NA	NA
North East Road Sector Development Scheme	7.65	17.65	30	55	NA	NA
North East Road Special Infrastructure Development Scheme	69.97	7.77	85.68	172.83	NA	NA
Grant under proviso to Article 275 (1) of the constitution	6.08	12.95	27	19	NA	NA
Grants from Central Road Fund	33.76	19.42	25	5	NA	NA
Special Assistance	175.35	40.81	116.11	276.83	NA	NA
Compensation for Loss of Revenue arising out of Implementation of GST	101.45	---	----	----	NA	NA
Total	422.96	98.6	289.99	533.2	NA	NA
Deduct Refund	----	-43.26	----	----	NA	NA
Total (Net)	422.96	55.34	289.99	533.2	NA	NA

Source: Collected from the Ministry of Finance, Govt. of Tripura

9.2 Progress and Efforts Made by the State of Recommendations of Previous Finance Commissions

The state has lot of progress as per the recommendations of previous Finance Commissions which are discussed in the following sub-heads.

9.2.1 Efforts Made by the States in Expansion and Deepening of Tax Net under GST

The Government of Tripura continued to make progress in fiscal correction and consolidation during 2019-20, in line with the fiscal restructuring guidelines prescribed by the Finance Commission and the targets set under the Tripura Fiscal Responsibility and Budget Management

Act, 2005. Tripura has been actively working to expand and deepen its tax net under the Goods and Services Tax (GST) regime. To achieve this, the state has implemented various initiatives and measures.

Key Initiatives and measures

Notification and Orders: The state government has issued several notifications and orders to clarify and simplify the GST rules and regulations. Tripura State Goods and Services Tax (Fourth Removal of Difficulties) Order, 2018, was issued to remove difficulties in implementing the GST Act.

GST Rules and Amendments: Tripura has notified several GST rules and amendments to align with the Central GST Act. The Tripura State Goods and Services Tax (Amendment) Rules, 2023, is an example of such an amendment.

Taxpayer Services: The state government has established a taxpayer services portal to facilitate easy registration, return filing, and payment of taxes. The portal also provides various e-services, including VAT e-Services, GST e-Services, and Profession Tax e-Services.

Geographical Division: The state is divided into 15 charges for efficient collection of taxes, including VAT/CST, GST, Tripura Road Development Cess, Profession Tax, and Agri. Income Tax.

Registration and Refund: Tripura has streamlined registration processes and refund mechanisms under GST, ensuring seamless transactions and encouraging compliance.

Tax Revenue Collection: The state has made significant progress in collecting taxes, with notable achievements in VAT, CST, Luxury Tax, Entertainment Tax, and GST collection.

Awareness and Education: The Tripura government has conducted various awareness and education programs to inform taxpayers about the GST rules and regulations. These programs aim to promote voluntary compliance and reduce tax evasion.

Additional Efforts: The Tripura government has also established the Office of the Chief Commissioner of State Tax to oversee GST implementations and ensure effective tax administrations. These efforts demonstrate Tripura's commitment to expanding and deepening its tax net under GST, promoting economic growth and fiscal stability.

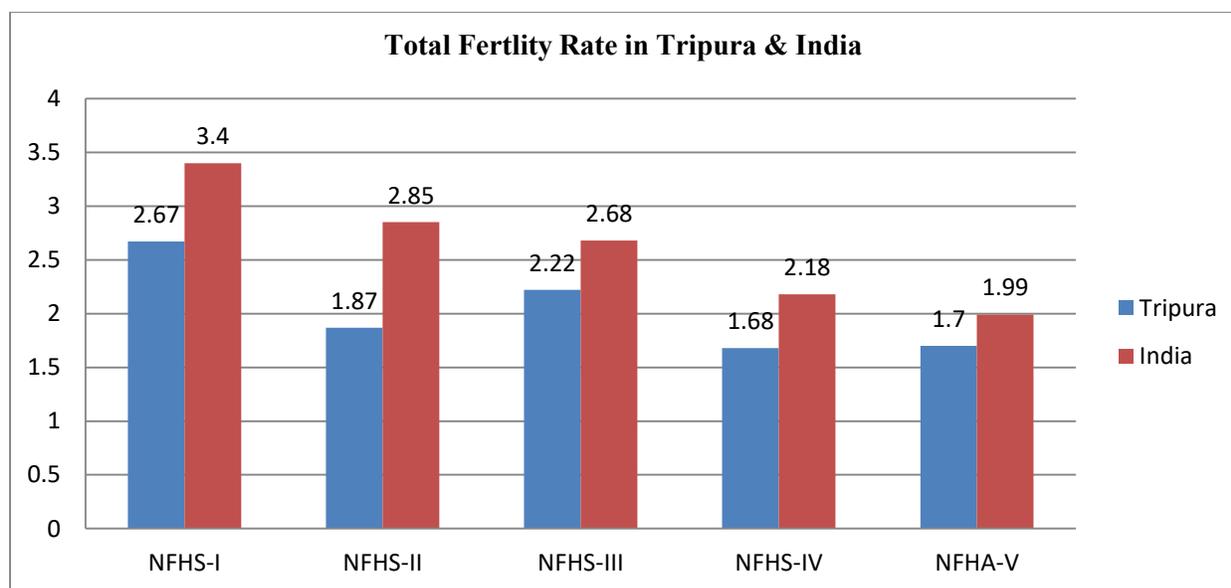
9.2.2 Efforts and Progress Made in Moving Towards Replacement Rate of Population Growth

India has made significant progress in slowing its population growth, with the total fertility rate (TFR) declining to 2.2 in 2017, down from 3.2 in the 1990s. Most Indian states are expected to

reach replacement fertility levels of 2.1 children per woman by 2021, with urban fertility rates already below replacement level at 1.7 children per woman. As per NFHS-V, fertility rate declines to 2.0 and total wanted fertility rate is 1.6 and Crude Birth Rate (CBR) is 14.5. The percentage of child bearing women age of 15-19 is 22 percent in Tripura which is highest in India. Tripura's progress toward replacement rate population growth is influenced by various factors, including education, family planning, and economic development.

Figure 9.1 shows the comparison of fertility rate between Tripura and India. It is found that fertility rate is fluctuating in different NFHS reports. The total fertility rate is lower than the national average.

Figure 9.1: Comparison of Fertility Rate between Tripura and India



Source: Drawn from NFHS-V Data

Key Factors Contributing to Population Growth Slowdown:

Rising Education Levels: Women's education has played a crucial role in reducing fertility rates. States with higher literacy rates, like Kerala, have lower fertility rates.

Rising Awareness Level: Awareness campaigning to control the population growth is done by Health & Family Welfare department regularly.

Increasing Urbanization: Urbanization has led to delayed marriages, increased female workforce participation, and better access to family planning services.

Improving Economic Conditions: Economic growth has reduced poverty and improved living standards, leading to decreased fertility rates.

Table 9.5 shows the state performance taken towards replacement rate of population. During 2022-23, number of Nirodh users and oral pill users, IUD insertions increases compared to previous years. However, the number of total sterilizations, vasectomy and tubectomy decreases.

Table 9.5: Performance of Tripura on family planning during 2012-13 to 2022-23 (in Numbers)

Years	Total Sterilization	Vasectomy	Tubectomy	IUD insertion	CC users (Nirodh)	Oral Pill Users
2012-13	6826	155	6671	876	498709	83227
2013-14	5412	23	5389	984	447394	97754
2014-15	4196	18	4178	1102	347976	144096
2015-16	2764	27	2737	1389	323324	145891
2016-17	2576	43	2533	3429	345404	143800
2017-18	2617	13	2604	1794	322078	142381
2018-19	3072	59	2528	484	78651	34119
2019-20	2953	40	1185	351	165967	118515
2020-21	2147	4	763	660	189019	125815
2021-22	2874	22	2852	1145	254478	249541
2022-23	3335	15	3320	2178	670112	437728

Source: Directorate of Economics & Statistics, Planning (Statistics) Department, Government of Tripura

Ongoing Initiatives and Challenges

1. Family Planning Programs: The government has expanded family planning services, adding new contraceptive methods and increasing funding.
2. Addressing Unmet Needs: Despite progress, many women still lack access to modern contraceptive methods, leading to unintended pregnancies.
3. Regional Disparities: Significant variations in fertility rates persist across states, highlighting the need for targeted interventions.

To overcome these challenges, the Population Foundation of India recommends focusing on the reproductive rights of unreached populations, particularly women. By prioritizing education, family planning, and economic empowerment, India can continue its progress toward replacement rate population growth.

9.2.3 Achievements of the State in Implementation of Flagship Schemes of Govt. of India

There is a significant progress of the state Tripura in implementing flagship programmes of the Govt. of India. The major flagship programmes implemented in Tripura are Sarva Shikha Abhiyan, National Rural Livelihood Mission, Mukhyamantri Yova Yogayog Yojana.

Sarva Shikha Abhiyan (SSA): The Department of School Education, Govt. of Tripura has successfully implemented this flagship schemes along with mid-day meal programme. Table 9.1 shows the achievements of the Sarva Shikha Abhijan programme. It is observed that five new Junior Basic school have been constructed. Some schools are also upgraded from Junior Basic to Senior basic and Senior Basic to High school.

Table 9.6: Achievements of Flagship Programme under SSA Scheme

Sl.	Item	Achievements for 2015-16	Remarks
1	Opening New J.B. Schools	05	All schools are English medium
2	Up-gradation J.B. to S.B. (Under SSA, Rajya Mission, Tripura)	14	NIL
3	Up-gradation S.B. to High (Under State Plan)	09	NIL
4	Up-gradation S.B. to High (Under RMSA, Tripura)	14	NIL
5	Out of school going children (Elementary Stage)	739 nos. (As per Household survey 2015)	But after Vidyalaya Chalo Abhijan -2016, no. of drop out School Children is 151
6	Drop Out Rate: Class I -V	3.62 (2014-15) 1.28(2015-16)	NIL
7	Drop Out Rate: Class I -VIII	3.46(2014-15) 1.62(2015-16)	NIL

Source: <https://elementaryeducation.tripura.gov.in/achievements>

The School Education Department, Govt. of Tripura has constructed a total number of 32 dining halls and 6566 storage bins for storage of rice in different school premises at present under the Mid-Day meal programme. The general awareness posters about the Mid-Day-Meal programme have been displayed at the school premises. They have also taken necessary steps to provide Iron and Folic Acid tablets (IFA tablets) to all the children of all schools covered under Mid-Day-Meal Programme in collaboration with Health Department, Govt. of Tripura. For the goodness of clean and hygiene the department has introduced the “HAND WASH” programme in each school unit along with Mid-Day-Meal programme. The state has also constructed State Steering-cum-

Monitoring Committee for Mid-Day Meal Scheme in order to monitor the scheme. The departmental officers and inspectors are frequently doing inspection and monitorization of the programme.

Beti Bachao Beti Padhao Scheme: This scheme was launched in 2015 by the Government of India to promote gender equality and women empowerment, to prevent gender-biased, sex-selective elimination, to ensure the survival and protection of the girl child, to encourage education and participation of the girl child, to prevent child marriage and to protect girls from physical and mental harassment. The state govt. has focused on the South Tripura district, for its low sex ratio. It is a multi sectoral Awareness generation scheme, implemented by the South Tripura District with the objective to improve Sex Ratio on Birth (SRB), which has a positive impact starting from the financial year 2021-22 with SRB measurement as 1002 girls per 1000 boys in South Tripura district. Awareness generation & outreach activities have not been done during 2022- 23 due to non-availability of fund. An amount of Rs.1.8 crore has been released by the WCD, Govt. of India under BBBP during 2022-23.

National Rural Health Mission (NRHM): The state government has been implementing the National Rural Health Mission (NRHM) to achieve the vision 2018. The vision is to create a community-owned and managed health system with the government's support. The State Government had received Rs.313.20 crore under various Health Schemes out of which Rs.190.44 crore was received under National Rural Health Mission (NRHM) and Rs.84.51 crore was received as Covid-19 Emergency Response and health Systems preparedness package etc., during 2021-22. Govt. of India has also released Rs.11.71 crore for implementation of Ayushman Bharat Scheme in the State under the Health Department. The NRHM has received from the 15th Finance Commission Rs.1226.00 crore for Block Public Health units, Rs.1324.00 crore for supporting diagnostic infrastructures to PHCs, Rs.1878.00 crore for conversion of rural sub-health centre and PHCs to health and wellness centres (HWCs). For urban area NHM has received 15th Finance Commission grants of Rs.133.00 crore for supporting infrastructures to primary healthcare facilities and Rs.4376.00 crore for urban health and wellness centres (HWCs).

Supplementary Nutrition Programme (SNP): The Integrated Child Development Services (ICDS) Scheme has been the biggest intervention of the Government of India implemented through the State Governments to combat material and child under nutrition. The State Social Welfare & Social Education Department started implementation of the Supplementary Nutrition Programme

(SNP) from the annual plan of 2003-04. SNP is distributed in all the 9931 Anganwadi Centers for 300 days a year. Through the Supplementary Nutrition Programme (SNP) under ICDS, Social Welfare & Social Education Department has provided Nutritional support to 3,06,645 children (6 months - 6 years of age) and 43,406 expecting & nursing mothers in the year 2022-23.

Severe Acute Malnutrition (SAM): From September, 2020 onwards, arrangement has been made for ensuring additional nutrition like 6 eggs, 20 grams Jaggery and 200 ml Milk for 6 days in a week to the children suffering from Severe Acute Malnutrition (SAM) under POSHAN Abhiyaan. Till date 9188 children has been identified under SAM and provided additional nutrition to them.

Pradhan Mantri Matru Vandana Yojana (PMMVY): A Total of 10658 beneficiaries have been found under the scheme during the financial year 2022-23. A new software has been developed by the Ministry of Women & Child Development, Govt. of India in this regard. As per new guidelines under PMMVY-2, maternity benefit @ Rs.6000/- will be provided to all the eligible beneficiaries whose second child is a girl child in one installment after birth during 2023-24.

Scheme for Adolescent Girls (SAG): A total number of 25955 Adolescent Girls (AGs) have been provided nutrition (Rice, Dal, Egg etc.) under SAG scheme during 2022-23. The scheme has been revised with effect from 1st April, 2022 in the age group of 14-18 years. Under this scheme adolescent girls are identified with below normal Body Mass Index (BMI) and anemic adolescent girls belong to families performing poorly on the socio- economic caste census.

Apart from that Tripura has made significant progress in implementing various flagship schemes of the Government of India.

Integrated Power Development Scheme (IPDS): In order to improve the power supply in Tripura, Integrated Power Development Scheme (IPDS) has been successfully implemented in the state by the Tripura State Electricity Corporation Limited (TSECL) with projects worth Rs.30904 crore sanctioned as of November 25, 2021. Under this scheme, several initiatives such as setting up a Smart Customer Care Centre System, installing an online transformer monitoring system etc. have been taken. This scheme has improved the distribution and sub-transmission networks in urban areas, distribution of transformers and feeders, distribution of meters among the urban consumers, smart meter solutions, solar panel on the government buildings etc. Under this scheme, lots of achievements such as 273.90 km of 11 KV line, 303.72 km of LT line, 31 km of 33 KV line, 31 solar panels and 22500 pre-paid meters have been given the consumers.

Deendayal Upadhyaya Gram Jyoti Yojana (DDU- GJY): In order to electrify all villages of Tripura, this flagship programme has been taken in the state. All willing un-electrified households in Tripura have been electrified by April 28, 2018, before the stipulated timeline. Under this scheme 176 sub-stations have been constructed, 14228 distribution transformers have been achieved, 1240 feeder segregations have been done and 5599 km of 11 KV lines have been constructed by March, 2021.

Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya): Tripura has achieved 100 percent electrification of all willing un-electrified households, with 1,39,090 households electrified since the scheme's launch October, 2017 to March 31, 2019. After completion of target, this scheme is closed in Tripura in 2022 with a closure value of Rs.332.30 crore.

Revamped Distribution Sector Scheme (RDSS): In order to uplift the poor section of the society, improve the quality of life, development of rural and backward areas, provide financial security, education and training to the vulnerable section of the nation, provide financial assistance to women, small business and weaker section, this scheme is launched by Govt. of India. Tripura is one of the states to benefit from RDSS, aiming to reduce aggregate technical and commercial (AT&C) losses to 12-15 percent and average cost of supply-average revenue realized (ACS-ARR) gap to zero by 2024-25. A detailed project report was submitted by TSECL for the distribution of investment requirements to meet the envisaged targets of RDSS and seek funding to improve the operational efficiency and financial sustainability of the distributional sector. State has achieved immense progress in initiation of implementation of result-based reform linked RDSS Scheme to improve operational and financial viability of the Corporation including conversion of the entire billing system into smart metering with a total investment of Rs.803 crore.

North Eastern Region Power System Improvement Project (NERPSIP): Tripura is one of six states to benefit from NERPSIP, strengthening intra-state transmission and distribution systems. The project has improved the sub-transmission and intra-state transmission infrastructure, which has increased the availability of power to consumers. The revised cost of this project is Rs.1800.28 crore. Table 9.7 reveals the physical progress under this scheme. The project is expected to be fully completed soon.

Table 9.7: Physical Progress under NERPSIP Scheme (Progress of Work in Percent)

Sl.	Components	Scope	Progress of work
1	New 132 KV sub-station	9	80% done
2	Augmentation / Existing 132 KV sub-station	7	80% done
3	New 132 KV Transmission line	458 CKM	70% done
4	New 33 KV sub-station	34	57% done
5	Augmentation / Existing 33 KV sub-station	25	48% done
6	New 33 KV line	617 km	40% done
7	Reconductoring 33 KV line	326 km	0% done
8	Optical ground wire installation for communication	532.35 km	50% done

Source: https://www.tsecl.in/TSECL_NERPSIP.html

New Pension Scheme (NPS): Pension liability is one of the major liabilities of the state. This pension liability have increased from Rs.267.35 crore in 2006-07 to Rs.1605.01 crore in 2017-18, which is about a trajectory six times in the pension expenditure. In a notification dated on 13th July, 2018, Tripura Govt. has implemented this scheme for all appointments made to a regular pay scale post in State Government on or after 1st July, 2018. In order to implement the new scheme, it is proposed to have a Central Recordkeeping Agency (CRA) & several Pension Fund Managers (PFMs) for smooth implementation of the scheme. In an order the state Govt. has mentioned: Employees joining the service of the State Government on or after 1st July, 2018 shall not be governed by the existing Central Civil Services (Pension) Rules, 1972 (as adopted in the State of Tripura) and orders issued there under from time to time. Their pension and other retirement benefits will be governed by a new set of Pension Rules being formulated in line with the Contributory Pension Scheme of the Government of India (hereinafter NPS). They shall also not be entitled to General Provident Fund.

The NPS will work on a defined contribution basis and will have two tiers viz., Tier-I and Tier-II. Tier-I will be mandatory for the employees whereas Tier-II will be optional and at the discretion of the Government servants.

In Tier-I, the Government servant shall make a contribution of 10 percent of the Basic which will be deducted from the employees' salary every month by the Treasury Officer/ Drawing and Disbursing Officer concerned. Government will also make a matching contribution.

Pradhan Mantri Awas Yojana (PMAY-G): The Pradhan Mantri Awas Yojana (PMAY) is a scheme by the Government of India that aims to help low and moderate-income residents of the country access affordable housing. The scheme aims to provide additional

amenities like electricity, LPG, and road connectivity to beneficiaries. The scheme aims to ensure that houses have a toilet, access to drinking water, and Jan Dhan banking facilities. The scheme aims to identify and mainstream innovative construction technologies that are sustainable, eco-friendly, and disaster-resilient. Table 9.8 highlights the transition from IAY to PMAY-G as the primary rural housing scheme over the past decade from the year 2014-15 to 2024-25 in Tripura. Initially, IAY is the only scheme, but with the launch of PMAY-G, the focus shifted, and by 2024-25, only PMAY-G was active. The number of beneficiaries has decreased again for PMAY-G (131,912 persons in 2023-24 to 3,830 persons in 2024-25), and IAY completions reach zero, showing PMAY-G as an exclusive program for housing completion.

Table 9.8: Implementation of PMAY-G and IAY (in Numbers) during 2014-2015 to 2024-25

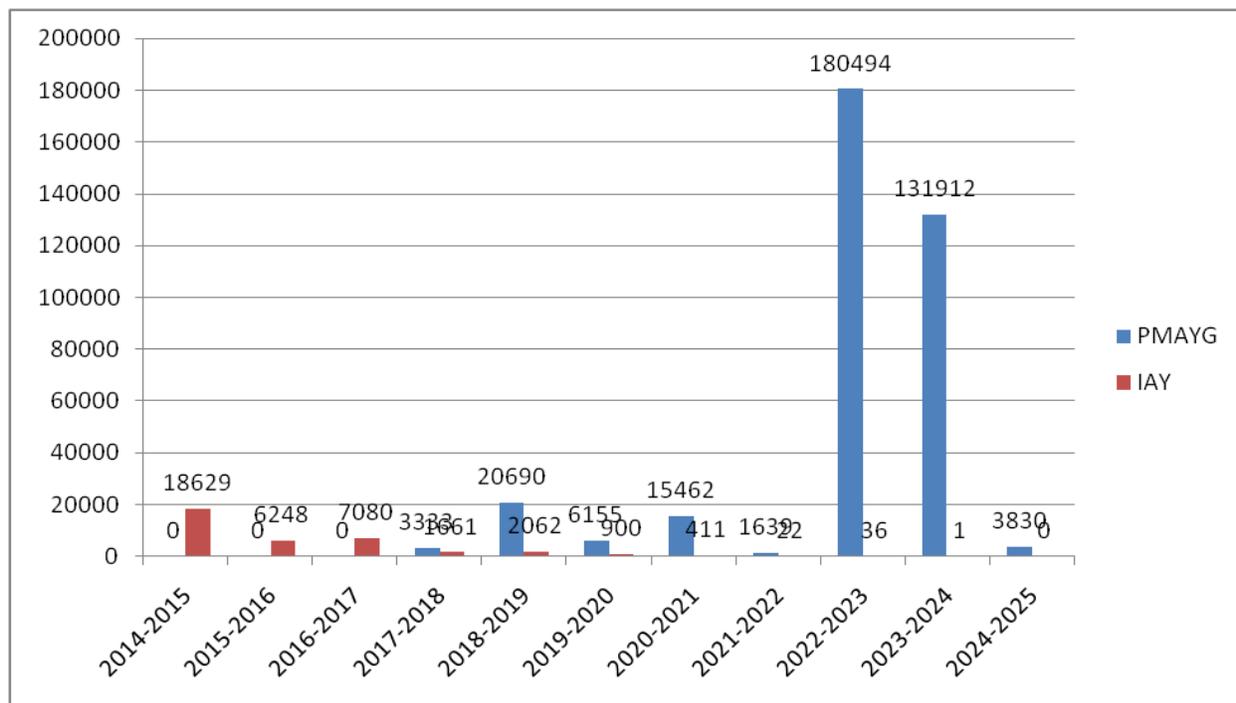
Year	PMAYG	IAY	(IAY + PMAY-G)
2014-2015	0	18629	18629
2015-2016	0	6248	6248
2016-2017	0	7080	7080
2017-2018	3333	1661	4994
2018-2019	20690	2062	22752
2019-2020	6155	900	7055
2020-2021	15462	411	15873
2021-2022	1639	22	1661
2022-2023	180494	36	180530
2023-2024	131912	1	131913
2024-2025	3830	0	3830

Source: Ministry of Rural Development, Government of India

In the year 2022-23, it shows an enormous increase, with 180,494 houses completed under PMAY-G and only 36 under IAY. This peak suggests substantial funding or focus on PMAY-G in that year. The Pradhan Mantri Awaas Yojana-Gramin (PMAY-G) scheme had not been implemented in the year 2014-15, so only houses under the IAY scheme were completed during this period. The numbers gradually decreased each year from 18,629 in 2014-15 to 7,080 in 2016-17.

Figure 9.2 shows houses completed during the year 2014-15 to 2024-25 in the state Tripura under PMAY-G and IAY. Since the inception of PMAY-G in 2017-18, the State has initiated to complete 3,333 houses, while IAY completions has continued to decrease to 1,661 houses. A total number of 4994 houses have been completed under this scheme during that year.

Figure 9.2: Houses completed under PMAY-G and IAY in a financial year from 2014-2015 to 2024-25



Source: Ministry of Rural Development, Government of India

Table 9.4 shows the financial statement for several fiscal years under the Pradhan Mantri Awaas Yojana-Gramin (PMAYG) program in Tripura, expressed in lakhs.

Table 9.9: Financial Statement under Pradhan Mantri Awaas Yojana-Gramin (PMAYG) in Tripura (in Lakhs)

Year	Central Release	Actual State Release	Total Miscellaneous	Interest Accrued	Expenditure (FTO with Credit Confirmation)		
					Programme Fund	Admin Fund	Total
2019-20	22952.36	1906.263	85.543	66.595	20957.92	92.525	21050.44
2020-21	3710.355	1906.336	0	263.935	9501.934	328.4229	9830.357
2021-22	136847.7	13607.14	2.903	463.398	110675.4	442.6812	111118
2022-23	126419.9	15644.84	35978.66	433.086	131432.6	1081.569	132514.2
2023-24	132062	12974.33	39.2184	866.55	165238.1	1220.429	166458.5
2024-25	9481	0	9.66	146.23	9993.044	595.3667	10588.41

Source: Ministry of Rural Development, Government of India

Significant annual variations are observed in Central Release, which peaks in 2021-2022 and stays high in the years that follow. While it is zero for 2024-2025, the actual state release is typically lower than the central release and stays constant in certain years. It is observed that the programme funds receive additional revenue from the annual variations under total miscellaneous and interest accrued. With expenses typically equalizing the total amount allotted, expenditure (FTO with Credit Confirmation) shows efficient use of money and a high spending rate. Significant amount of monies go directly to the program, as seen by the fact that the program fund consistently accounts for the majority of expenditures while the administrative fund is substantially smaller.

Table 9.10 shows the fund received and utilization status of NRLM and TRLM over the years. NRLM has received steady funding, with sizable contributions from both the federal and state governments. Reports on interest income demonstrate extra money received from interest on investments. In comparison to NRLM, RSETIs have comparatively less funding and cost. Funding for skill development has increased from Rs.87.23 lakhs in 2015-16 to Rs.481.10 lakhs in 2016-17. During 2016-17, the state has received Rs.3657.16 lakhs as Central assistance. Due to their reduced allocations of funds for SARAS and IPPE-II, the funds have been fully used.

Table 9.10: Status of Fund Released and Expenditure Incurred during 2013-14 to 2017-18 of TRLM under NRLM (Rs. in Crore)

Year	Categories	Opening Balance	Central Share	State Share	Other Receipts	Total Revenue	Expenditure	Closing Balance
2013-14	NRLM	61.19	1060.74	117.86	6.01	1245.8	413.65	832.15
	Interest	0	257	28.55	0	285.55	0.042	285.508
	RSETIs	0	66	0	0	66	22.76	43.24
	Total	61.19	1383.74	146.41	6.01	1597.35	436.45	1160.898
2014-15	NRLM	832.462	0	0	31.59	864.052	414.7	449.352
	Interest	285.508	0	0	12.15	297.65	0	297.65
	RSETIs	43.24	0	0	0	43.24	17.57	25.67
	Total	1161.21	0	0	43.74	1204.94	432.27	772.672
2015-16	NRLM	463.9	0	0	143.34	916.59	722.48	194.11
	Interest	297.65	0	0	11.7	0	0	0
	RSETIs	25.67	0	0	0	25.37	21.26	4.41
	SARAS	0	26.25	0	0	26.25	26.25	0
	Skill Development (DDU-GKY)	0	0	87.23	0	87.23	87.23	0

	Total	787.22	28.3	87.23	155.04	1057.79	859.27	198.52
2016-17	NRLM	413.06	1576.44	175.16	306.54	2471.2	1649.05	822.15
	RSETIs	4.41	84.33	0	0	88.74	28.65	60.09
	SARAS	0	26.25	0	0	26.25	22.51	3.74
	Skill Development (DDU-GKY)	0	3657.16	481.1	4.74	4143	62.59	4080.41
	IPPE-II	0.87	2.05	0	0	2.92	2.88	0.04
	Total	418.34	5346.23	656.26	311.28	6732.11	1765.68	4966.43
2017-18	NRLM	775.38	3700	411.11	32.61	4919.1	4075.84	843.26
	RSETIs	60.09	0	0	0	60.09	28.65	31.44
	SARAS	3.74	26.25	0	0	29.99	29.99	0
	Skill Development (DDU-GKY)	4405.62	0	13.55	127.43	4546.6	1900.78	2645.82
	IPPE-II	0.14	0	0	0	0.14	0	0.14
	Total	5244.97	3726.25	424.66	160.04	9555.92	6035.26	3520.66

Source: Directorate of Economics & Statistics, Government of Tripura

Swadesh Darshan-I Scheme:

Development of Infrastructure facilities have been undertaken under SwadeshDarshan- I in major tourist destinations like Sepahijala, Udaipur, Chhabimura, Neermahal, Ujjayanta Palace, Dumbur Lake, Jampui Hills, and Unakoti. So far, a total amount of Rs.89.41 crore has been released by the Ministry of Tourism, Government of India, under Swadesh Darshan - I and out of which expenditure for an amount Rs. 84.03 crore has been incurred.

Pilgrimage Rejuvenation & Spiritual Augmentation Drive (PRASAD) Scheme:

Under PRASAD Scheme developmental works of Mata Tripura Sundari Temple, Udaipur is going on. Total amount of Rs.37.80.00 crore has been sanctioned by the Ministry of Tourism, Government of India. So far, an amount of Rs.21.18 crore has been released by the Ministry of Tourism, Government of India, under PRASAD Scheme.

Jal Jeevan Mission (JJM):

This scheme has been launched in partnership with states, to enable every household in villages to have Functional Household Tap Connection (FHTC) by 2024. It is envisaged that with FHTC, each household will have potable water supply in adequate quantity of prescribed quality on regular and long term basis. However, keeping the objectives, the State Government has decided to provide Functional Household Tap Connection (FHTC) to all rural households in the State

within December, 2023. An amount of Rs.571.18 crore has been transferred by the Govt. of India during the year 2021-22. As on Jan 16, 2023, 4.29 lakh households have tap water connections i.e., 57.42 percent households have tap water supply in the state. Since the inception of JJM, Tripura has been able to provide tap water connections to over 4.05 lakh households (56.51 percent) compared to just 24,502 households (3.30 percent) earlier. 3,597 (79 percent) schools, 5,055 (56 percent) Anganwadis and 1,489 (97 percent) Gram Panchayats / Community Health Centres have tap water supply in Tripura. Presently, Tripura has 21 water testing laboratories. The fund received for Jal Jivan Mission, from the Govt. of India is Rs.594.18 crore during 2023-24, and expenditure spent during this period is Rs.558.82 crore.⁵

Atal Mission for Rejuvenation & Urban Transformation (AMRUT):

The Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0) scheme was launched on 01 October, 2021 for the period of 05 years i.e. from the financial year 2021-22 to the financial year 2025-26. AMRUT 2.0 is designed to provide universal coverage of water supply through functional taps to all households in all the statutory towns in the country and coverage of sewerage/septage management in 500 cities covered in the first phase of the AMRUT scheme. The state Govt. has decided to implement AMRUT 2.0 scheme by Tripura Jal board, utilizing the full amount of allocated funds within Agartala Municipal Corporation Area & 8 ULBs. Total outcome after implementation of AMRUT 2.0 Scheme in Agartala Municipal Corporation (AMC) Area and 8 ULBs are DTW- 70 Nos, Pipeline – 504.5 km. Modified IRP- 26 Nos, Pkg. Typ IRP-30 Nos. and water tap connection completion for 24149 household along with Rejuvenation & Beautification of six Water Bodies. Total Project Cost is Rs.182.273 crore under this mission. In addition, Tripura Jal Board has engaged 60 SHG members to collect water charges from the consumers within AMC areas through POS (Point of Sale) machine since 23rd June 2022 and they are working successfully.

Pradhan Mantri Ujjawala Yojana (PMUY):

In May 2016, Ministry of Petroleum and Natural Gas (MoPNG), introduced the 'Pradhan Mantri Ujjawala Yojana' (PMUY) with an objective to make clean cooking fuel available to the rural and deprived households to replace traditional cooking fuels which have detrimental impacts on the human health and the environment. Under this Central Govt. sponsored programme, so far total 2,83,721 deposit free LPG connections have been provided in the State and out of that 2,37,342

⁵Source: Tripura Annual Budget at a Glance, 2024-25.

connections have been given during 2018-23, and 12,688 connections have been provided in 2022-23.

Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY):

It was a noble initiative of the Govt. of India to provide food security for the people of the country during Covid-19 pandemic. Free of cost rice and pulses have been provided to the 6 lakh NFSA families @ 05 kg rice per head per month in addition to their regular NFSA (National Food Security Act) entitlement and 01 kg pulses per card per month. Commencing in April, 2020 this free food distribution programme continued until December, 2023. During the period total 3,35,165 MT rice, 4381 MT pulses have been distributed in the State under this Scheme, of which total 1,07,730 MT of rice was distributed from April, 2022 to December, 2022. Subsequently, in order to ensure sustained food security for the population, the Government of India has taken a new initiative under PMGKAY which focuses on distributing the regular NFSA entitlement of food grains free of cost for the period from January, 2023 to December, 2023. Accordingly, under this new programme, from January, 2023 to March, 2023 total 39,980 MT rice have been distributed free of cost amongst NFSA beneficiaries in the State.

9.2.4 Progress made for Disaster Resilient Infrastructure, Sustainable Development Goals, and Quality of Expenditure

The state has focused on strengthening physical infrastructure and enhancing the social, economic, and psychological resilience of its citizens through Disaster Resilient Infrastructure (DRI). The state's disaster management policy prioritizes total risk management and vulnerability reduction. To achieve this, Tripura aims to develop infrastructure that supports economic, social, and environmental development, aligning with the United Nations' Sustainable Development Goals (SDGs).

The Asian Development Bank (ADB) supports Tripura's infrastructural development through project readiness financing, focusing on industrial estates. This initiative enhances the state's readiness for infrastructure projects, ensuring effective expenditure.

Components of Disaster Resilient Infrastructure in Tripura

Transportation Networks: Developing resilient roads, bridges, and public transportation systems are the priorities of the state. The progress of transportation networks as well as the outcomes is given in the following.

- The seven new approved projects include: Churaibari-Agartala NH-08 (171 km) four-lane (Rs.3,233 crore); Agartala bypass western and eastern sections (35 km) (Rs.3,161 crore); Khowai-Teliamura-Amarpur-Harina NH-208 (Rs.2,421 crore), four lane of Udaipur-Srimantapur road (34 km) (Rs.480 crore); four ropeway projects Maharani-Chabimura, Udaipur Railway Station to Tripura Sundari Temple, Jampui Hills, Suramachara in Kamalpur (Rs.692 crore); three railway overhead bridges (Rs.35 crore); and construction of cement concrete roads in urban areas (Rs.200 crore).⁶
- Construction of Flyover on Drop Gate-Nagerjala-Battala-Fire Service and Melarmath Areas (Length 2500 M) at Agartala (project cost Rs.94.71 crore)
- Modernization and Upgradation of Indira Gandhi Memorial (IGM) Hospital at Agartala (project cost Rs.38.08 crore) is now ongoing.
- The construction of road from Udaipur (NH44) to Melaghar (TR-02) under NESRIP scheme (project cost Rs.139.84 crore) is ongoing.
- Improvement of Pecharthal (NH-44) Kanchanpur Road (Length: 26:50) Phase-II from Machmara - Kanchanpur (Length: 18 Km in Unakoti District in Tripura) under NLCPR state scheme is ongoing with the project cost Rs.56.75 crore.
- Improvement of Melagarh-- Sonamura Road (Length: 8.454 Km) Sipahijala District in Tripura under NLCPR state scheme is ongoing with the project cost Rs.30.50 crore.
- Construction of Tripura Institute of Technology (Phase-II), West Tripura under NLCPR state scheme is ongoing with the project cost Rs.74.39 crore.
- Construction and establishment of Science City in Tripura under NLCPR state scheme is completed with the project cost Rs.27.45 crore. Presently, it is operational and the state can enhance the non-tax revenue for better fiscal health.

Rural Development: Enhancing rural infrastructure, including water supply, sanitation, and energy are ongoing in the state. Impactful socio-economic projects are given priority, costs are decreased, livelihoods are protected, and climate adaptation is aided by resilient infrastructure. Through creative funding, collaborations, and sustainability initiatives, quality expenditure guarantees effective resource use, community involvement, long-lasting infrastructure, and long-term benefits.

⁶ Source: North-east Today, dated November 11, 2022, <https://www.northeasttoday.in/2022/11/11/>

Agriculture Development: Climate-resilient agricultural practices are implemented in the state. Promoting agriculture in Tripura with climate-resilient strategies includes drought-tolerant crops, water-saving irrigation techniques like System of Rice Intensification (SRI), agroforestry, organic fertilizers, climate-adapted livestock, crop rotation, and farmer education on adaptive practices.

Crop Diversification: Farmers can diversify their crops to build resilience. Crop diversification in Tripura is essential to address climate challenges by incorporating resilient crops, short-duration varieties, drought-resistant pulses, and horticulture, while reducing reliance on "jhum" cultivation, mitigating deforestation, and soil degradation. Climate-resilient paddy, pulses, oilseeds, and fodder crops enhance food security, income, and productivity, while organic farming improves soil health and resilience. Ensuring market linkages, farmer training on climate-smart practices, and supporting research for resilient crops further strengthen agricultural adaptation and livelihoods.

Water Management: Farmers can use micro-irrigation and rainwater harvesting systems to conserve resources. Effective water management in Tripura is essential for addressing water scarcity and climate change impacts. Key practices include rainwater harvesting, constructing ponds, tanks, and check dams, and employing traditional methods like gully plugging to enhance soil infiltration. Precision irrigation minimizes water loss but requires careful management, while drought-tolerant crops and short-cycle varieties optimize water use. Organic mulching reduces evaporation, contour planting prevents erosion, and improved soil health enhances water retention. These strategies build climate resilience, ensuring sustainable agriculture amid rising droughts and unpredictable weather.

Soil Conservation: Farmers can use organic fertilizers, rotate crops, and minimize tillage to maintain soil fertility and structure. Tripura's highly erosive soil and intense rainfall necessitate urgent soil conservation measures alongside sustainable forest management to prevent forest degradation and sediment disasters. Soil and moisture conservation in targeted forest catchments will include activities like check dams, brushwood check-dams, bundling, contour trenching, and filter strips. Soil moisture conservation and afforestation reduce sediment discharge, sediment, and downstream check dams to assess ecological impacts. Conservation measures like gully plugging, contour binding, mulching, and riverbank protection minimize soil erosion and extend the lifespan of water harvesting structures.

Climate-smart Seeds: Farmers can use climate-smart seeds. The ICAR Tripura Centre showcased climate-resilient rice varieties such as ICAR NEH NICRA Aerobic Dhan-1 and 2, NICRA Boro Rice, and NICRA Hill Rice. These varieties address the challenges posed by climate change and aim to ensure sustainable productivity for farmers. In this regard ICAR, Tripura has developed 17 high-yielding paddy varieties, including Gomati, Hakuchuk-2, Tripura Chikan Dhan, Khowai, and Naveen, which contribute to over 70 percent of the state's total paddy production.

Climate-resilient Breeds: The climate resilient breeds are being made by ICAR and KVK scientists in Tripura. The crossbred pigs (Duroc X Hampshire, Yorkshire cross, Hampshire X Ghungroo) thrive in South Tripura's low-input system, and weights of 45-66.2 kg at six months, under 27 FLD and 20 TSP units. Improved dual-purpose poultry varieties, Gramapriya (170 eggs/year, 3-3.5 kg) and BND (140 eggs/year, 2.9-3.4 kg), have been introduced for backyard rearing in South Tripura under 150 FLD units. Layer duck breeds Khaki Campbell (260 eggs/year) and Chara Chemballi (178 eggs/year) are reared under 20 FLD and 30 TSP units. The White Pekin broiler duck (2.68 kg at 20 weeks, 130 eggs/year) is reared under 10 OFT and 15 FLD units.

Integrated Farming System: The integrated farming method has been developed with the assistance of ICAR Tripura scientists and is being implemented at Bagma under the supervision of the Bagma Agri Producer Company Limited (BAPCL) in Gomati District.

Bio-pesticides: Farmers can use bio-pesticides instead of synthetic pesticides to reduce environmental risks. In order to encourage farmers to practice organic farming, the State Liquid Bio-fertilizer Production Center was established in 2019-20 to produce liquid bio-fertilizer in liquid form with a one-year shelf life of various strains, including Azotobactor (N₂ Fixer), Bio-Phos (PSB), Bio-liquid NPK, and Bio-Potash (KMB).

Cold Storage: Farmers can store excess produce in cold storage to sell during off-season. Cold storage facilities preserve perishable goods by inhibiting microbial growth and preventing spoilage. The scheme ensures better market prices by storing potatoes and other products in 10 cold storages across Tripura with a capacity of 18,000 MT, including 7 multi-chambered facilities for fruits and vegetables. To prevent distress sales and ensure year-round remunerative prices for farmers, the government promotes cold storage usage. For 2024-25, Rs.251 lakh has been allocated for maintenance and operations to minimize storage losses.

Specialty Rice Varieties: Farmers can cultivate specialty rice varieties like Harinarayana, Kalikhasa, and Binni. The ICAR Tripura Centre showcased climate-resilient rice cultivars

(NICRA Aerobic Dhan-1 & 2, Boro, and Hill Rice) and highlighted its contribution of 17 high-yielding paddy varieties, including Gomati and Khowai, which account for over 70 percent of Tripura's paddy production.

Mushroom production: In Tripura farmers are doing mushroom production practices as an alternative source of income during harsh climate. Due to its low water requirements, ability to be grown in confined spaces, use of agricultural waste as a substrate, low carbon emissions, and ability to flourish in harsh weather, mushroom production is regarded as a climate-resilient agricultural practice. As such, it is a valuable option for adjusting to the effects of climate change, such as drought and extreme temperatures. The state of Tripura is making every effort to control mushroom seed, yet the state still lacks enough of it.

Water Saving Practices: In Tripura, the System of Rice Intensification (SRI) improves paddy yields using less water, seeds, and fertilizer, making it an efficient and popular cultivation method. Tripura focuses on boosting paddy production (49 percent of GCA) using Integrated Crop Management for HYV and SRI for hybrid paddy cultivation. Paddy, covering 58 percent (1.48 lakh ha) of Tripura's net cropped area, is a focus for production enhancement using System of Rice Intensification (SRI) and Integrated Crop Management (ICM).

Industrialization: MSMEs can reduce their environmental impact through recycling, energy-efficient practices, and low-carbon strategies, with government incentives boosting competitiveness and attracting eco-conscious consumers. Tripura hosts a mix of industries, including large-scale units like rubber thread and food processing, and medium-scale units like bamboo floor tiles, tea factories, and rice mills. Small and micro enterprises focus on resource-based industries (tea, rubber, fruit, milk processing), service sectors (hotels, diagnostics, cold storage), and government-supply units (PVC pipes, steel bars). Other industries include bakeries, handlooms, distilleries, LPG bottling, and PU foam production.

Progress Made for Sustainable Development Goals

Table 9.11 shows the indicator-wise comparative progress of the state. It is observed that the state has done remarkable progress under the PMGSY scheme. The performance in terms of mobile Tele density and internet user. But, the percentage share of gross value added (GVA) in manufacturing sector is very poor and as a result of manufacturing employment proportion of total employment is poor.

Table 9.11: Indicator-wise Comparative Progress of SDG-9

Indicators	Tripura	All India	Target
Percentage of targeted habitations connected by all-weather roads under Pradhan Mantri Sadak Yojana (PMGSY)	95.87	97.65	100
Score as per Logistics Ease Across Different States (LEADS) report	2.95	3.18	5
Percentage Share of GVA in manufacturing to total GVA (current prices)	3.31	16.1	25
Manufacturing employment as a proportion of total employment	6.38	12.07	20
Innovations as per India Innovation Index	12.84	35.59	100
Number of mobile connections per 100 persons (Mobile Tele Density)	75.78	84.39	100
Number of internet subscribers per 100 population	52.34	55.41	100
SDG-9: Index Score	35	55	100

Source: Economic Review of Tripura, 2022-23

Under SDG-13, disaster preparedness scores as per Disaster Resilience Index for Tripura 22.5 against 19.20 all India score. The performance is satisfactory though the target score of that is 50.

Quality of Expenditure in Tripura:

Effective expenditure is crucial for achieving sustainable development goals. Tripura's focus areas include:

Infrastructure Development: The potential credit support for storage godowns/market yards in 2023-24 is Rs.22.53 crore, while the Government of India's Agriculture Infrastructure Fund (AIF) initiative for farm gate infrastructure development is yet to gain momentum in the state.

To optimally utilize gas in Tripura, ONGC developed a 726.6 MW Combined Cycle Gas Turbine (CCGT) thermal power project near its gas field, supplying power to deficit areas in North Eastern India. The ONGC-Tripura Power Company Ltd (OTPC) was established in September 2008 with equal participation from ONGC, IL&FS, and the Government of Tripura for implementing the project at Palatana, Gomati District.

To augment PDS storage capacity, the Food Department has undertaken infrastructure projects funded under the "Central Sector Scheme of Storage & Godown" and "NLCPR Scheme of DoNER." In 2022-23, five newly constructed food godowns with a combined capacity of 3500 MT became operational across the state, along with the opening of 112 new shops. These developments aim to enhance storage and distribution infrastructure for better service delivery.

The Deen Dayal Upadhaya Gram Jyoti Yojana, sanctioned by the Ministry of Power, aimed at electrifying villages and providing free service connections to BPL households, along with constructing necessary electrical infrastructure such as 11KV lines, LT lines, and substations. The scheme also focused on strengthening existing infrastructure and upgrading energy metering systems. Successfully closed on 28.02.2021, the scheme had a closure value of Rs.64.44 crore. A multi-sector Special Economic Zone (SEZ) is being set up at Sabroom which would further boost the export and import by providing conducive infrastructure to the investors.

Due to its geographical isolation and limited infrastructure, Tripura requires modern communication and transport systems to stay connected with the rest of the country, especially trade hubs like Kolkata and Guwahati. NH-8 has been the state's lifeline, and the introduction of long-distance trains, along with rail track doubling and connections to Bangladesh, holds expectations for improving the state's economic prospects. Road connectivity remains the most dependable means of communication so far.

Under SDG-9, Tripura aims to expand infrastructure in transport, energy, and banking, increase highway density to 238 sq.km per 1000 sq. km., and boost manufacturing employment from 1.79 percent to 4.5 percent by 2030. Prioritizing infrastructure development is crucial for Tripura's economic growth, with policies aimed at delivering quality services to households and farms for sustainable development. Tripura's infrastructure and communication challenges hinder private investment and employment, necessitating efforts to generate productive and inclusive growth opportunities.

Human Development: Investing in education, health, and social welfare

The State Government focuses on fiscal correction and social infrastructure, addressing unmet needs in contraception, healthcare, and personnel, while providing integrated services for reproductive and child health care. Sustained economic growth and increased employment in secondary and tertiary sectors will be ensured by expanding infrastructure, skilling, credit facilities, and entrepreneurship across all districts.

To enhance academic infrastructure, technical colleges received modern teaching aids, new job-oriented courses are being introduced, and RUSA is actively improving college infrastructure and education quality in Tripura. Infrastructure development and access to digital learning resources, including journals and pre-recorded lectures, are prioritized, with Rs.277.58 lakh allocated for

livelihood facilities for the Karbong community. In 2022-23, Tripura's State Government has provided Rs.6.80 crore for agriculture, horticulture, and marketing infrastructure development.

The State Government has signed MoUs with NIT, TIT, Techno College, and ICFAI, providing Rs.10 lakh each for incubation infrastructure and Rs.1 lakh per student project (up to 5 projects per institute).

Economic Empowerment: Promoting entrepreneurship and job creation

TIDC has developed 535.73 acres of infrastructure at Bodhjunnagar Industrial Area, including a Growth Centre (320.80 acres), EPIP (126.12 acres), Rubber Park (58.81 acres), and Food Park (30.00 acres), with an investment of Rs.101.97 crores. TIDC has developed 226.16 acres of infrastructure at R.K. Nagar Industrial Area, including Bamboo Park (135.00 acres), IOCL (40.00 acres), and R.K. Nagar Industrial Park (51.16 acres), with an investment of Rs.24.28 crore. In 2022-23, TIDC earned Rs.574.21 lakhs from lease premiums, rentals, and agency charges, utilizing the funds for infrastructure maintenance and development after covering administrative expenses.

The Asian Development Bank (ADB) approved Project Readiness Financing Loan 6046-IND for infrastructure development of industrial estates in Tripura. To enhance skills in bamboo bottle making, BCDI and TRPC received financial grants under the National Bamboo Mission for training beneficiaries and developing infrastructure for bamboo bottle manufacturing. The State Government has focused on value addition in the food processing sector by developing infrastructure like Food Parks, Cold Storage, and Food Testing Labs, utilizing locally available resources such as pineapple, jackfruit, and cashew nut.

9.2.5 Progress Made in Increasing Capital Expenditure, Eliminating of Losses of Power Sector and Improving the Quality of such Expenditure in Generating Future Income Streams

Tripura has made significant progress in increasing capital expenditure, eliminating losses in the power sector, and improving the quality of such expenditure to generate future income streams.

Capital Expenditure Initiatives

The state has focused on strengthening power distribution and generation efficiency through strategic investments. This includes replacing outdated infrastructure to improve generation efficiency. Additionally, Tripura has divided its geographical area into 15 charges for efficient tax collection, including GST, which contributes to its capital expenditure.

Power Sector Loss Reduction

To eliminate losses in the power sector, Tripura has implemented various measures, such as:

Improving Generation Efficiency: Replacing old power generation units with new ones to reduce energy losses.

There are two primary sources of power generation in the state viz. thermal and hydro-electric. The state's enormous natural gas reserves increase its capacity to generate thermal electricity. It is observed that TSECL's 115MW total capacity is made up of three producing stations: the Gomati Hydroelectric Project, the Baramura Gas Thermal Power Station, and the Rokhia Gas Thermal Power Station. Natural gas is abundant in the state, increasing the possibility of producing thermal power. Thermal power makes up 97.56 percent of the two major power-generating sources, with hydel electricity (specifically, the Gomati Power Project) providing the remaining 2.44 percent. Out of 115MW installed capacity, 5 MW standby of Gomati Hydro Electric Project in the state, which again comprises of Baramura-42MW, Rokhia-63MW, and Gomati Hydel project-10 MW, the overall generation is 85 MW round the clock; thus, the Plant Load Factor (PLF) works up to 74 percent for installing adequate capacity in the State based on gas availability.

Table 9.12: Demand and Supply of Power in Tripura during 2022-23

Sl.	Particulars	Unit
1	System Demand	332.70 MW
2	Availability	460-500 MW
	2.1 From Own Sources	80-100 MW
	2.2 From Central Sector	380-400 MW
3	Shortfall	Nil
4	Power Generation Station	3
	4.1 Hydel	1
	4.2 Gas	2
5	Installed Capacity	115 MW
	5.1 Hydel	10 MW
	5.2 Gas	105 MW
6	Own Electricity Generation	558.24 MU
	6.1 Hydel	13.76 MU
	6.2 Gas	550.07 MU
	6.3 Auxiliaries	5.60 MU
7	Purchased from Central Sector	2642.53 MU
8	Total Available Power (6+7)	3200.77 MU

Source: Economic Review of Tripura, 2022-23

Table 9.12 shows the demand and supply of power in Tripura for the fiscal year 2022-2023. In 2022-2023, the State's peak demand was 332.70 MW. After receiving an increased share from OTPC, Palatana, NEEPCO, and Monarchak power, the state is able to satisfy the whole peak demand, and Tripura is currently a power surplus state.⁷ Out of the total available power 460-500 MW, 80-100 MW power comes from its own generation and rest 380-400 MW comes from the central sector to meet the demand of the state. At present, there is no shortage of power in the state. In order to meet demand, Tripura bought 2642.53 MU of electricity from central agencies in 2022–2023. Tripura had more power available than needed in 2022-2023 (3200.77 MU).

Quality Expenditure in Generating Future Income Streams

The state intends to guarantee universal school enrollment and retention, especially in upper primary and senior schools, with at least 6 percent of its GSDP allocated to education and increased investment in health-care infrastructure through public-private partnerships in order to improve attainment in education, health, and nutrition.

In 2022-23, the Government of Tripura's total expenditure is Rs.25,169.11 crore, comprising Rs.20,786.78 crore in revenue expenditure, Rs.4,382.33 crore in capital expenditure, Rs.976.68 crore in public debt, and Rs.52.00 crore for loan payments, reflecting progress in fiscal correction and consolidation as per the Finance Commission and the Tripura Fiscal Responsibility and Budget Management Act, 2005.

In 2022-23, the revenue receipt has been generated of Rs.18,309.01 crore by the state, while revenue expenditure of Rs.17,738.71 crore has been spent. In 2022-23 capital receipt of Rs.929.01 crore has been collected by the state, while capital expenditure of Rs.2024.97 crore has been spent. In 2023-24 (BE), the Government of Tripura's revenue receipt is Rs.22307.57 crore, while revenue expenditure is Rs.22295.77 crore. In 2023-24 (BE), the Government of Tripura's capital receipt is Rs.3335.60 crore, while capital expenditure is Rs.4438.23 crore. In 2022-23, the total expenditure is Rs.20,864.99 crore, including Rs.17,738.71 crore in revenue expenditure, Rs.2,024.97 crore in capital expenditure, Rs.991.66 crore in public debt, and Rs.109.65 crore for loan payments and advances.

Development expenditure is 57.38 percent of total expenditure in 2022-23 (Provisional) and is projected to be 62.92 percent in 2023-24 (BE). Revenue expenditure on salaries and wages is

⁷Source: Economic Review, 2022-23

Rs.5720.56 crore in 2022-23 (Provisional) and is projected to be Rs.7852.23 crore in 2023-24 (BE).

The Chief Minister's COVID-19 Special Relief Scheme supplied free dry ration packets, costing Rs.1000 each, to 7.13 lakh NFSA and deserving APL families, incurring a total expenditure of Rs.71.30 crore. In 2022-23, an amount of Rs.60.049 crore was received, of which Rs.55.96 crore was transferred to Rural Local Bodies for implementing development activities, including salary/honorarium payments, TA/DA, and office expenditure.

In 2022-23, Rs.19.58 lakh has been received and spent on providing assistance to beneficiaries for purchasing planting materials, plant protection components, organizing awareness programs, renovating office buildings, offering stipends for training through 16 Mulberry Rearing Societies, and developing sericulture in TTAADC areas.

Under the Swadesh Darshan-I scheme, infrastructure development has been undertaken at major tourist destinations like Sepahijala, Udaipur, Chhabimura, Neermahal, Ujjayanta Palace, Dumbur Lake, Jampui Hills, and Unakoti, with Rs.8,941.33 lakh has been released by the Ministry of Tourism, Government of India, and Rs. 8,403.29 lakh spent so far.

Administrative approval and expenditure of the first installment of Rs.126 crore out of Rs.252 crore have been sanctioned under the scheme for Special Assistance to States for capital expenditure, for the renovation of 100 Vidyajyoti Schools and the development of sports infrastructure.

By 2030, the public expenditure on education would be increased from 6.14 percent to 10.5 percent of GSDP, aiming to achieve 100 percent Net Enrolment Ratio for both primary and upper primary levels through improved curriculum, teaching, and qualified teacher recruitment.

Tripura aims to improve the quality of expenditure by:

Promoting Sustainable Development: Investing in renewable energy sources to reduce dependence on fossil fuels

Encouraging Private Investment: Creating a conducive business environment to attract private investments in the power sector

Developing Infrastructure: The state's economic review reports highlights its focus on social, agricultural, industrial, and economic development, indicating a comprehensive approach to generating future income streams.

Administrative approval and expenditure sanction have been issued for the construction of 9 numbers of 100-seated hostels for Vidyajyoti schools, sanctioned by DoNER, Government of India. In the academic year 2022-23, 44,673 bicycles have been distributed to girl students in class IX from the 2020-21 and 2021-22 batches, with an expenditure of Rs.1710.00 lakh.

In 2022-23, the total State Plan expenditure for 37 SCSP-related departments was Rs.10,738.04 crore, with SCSP expenditure amounting to Rs.1,560.47 crore (14.53 percent of the State Plan expenditure), while the SCSP outlay was Rs.2,333.80 crore (11.35 percent of the total State Plan outlay of Rs.20,563.48 crore), and the flow of funds to SCSP was Rs.2,134.28 crore (12.45 percent of the total plan outlay of Rs.17,138.41 crore).

In 2022-23, the TTAADC received administrative approval for Rs.3831.45 lakh for creating assets through plantation, road formation, and water bodies, with Rs.1889.52 lakh have been spent on the programmes implemented by Zonal Development Officers and other Line Departments. In 2022-23, the TTAADC provided financial assistance for the medical treatment of 1,050 tribal families in the area, spending Rs.75.12 lakh on medicines and treatment costs, both within and outside the state.

The State Government is actively considering eco-tourism programs to attract tourists to scenic, ecologically important locations, with tourism infrastructure being developed under Tripura Nature Trails and Resorts Ltd. (TNTR).

9.2.6 Progress Made in Increasing Tax/ Non-Tax Revenues, Promoting Savings by Adoption of Direct Benefit Transfers and Public Finance Management System, Promoting Digital Economy and Removing Layers Between the Government and Beneficiaries

Progress Made in Increasing Revenue:

- As per the Economic Review of Tripura 2022-23, the state has earned the tax revenue from sales, trade, and other sources are Rs.463.57 crore in 2022-2023 (Provisional) and Rs.519.20 crore in 2023-2024 (BE). Vehicle taxes are Rs.131.66 crore. in 2023-2024 (BE) and Rs.117.55 crore in 2022–2023 (Provisional). In 2022-2023 (provisional), the total state non-tax revenue was Rs.8585.10 crore; in 2023-2024 (BE), it was Rs.11715.57 crore. The State's own non-tax revenue is Rs.450.00 crore in 2023-2024 (BE) and Rs.402.35 crore in 2022-2023 (provisional).
- The total tax revenue for 2022–2023 (provisional) and 2023–2024 (BE) is Rs.9723.91 crore and Rs.10592.00 crore, respectively. In 2022-2023 (Provisional), the State Own Tax revenue as a percentage of total receipts is 15.59 percent; in 2023-2024 (BE), it is 13.10 percent. In

2022-2023 (Provisional), the revenue received from the Central Taxes share has been Rs.6724.23 crore, and in 2023-2024 (BE), it has been Rs.7232.00 crore.

- In 2022-2023 (provisional), the total State Goods and Service Tax (SGST) is Rs.1459.01 crore; in 2023-2024 (BE), it is Rs.1634.09 crore. In 2022-2023 (provisional), the State Excise has received Rs.368.11 crore, and in 2023-2024 (BE), it has received Rs.412.28 crore.
- The collection of audit and registration fees from cooperative societies raised Tripura's non-tax revenue collection to Rs.13,59,859.00 as a result of the modernization of the tax collection system and effective monitoring efforts by the personnel in the relevant department.
- The evidence of effective work done by the officials have been provided by income generation of the Agartala Municipal Corporation, 13 Municipal Councils, and 6 Nagar Panchayats during the fiscal year 2022–2023, further depicting positive revenue collection. A total of Rs.1915.12 lakh has been collected in 2022-2023 from property taxes of Rs.1307.68 lakh, water taxes of Rs.178.17 lakh, trade licenses of Rs.429.27 lakh, moreover a sum of Rs.3202.86 has also been collected as other revenue.
- There were 52110 registered cars overall from April 1, 2022, to March 31, 2023. In 2022–2023, revenue collection amounts to Rs.115.63 crore. Out of the total of Rs.49.65 crore, Rs.48.85 crore comes from non-tax collection, and Rs. 44.36 lakh comes from enforcement.
- Geographical Identification System (GIS) based property tax project has been completed and is on the verge of Go-Live. Online property taxation system has been started in all the 20 Urban Local Bodies.

Progress Made for Direct Benefit Transfer:

- The digitization of the banking system and the direct benefit system in Tripura, as directed by the administrative authorities, is accomplished through the opening of bank accounts under the "Pradhan Mantri Jan-Dhan Yojana" and the MGNREGA.
- The Centers for Financial Literacy (CFLs) are being implemented by Bagma Agri Producer Company Limited (BAPCL) as part of the RBI's initiatives, which were funded by NABARD, to raise public awareness of financial literacy and all the digital resources available to help people understand financial matters.

Progress Made for Digitalization of Economy:

- As part of its digitization initiative, all 66 branches, along with the Head Office of the Bank, have been integrated under the Core Banking System (CBS). The Bank's management has undertaken several measures to enhance loan recovery and address overdue interest from defaulting members. These efforts are expected to significantly reduce the Bank's Non-Performing Assets (NPA) in the near future.
- To extend services to remote areas, mobile CSC vans have been introduced. These fully functional vans operate within designated service areas, providing doorstep delivery of services. Equipped as fully operational Common Service Centers (CSCs), they deliver Government-to-Citizen (G2C) services in remote regions as part of the Digital India initiative.

9.2.7 Progress Made in Promoting Ease of Doing Business by Effecting Related Policy and Regulatory Changes and Promoting Labour Intensive Growth

Tripura has made significant progress in promoting ease of doing business by implementing related policy and regulatory changes. As per a report of Economic Review with the initiative of Government of Tripura, Tripura Legislative Assembly (TLA) has passed an Act - Tripura Industries (Facilitation) Act 2018 for creating single window clearance to set up new businesses in Tripura. The state government has launched the "Startup Tripura" initiative, aiming to build a strong ecosystem for nurturing innovation and startups. This initiative provides various supports, including:

- ***Physical Infrastructure Support:*** Tripura has established the SWAAGAT portal involving 11 Departments and integrating 60 plus services to facilitate online registration and provide necessary assistance to startup industries. The state government has also set up a startup cell to provide hand-holding support and established a startup portal with components like investor organizations, trade organizations, regulatory environment, policies, programs, events, and service providers. The state has launched device testing labs and cloud space in the State Data Center (SDC) at subsidized rates.
- ***Simplification of Licensing and Inspection:*** The state has implemented a Central Inspection System to synchronize multi department inspections under Labor, Factory, Pollution Control and Legal Metrology Acts and Rules, thereby improving transparency and simplification of compliance (Labour- 7 Acts, Factories & Boilers - 2 Acts, Pollution Control Board – 2 Acts, Legal Metrology - 1 Act). The state has also set up an Industrial Facilitation Centre to facilitate

single window clearance in the State. NOC/Licenses/Clearances are being issued by concerned Departments without any physical touch point provided through a single window system.

- ***Incubation Rental Charges:*** Free rental for the first three years, with an option to extend for another year on payment basis.
- ***Incentives for Startups:*** Reimbursement of State Goods & Service Tax (SGST), industrial promotions subsidy, patent filing cost reimbursement, and marketing development support
- ***Recruitment Assistance:*** One-time recruitment assistance of Rs.10,000 per employee for the first year
- ***Performance Linked Support:*** Grant of 5% on turnover, within the limit of Rs.10 lakhs for 3 years from the date of incubation

In terms of regulatory changes, Tripura has implemented measures to reduce the time to set up a business to 12 days or lesser and established favorable labor and intra-state goods policies. These initiatives demonstrate Tripura's commitment to promoting ease of doing business and labor-intensive growth.

9.2.8 Basic Services, Including Quality Human Resources and Implementation of Performance Grant System in Improving Delivery of Services in Local Bodies

Under rural bodies, basic services incorporate rural houses, rural roads, health services, education, human resources etc.

Transport Infrastructure: Rural roads are a lifeline for the communities especially for providing communications to markets, educational institutions, health centers and other public institutions apart from contributing to socio-economic development of rural people. In rural areas of Tripura, 6980 kms rural roads have been constructed. As per Economic Review 2022-23, the rural road constructed in Tripura is 11943 km. A total of 318 RCC bridges has been constructed.

Telecommunication Services: Telecommunications is another important services developed in Tripura. As per Economic Review 2022-23, there are 74 telephone exchange, 6777 landline, 1683 broadband, 10778 FTTH (Fibre to the home), 465942 mobile connections and 838 cellular tower.

Banking Service: Banking is one of the most important services to enhance the quality of the human resources. The following Table 9.13 shows the updates of Pradhan Mantri Flagship Programme up to 2022-23. It is found that there is satisfactory progress under Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jan dhan Yojana and Pradhan Mantri Mudra Yojana though the progress for stand up is not up to the mark.

Table 9.13: Performance of Pradhan Mantri Flagship Programme till 2022-23

Sl.	Scheme-wise details	Progress
1	Pradhan Mantri Jan dhan Yojana (PMMY) (No. of Accounts)	951457
2	Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) (No. of Accounts)	364214
3	Atal Pension Yojana (No. of persons covered)	172807
4	Pradhan Mantri Suraksha Bima Yojana (PMSBY) (No. of Accounts)	1022930
5	Pradhan Mantri Mudra Yojana (PMMMY) (No. of loan given)	355960
6	Stand Up India (No. of loan)	91

Source: Economic Review of Tripura, 2022-23

Health Services: Health Services in rural areas are predominantly catered by Government Health Centres under the Control of Health & Family welfare Department. PRIs have been associated with various Committees since constituted to monitor the access and quality of health services delivery. Different schemes are implemented under the umbrella of National Health Mission (NHM) which aims at providing accessible, affordable and quality health care to people living in rural / urban areas.

Table 9.14 shows the district-wise health infrastructure in the rural and urban bodies in Tripura. It is observed that there are 6 state hospitals, 6 district hospitals and 15 Sub-Division hospitals are available at present in the state. There are total 21 rural hospitals and CHCs, 121 PHCs and 999 sub-centres in the state. The overall health infrastructure is not satisfactory in the state.

Table 9.14: District-wise Health Infrastructure in Rural and Urban Bodies of Tripura

Sl.	Name of Institutions	West	Sepahijala	Khowai	South	Gomati	Dhalai	Unakoti	North	Total
i	State Hospital	6	0	0	0	0	0	0	0	6
ii	District Hospital	0	0	1	1	1	1	1	1	6
iii	Sub-Divisional Hospital	0	2	1	2	3	3	2	2	15
iv	Rural Hospital & CHCs	3	4	1	6	3	2	0	2	21
v	PHCs	20	15	10	20	12	16	12	16	121
vi	Sub Centre /Dispensary(Allopathic)	171	143	104	145	146	121	70	99	999
vii	Sub Centre /Dispensary (Homeopathy)	22	13	5	11	10	4	3	2	70
viii	Sub Centre /Dispensary (Ayurvedic)	14	5	5	3	4	2	0	3	36
ix	Blood bank	2	1	2	2	1	2	1	1	12
x	Blood Storages	1	1	-	1	1	2	-	1	7

Source: Health & Family Welfare Dept, Govt. of Tripura

Educational Services: The School Education Department has taken a number of initiatives recognizing the role of PRIs in the management of Primary Schools and Senior Basic Schools. The ward members have been inducted as members in the School Management Committee. They look into the matter of development of educational institutions. The total number of schools in Tripura stood at 4,912 in 2022-23 and enrolments per school are 145 and 141 in 2021-22 & 2022-23 respectively. The total number of students of the General Degree colleges in Tripura increased from 59,433 in 2021-22 to 64,193 in 2022-23.

Services for Improving Urban-life Quality: Action plan for treatment of sewage and seepage of 20 ULBs has been approved by the State High Powered Committee (SHPC). A total of Rs.282.58 crore has been approved by SHPC. Tripura Urban Planning and Development Authority (TUDA) is established to look after the Lighthouse project at Agartala, Township project at Agartala, ADB project for urban infrastructure development in 7 district headquarter and 13 ULBs etc.

Agartala Smart City has been emphasizing on various development works for providing better quality of life. As per Economic Review 2022-23, the central share of Rs.453.24 crore has been received and Rs.51.04 crore has been received as state share. A total of 63 projects have been undertaken under Smart City Mission amounting to Rs.1020.73 crore. Till date 52 projects have been completed.

9.2.9 Control and Lack of It in Incurring Expenditure on Populist Measures

In order to control, the state has given subsidies as a populist measure. Subsidies remain a critical component of fiscal policy. Though to control the fiscal deficit of the state, the amount of subsidies is declining in the state. To maintain budgetary stability and promote the well-being of its community, the Government of Tripura must efficiently oversee the distribution of funds and make sure that development priorities are met.

9.2.10 Progress Made in Sanitation, Solid Waste Management and Bringing in Behavioral Change to End Open Defecation

The Swachh Bharat Mission (SBM) in Tripura's accomplishments since its launch in 2012 are shown in the table through March 31, 2023. With 4,60,231 individual household latrines (IHHL) built, there has been a notable advancement in the goal of being open defecation-free (ODF). Table 9.15 shows the present status of Swachh Bharat Mission as on March 31, 2023.

Table 9.15: Present Status of Swachh Bharat Mission as on 31.3.2023

Item	Achievement as on 31.03.2023 since 2012
Individual Household Latrine (IHHL)	4,60,231
Community Sanitary Complex (CSC)	249
GOBAR-Dhan project	16
Solid and Liquid Waste Management (ODF plus)	a.(Aspiring)- 135 b.(Rising)- 17 c. (Model)- 03

Source: Economic Review of Tripura

In order to provide shared sanitation facilities in places without private toilets, 249 community sanitary complexes (CSCs) have been constructed. To support organic resource management and waste-to-energy activities, sixteen GOBAR-Dhan projects have been put into action. In case of Solid and Liquid Waste Management (ODF plus) villages are categorized as Aspiring (135), Rising (17), and Model (3), based on progress in sustainable solid and liquid waste management. In accordance with the analysis the focus is on upgrading villages from "Aspiring" to "Rising" and "Model" ODF Plus categories by improving waste management infrastructure. Promote community participation through awareness campaigns and expand GOBAR-Dhan projects for bio-energy and manure production. It is needed to build more community sanitary complexes (CSCs) in high-demand areas, ensuring proper maintenance and accessibility. It is regularly needed to monitor the functionality of IHHLs, CSCs, and waste management systems, addressing gaps effectively. Use technology like GIS mapping and offer incentives to "Model" villages to enhance waste management and inspire others.

9.3 Concluding Remarks

Geographical and transportation bottlenecks in Tripura lead to poor infrastructure for marketing products, resulting in non-realization of remunerative prices for its agricultural, horticultural, and industrial goods.

Low infrastructure availability has hindered economic development in Tripura, despite its potential growth. Being close to the rapidly growing South East Asian region, the state can leverage regional experiences for faster economic progress and employment opportunities. Developing infrastructure and creating favorable conditions are crucial for attracting investment and ensuring sustained growth.

Overall health infrastructure is not satisfactory in the state. The state should focus more on it during the next Finance Commission period (2026-27 to 2030-31).

Chapter 10

Details of Sustainable Debt Roadmap for 2026-31 and Identification of Potential Areas for Better Fiscal Health of the State

This chapter contains five sections and it covers the Terms of Reference 13. Section 10.1 explains about the effectiveness and productivity of debt and its sustainable measurement. Section 10.2 explains about the determination of a sustainable debt road map. Section 10.3 identifies the potential areas for better fiscal health. Section 10.4 focuses on the strength, weakness, opportunities and threat for the sustainable development of the state. Section 10.5 highlights the recommendations.

10.1 Effectiveness and Productivity of Debt and Its Sustainability Measurement

The effectiveness and productivity of debt for the state of Tripura can be evaluated by analyzing its debt-to-GSDP ratio, fiscal deficit, and debt servicing costs.

Debt-to-GSDP Ratio:

This ratio indicates the proportion of public debt to the state's GSDP. A lower ratio suggests better debt sustainability. Tripura's debt-to-GSDP ratio has been increasing over the years, indicating a growing dependence on debt financing. According to the Annual Financial Statement 2022-23, the state's internal debt stood at Rs.309,098 million. A high debt-to-GSDP ratio can limit the state's fiscal flexibility and increase its vulnerability to economic shocks.

Fiscal Deficit-GSDP Ratio:

This ratio measures the difference between the state's revenue and expenditure as a proportion of GSDP. A lower ratio indicates better fiscal discipline. Tripura's fiscal deficit has been a concern, with the state relying heavily on borrowing to finance its expenditure. The Budget At a Glance 2024-25 reports a fiscal deficit of ₹206,200 million. A high fiscal deficit can lead to a higher debt burden and reduced credit ratings.

Revenue-Debt Ratio: The ratio measures viability of revenue generation out of the debt taken by the state. The higher ratio indicates the better debt productivity of the state.

Debt Servicing Costs Ratio:

This ratio measures the proportion of public debt servicing (interest and principal payments) to the state's revenue. Debt servicing costs, including interest payments and principal repayments, can be a significant burden on the state's finances. According to the Annual Financial Statement 2022-

23, Tripura's public debt has been increasing over the years. The state's debt-to-GSDP ratio, fiscal deficit-to-GSDP ratio, and interest payment-to-revenue ratio need to be monitored closely to ensure debt sustainability.

According to the Budget At a Glance 2024-25, Tripura's total debt servicing costs stood at Rs.279,200 million. High debt servicing costs can limit the state's ability to invest in critical sectors like education, healthcare, and infrastructure.

The key fiscal statistics for Indian state Tripura from the year 2004-05 to 2022-23 are shown in Table 10.1. These metrics include capital expenditures, total debt, total revenue generated, fiscal deficit (FD), and gross state domestic product (GSDP). The state can sustain economic growth, ensure fiscal sustainability, and improve public services by putting these plans into practice.

Table 10.1: Important Fiscal Indicators of the State during 2004-05 to 2022-23

Year	GSDP at Current Price (Base Year 2011-12)	Gross fiscal Deficit (-) / Surplus (+) (Rs. Crore)	Total Debt	Total Revenue Generated (Tax + Non-Tax)	Capital Expenditure
2004-05	8903.53	-240.31	2203.89	416.63	636.50
2005-06	9826.02	-110.1	2404.67	360.09	743.94
2006-07	10914.23	131.19	2563.97	436.55	722.45
2007-08	11797.07	-16.01	2542.27	485.70	923.68
2008-09	13572.64	-269.89	2615.64	591.50	1202.39
2009-10	15402.70	-1158.71	2940.91	652.01	1332.22
2010-11	17867.73	-247.37	3319.69	754.13	1058.34
2011-12	19208.41	258.62	3558.87	1072.25	1397.26
2012-13	21663.20	336.56	4108.13	1183.40	1483.20
2013-14	25592.83	45.68	4719.24	1320.43	1640.73
2014-15	29533.46	-1049.03	4982.50	1369.90	2832.29
2015-16	35937.73	-1650.45	5680.72	1594.86	3188.03
2016-17	39479.40	-2529.62	6335.65	1640.86	3293.56
2017-18	43715.80	-2071.64	7398.47	1915.51	1777.05
2018-19	49823.32	-1339.7	8626.78	2138.11	1480.87
2019-20	54151.12	-3261.56	11027.69	2373.45	883.22
2020-21	53504.12	-1909.14	12639.64	2617.93	832.08
2021-22	62302.46	66.55	12537.04	2890.42	1368.96
2022-23	72347.54	-1512.73	12097.69	3402.03	2024.97
2023-24	82624.73 [#]	-647.01 [*]	11929.36 [*]	3707.79	2734.19

Source: Compiled from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and <https://ecostat.tripura.gov.in/Finance Account, Govt. of Tripura> (<https://cag.gov.in/ae/tripura/en>)

Note: # collected from <https://ecostat.tripura.gov.in/> as an advanced estimate

* collected from Ministry of Finance, Govt. of Tripura

This steady growth of GSDP indicates strong economic expansion, though some external factors like inflation and policy changes are also incorporated. From 2004-05 to 2022-23, the Gross State Domestic Product (GSDP) has increased nearly eight times from Rs.8903.53 crore to Rs.82624.73 crore. This growth was fueled by reforms, better governance, and more investment, and it accelerated significantly after 2015-16.

The fiscal deficit is the gap between the state's revenue and expenditure in which the negative values indicate a fiscal deficit, while positive values indicate a surplus. Out of the 20 years, state is mostly facing a fiscal deficit except five years. The state's fiscal deficit fluctuated significantly, with surpluses in 2006-07, 2011-12, 2012-13, 2013-14 and 2021-22 indicating prudent financial management, but high deficits, such as Rs.3,261.56crore in 2019-20, reflecting increased spending or revenue shortfalls. During 2023-24 the state has faced a fiscal deficit of Rs.647.01 crore.

The rising debt levels, while proportional to GSDP, indicate an increasing reliance on borrowings for development and recurrent expenditures. The state's total debt has steadily increased. The total public debt has increased from Rs.2203.89 crore in 2004-05 to Rs.11929.40 crore in 2023-24, indicating funding for growth-oriented initiatives but also posing questions over fiscal stability.

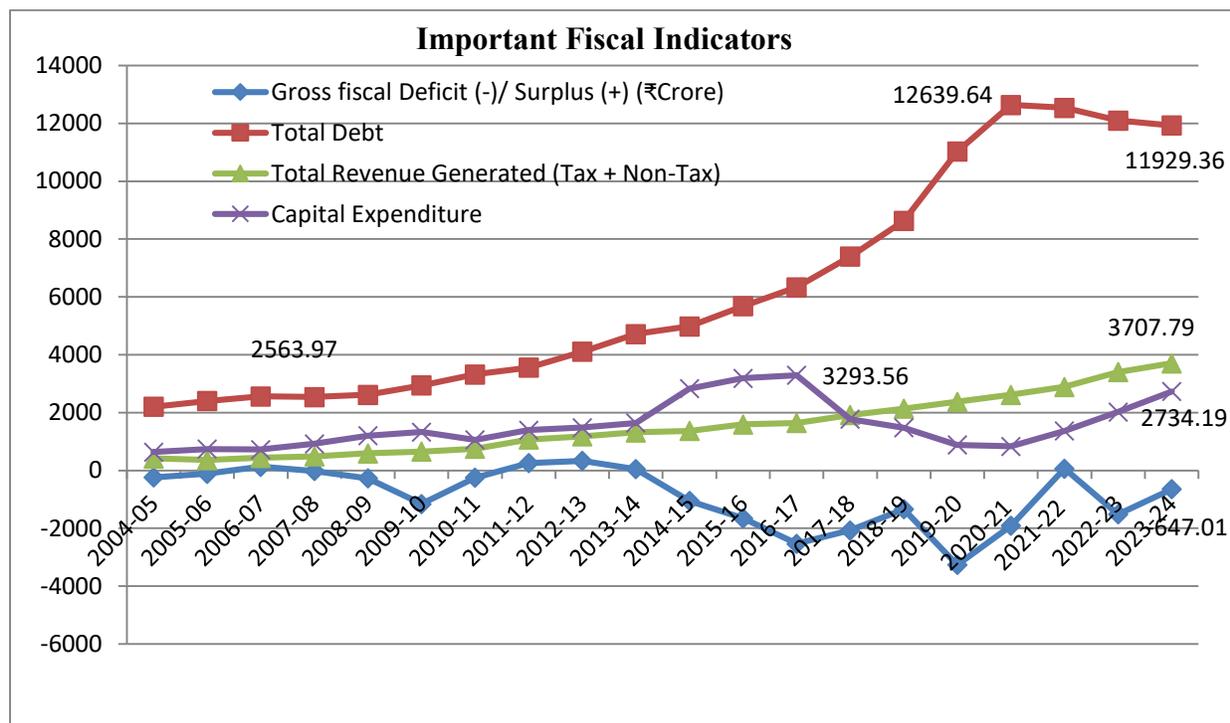
The sharp rise in generated revenue demonstrates effective fiscal policies, including improved compliance, digital tax systems, and growth in taxable activities. During 2004-05, the generated revenue from both own tax and non-tax was Rs.416.63 crore which is increased to Rs.3707.79 crore in 2023-24 due to enhanced tax collection, expanded tax bases, and effective revenue administration.

The capital expenditure of the state has increased over the years. During 2004-05, the spent on capital expenditure of Rs.636.50 crore and to a peak of Rs.3,293.56 crore in 2016-17, capital expenditures ranged greatly. However, it is decreased thereafter from Rs.1777.05 crore to Rs.832.08 crore in 2020-21. The decline in recent years could hamper long-term economic benefits, as capital expenditure drives infrastructure and public services improvement. Though from 2021-22, it is started to increase again and it is not sufficient till 2023-24.

The consistent rise in GSDP is a positive sign of economic development. The state should focus on diversifying its economic base to sustain long-term growth and reduce dependence on specific sectors. Fiscal surpluses in earlier years are commendable; however, the high deficits in 2019-20 and 2022-23 suggest increased spending on welfare or a mismatch in resource mobilization.

Figure 10.1 illustrates data highlights the state's economic growth trajectory, while also emphasizing the need for sustainable fiscal management in which the trends in key fiscal indicators of the state, including Gross State Domestic Product (GSDP), Fiscal Deficit (FD), Total Debt, Total Revenue Generated, and Capital Expenditure over the period 2004-05 to 2023-24.

Figure 10.1: Trends of Important Fiscal Indicators during 2004-05 to 2023-24 (in Rs. Crore)



Source: Drawn from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and Finance Account, Govt. of Tripura (<https://cag.gov.in/ae/tripura/en>) and Ministry of Finance, Govt. of Tripura

Figure 10.1 has also depicted the steady rise of public debt from a total of Rs.2203.89 crore in 2004-05 to Rs.12639.64 crore in 2020-21, indicating the increase in liability through economic expansion. There is a declining trend of public debt shown after 2020-21. The capital expenditure under infrastructure investment shows a increase in trend up to 2016-17 and thereafter the trend line shows a decline in capital expenditure up to 2020-21. The capital expenditure has increased gradually after 2020-21 to Rs.2734.19 crore in 2023-24.

Table 10.2 examines four key debt productivity metrics: Debt-to-GSDP ratio, Fiscal Deficit-to-GSDP ratio, Debt Servicing Cost-to-Revenue ratio, and Capital Expenditure-to-Debt ratio. While the state has made progress in managing debt and reducing servicing costs relative to revenue, increasing the Debt-to-GSDP ratio in recent years and declining capital expenditure-to-debt ratios

highlight concerns. A balanced approach is essential to ensure fiscal sustainability by maintaining a healthy debt profile, focusing on revenue generation, and utilizing borrowings effectively for growth-oriented projects.

Table 10.2: Debt Productivity of the State during 2004-05 to 2023-24

Year	Debt-GSDP	Fiscal Deficit-GSDP	Debt Servicing Cost-Revenue	Capital expenditure-Debt	Revenue-Debt
2004-05	0.25	-0.03	0.85	0.29	0.19
2005-06	0.24	-0.01	1.03	0.31	0.15
2006-07	0.23	0.01	0.89	0.28	0.17
2007-08	0.22	0.00	0.81	0.36	0.19
2008-09	0.19	-0.02	0.67	0.46	0.23
2009-10	0.19	-0.08	0.69	0.45	0.22
2010-11	0.19	-0.01	0.59	0.32	0.23
2011-12	0.19	0.01	0.46	0.39	0.30
2012-13	0.19	0.02	0.45	0.36	0.29
2013-14	0.18	0.00	0.45	0.35	0.28
2014-15	0.17	-0.04	0.50	0.57	0.27
2015-16	0.16	-0.05	0.46	0.56	0.28
2016-17	0.16	-0.06	0.48	0.52	0.26
2017-18	0.17	-0.05	0.46	0.24	0.26
2018-19	0.17	-0.03	0.48	0.17	0.25
2019-20	0.20	-0.06	0.47	0.08	0.22
2020-21	0.24	-0.04	0.49	0.07	0.21
2021-22	0.20	0.00	0.48	0.11	0.23
2022-23	0.17	-0.02	0.40	0.17	0.28
2023-24	0.14	-0.01	0.36	0.23	0.31

Source: Calculated from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and Finance Account, Govt. of Tripura (<https://cag.gov.in/ae/tripura/en>) and Ministry of Finance, Govt. of Tripura

It is important to promote economic diversification and sustainable growth while enhancing tax efficiency to increase revenue and reduce reliance on debt. From Table 10.2, it is found that the state has maintained a consistent debt-GSDP ratio except few years. The debt-GSDP ratio was maximum (0.25) during 2004-05 and after that it was decreased. From 2019-20 to 2021-22 the debt-GSDP ratio was higher compare to the previous year. During the pandemic year (2020-21) the debt-GSDP ratio was 0.24 due to very high debt (Rs.12639.60 crore) and decrease in GSDP (Rs.53504.12 crore). During 2023-24 the debt-GSDP ratio is 0.14 only and this is due to high

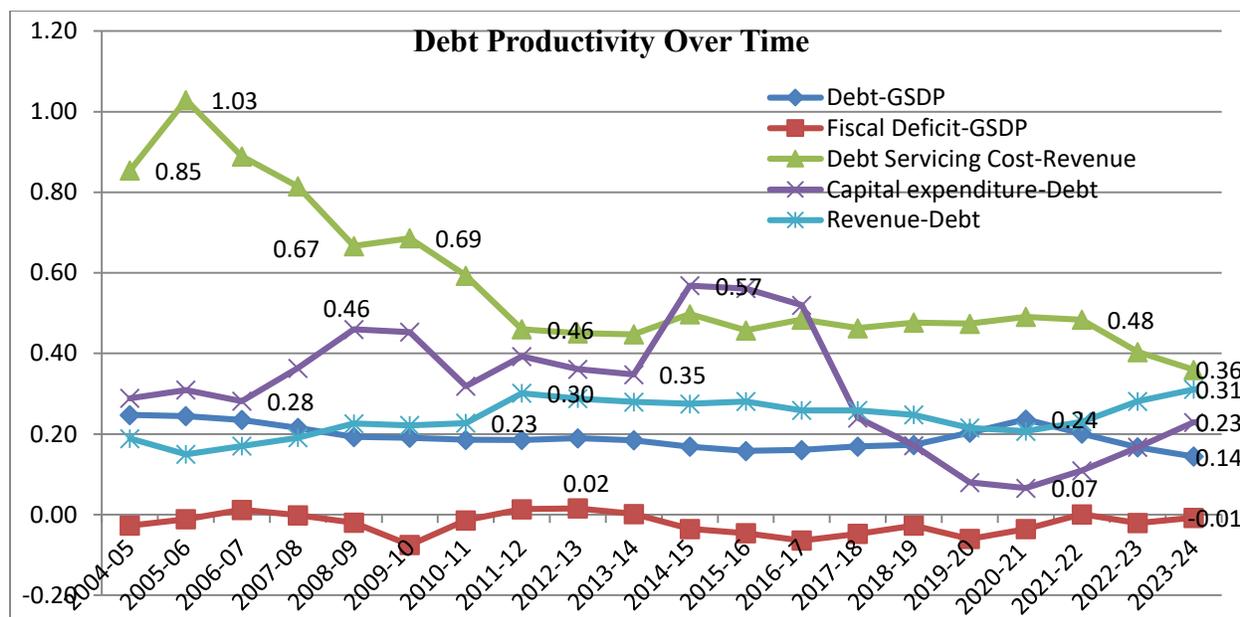
estimated GSDP (advanced). The Fiscal Deficit-to-GSDP ratio remained low or negative from 2006-07 to 2013-14, indicating fiscal prudence, bottom at -0.08 in 2009-10, and increased to -0.02 in 2022-23.

In order to prioritize efficient revenue collection to manage debt servicing and refinance high-cost debt to further reduce interest burdens. The debt servicing cost-to-revenue ratio decreased significantly from 0.85 in 2004-05 to 0.36 in 2023-24, reflecting improved revenue generation and lower borrowing costs.

Increase the proportion of borrowed money allocated to capital expenditures in order to boost economic productivity. Additionally, keep a close eye on the results of capital investments to make sure borrowed resources are being used efficiently. The ratio showed a decrease in the allocation of debt to productive assets, peaking at 0.57 in 2014-15 and at 0.56 in 2015-16 for efficient debt use in infrastructure. Thereafter, the capital expenditure-debt ratio decreased and it was minimum (0.07) during the pandemic year 2020-21. The revenue-debt ratio has increased gradually since 2004-05 to 2023-24. During 2004-05 the revenue-debt ratio was 0.19 and the value is now 0.31 in 2023-24.

Figure 10.2 provides a comparative analysis of various debt-related productivity indicators over time. Here's an explanation of the chart, followed by suggestions for improving the state's financial performance. The Debt-GSDP (Blue Line) indicates the ratio of state debt to GSDP, with fluctuations over the years and lower values reflecting better fiscal health. Beginning in the mid-2010s, the debt-to-GSDP ratio indicates a declining trend; but, after 2018-19, it has started to climb once more. The low level of debt utilization for capital expenditures is indicated by the relatively low Capital expenditure-Debt ratio. It is found that debt-servicing cost is more than one in 2005-06 which indicates that debt-servicing cost is more than revenue. There is a decrease in the Debt Servicing Cost-Revenue (DSC-Revenue ratio), which indicates lesser debt servicing burden. In comparison to debt levels, the revenue-debt ratio has improved recently, indicating improved revenue management. During 2011-12 the revenue-debt ratio was 0.30 but thereafter it has decreased in the pandemic year (2020-21). After the pandemic period it has started to increase and it touches 0.31 in 2023-24. Enhance Revenue Generation improves tax collection efficiency and diversified revenue streams by promoting industry growth. It is important to focus on productive debt utilization on increasing capital expenditures for infrastructure development and prioritize high-return projects to drive long-term revenue growth.

Figure 10.2: Debt Productivity of the State during 2004-05 to 2022-23



Source: Drawn from the State Finances Audit Report of the CAG of India (<https://cag.gov.in>) and Finance Account, Govt. of Tripura (<https://cag.gov.in/ae/tripura/en>) and Ministry of Finance, Govt. of Tripura

It is also important to control fiscal deficit, enforce expenditure controls and regularly adjust fiscal policies based on data to maintain stability. It is also important to reduce debt servicing burden, lower interest rates, restructure high-cost debt, and minimize borrowing for non-productive purposes. To enhance accountability and transparency, publish comprehensive debt reports on a regular basis and carry out independent audits to make sure that finances are in line.

To check whether the total debt of the state is productive or not, a log-log linear regression specification can be written in the following.

$$\log(GSDP)_t = \alpha + \beta_1 \log(Debt)_t + \beta_2 \log(Revenue)_t + u_t \quad \dots\dots\dots(10.1)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. The marginal effect shows whether debt and revenue generated is elastic to GSDP or not.

Table 10.3 shows the elasticities of debt and revenue on GSDP. It is found that the debt elasticity coefficient (\ln_{debt}) is 0.374664, indicating that responsiveness of revenue on GSDP is 0.374 and it is positively significant at less than one percent level of significance. It plays a substantial role in driving GSDP. The revenue elasticity ($\ln_{revenue}$) coefficient is 0.640732, indicating that responsiveness of revenue on GSDP is 0.64 and it is of statistical significance at less than one percent level. The revenue generation contributes positively to GSDP, but its impact is greater compared to debt.

Table 10.3: Elasticities of Debt and Revenue Generation

lngsdp	Coefficient	Std. Err.	t	P>t
lndebt	0.374664*	0.125107	2.994	0.008
lnrevenue	0.640732*	0.105962	6.046	0.000
Constant	2.450733*	0.382411	6.408	0.000

Source: Author's compilation

Note: * denotes significant at 1 percent or less level of significance.

Excessive debt may have a detrimental effect on growth after a certain point, as it examines whether there is a non-linear relationship between debt and GSDP. Examine the ways in which the revenue is used. The GSDP of the state may be increased by directing income towards the beneficial projects (such as infrastructure and education).

Governments should balance debt levels and prioritize effective revenue collection mechanisms to sustain GSDP growth. Caution should be exercised to ensure debt-financed growth does not lead to long-term fiscal imbalances.

Table 10.4: ANOVA for Elasticities of Debt and Revenue Generation

Source	SS	Df	MS	Number of obs.	20
Model	9.487754	2	4.743882	F(2, 17)	720.9532
Residual	0.11186	17	0.00658	Prob.> F	0.000
Total	9.599624	19	0.505243	R-squared	0.988347
Adj. R-squared	0.986977			Root MSE	0.081117

Source: Author's compilation

Table 10.4 shows the ANOVA (Analysis of Variance) of the above regression. The high R-squared (0.988) and Adjusted R-squared (0.986) and significant F values show that the goodness of fit is very high and the entire regression is meaningful.

To check whether the total debt of the state is productive or not, a linear regression specification can be written in the following.

$$GSDP_t = \alpha + \beta_1 Debt_t + \beta_2 Capex_t + u_t \quad \dots\dots(10.2)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. The marginal effect shows whether debt and revenue have any impact on GSDP or not

The findings of a regression study looking at the connection between debt, capital spending, and debt sustainability are shown in Table 10.5. The findings imply that the outcome variable is

significantly and favorably impacted by both debt and capital expenditure. Nonetheless, capital expenditure seems to have greater sway, and efficient debt management strategies that prioritize cost-effectiveness could improve economic sustainability and productivity.

Table 10.5: Result of Debt Productivity and Sustainability

Variable	Coefficient	Std. Err.	T	P>t
Total Debt	5.27323*	0.289655	18.21	0.000
Capital Expenditure	5.581657*	1.351761	4.13	0.001
Constant	-7653.732*	2665.724	-2.87	0.011

Source: Author's Estimation

Note: * denotes significant at 1 percent or less

Total Debt coefficient value 5.273 indicates that a one unit increase in total debt is associated with a more than five times increase in GSDP, suggesting that higher debt levels are positively linked to the model's outcome (likely economic productivity or sustainability). A high t-value (18.21), suggests that the coefficient is statistically significant. The probability value is extremely low, indicating that the total debt variable is highly significant in the model. The coefficient of capital expenditure is 5.581657, indicating that a one-unit increase in capital expenditure leads to also more than five times increase in the GSDP; the t-statistic is 4.13 and this is also significant at one percent level of significance.

The positive coefficients for both total debt and capital expenditure, policymakers should focus on increasing capital expenditure while managing debt for sustainable growth, as capital expenditure (coefficient of 5.58) may have a greater influence on productivity and sustainability than debt. While total debt shows a positive relationship with the dependent variable, policymakers should be cautious about increasing debt without simultaneously increasing capital expenditure to maximize its effectiveness. In case debt contributes positively in the short term, it is important to examine its long-term effects on sustainability and consider modeling potential diminishing returns on debt after a certain threshold is reached.

Table 10.6 shows ANOVA which indicates a strong fit and is highly significant, explaining most of the variation in debt productivity and sustainability. R-squared and Adjusted R-squared (0.9598) indicate that there is a very high goodness of fit. A high value of F-statistic (203.16) suggests that the model is meaningful and statistically significant.

Table 10.6: ANOVA for Debt Productivity and Sustainability

Source	SS	df	MS	Number of obs.	20
Model	9.1434E+09	2	4.5717E+09	F(2,17)	203.16
Residual	382549849	17	22502932.3	Prob.> F	0.000
Total	9.5259E+09	19	501364869	R-squared	0.9598
Adj. R-squared	0.9551			Root MSE	4743.7

Source: Author's Estimation

10.2 Determination of a Sustainable Debt Roadmap for 2026-31, Taking into Account-Tax Trend Forecasts

To determine a sustainable debt roadmap for Tripura from 2026-31, we need to consider several factors, including tax trend forecasts. Here's a step-by-step approach:

Tax Trend Forecasts: Analyze Tripura's tax revenue trends, including Goods and Services Taxes, Taxes on Income and Expenditure, and other taxes. Consider factors like economic growth, inflation, and tax policy changes. The state can think about opening up a newer tax bracket in order to enhance more revenue generation of the state.

Debt-to-GSDP Ratio: Evaluate Tripura's debt-to-GSDP ratio, which should ideally be below 60 percent. Assess the state's current debt level, GSDP growth rate, and interest rates. Presently, the Debt-GSDP ratio is 32 percent. However, some debt is required to spend on capital expenditures.

Fiscal Deficit: Examine Tripura's fiscal deficit, which should be within the recommended range of 3% of GSDP. Consider the state's revenue and expenditure trends.

Debt Servicing Costs: Calculate Tripura's debt servicing costs, including interest payments and principal repayments. Ensure these costs are manageable and do not compromise the state's fiscal stability.

Sustainable Debt Roadmap: Based on the above analysis, create a sustainable debt roadmap for Tripura from 2026-31. This roadmap should include:

Debt Reduction Targets: Specify realistic debt reduction targets, aligned with the state's fiscal consolidation goals.

Fiscal Discipline: Outline measures to maintain fiscal discipline, such as reducing unnecessary expenditures and enhancing revenue mobilization.

Debt Restructuring: Consider debt restructuring options, such as refinancing high-interest debt or extending repayment periods.

Contingency Planning: Develop contingency plans to address potential fiscal risks, such as economic downturns or natural disasters.

In order to examine the debt road map the following regression is taken.

$$\log(TR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (10.3)$$

$$\log(NTR)_t = \alpha + \beta_1 \log(X_1)_t + \beta_2 \log(X_2)_t + \dots + \beta_k \log(X_k)_t + u_t \dots (10.4)$$

For all $t = 1, 2, 3, \dots, T$ and $u_t \sim N(0, \sigma^2)$ is stochastic error component. TR is total tax revenue of the State and NTR is total non-tax revenue of the State. Xs are the total debt for each sector taken from the different sources for all sector. The marginal effect shows the partial elasticities of sectoral debt on growth of tax revenue and non-tax revenue. The decision or road map for taking debt will be based on the values of partial elasticities.

From Table 10.7, it is observed that the debt from different financial institutions have a significant impact on the revenue generation of the state. SDL, NSSF, NABARD and other financial institutions have a statistically substantial positive influence on tax income, though the coefficients show that these are not highly elastic with the revenue generation of the state. Thus Tripura should give them priority when it comes to funding.

Table 10.7: Determinants of Debt Road Map for Enhancing Tax Revenue

Intr	Coefficient	Std. Err.	t	P>t
lnsdl	0.567656*	0.1060486	5.35	0.000
lnnssf	0.5456568*	0.2550426	2.14	0.049
lnnabard	0.1220652*	0.0372326	3.28	0.005
lnlic	-0.1824505**	0.0709823	-2.57	0.021
Constant	-0.3734533	1.584903	-0.24	0.817

Source: Author's Estimation

Note: * denotes significant at 1 percent or less level of significance, ** denotes significant at 5 percent or less level of significance.

While state development loans must be carefully distributed to projects with quantifiable financial returns, LIC loans must be reexamined in light of their detrimental effects. Improved oversight and effective management of the National Small Saving Fund can increase its revenue contribution. Strategic borrowing from powerful sources can propel long-term economic growth and the construction of infrastructure. The negative impact of LIC loans indicates that they may

not be aligned with revenue-enhancing strategies. The state should evaluate the cost-effectiveness of borrowing from LIC and consider alternative sources with better fiscal outcomes.

Table 10.8 shows the ANOVA of the above regression model. The high R-squared and adjusted R-squared values confirm the goodness of fit of the model which accounts for the dependent variable is highly explained by the explanatory variables. The high value of F indicates the entire model is meaningful.

Table 10.8: ANOVA for Debt Road Map for Enhancing Tax Revenue

Source	SS	df	MS	Number of observation	20
Model	16.171649	4	4.04291225	F(5, 13)	201.79
Residual	0.300530911	15	0.020035394	Prob.> F	0.000
Total	16.4721799	19	0.866956837	R-squared	0.9818
Adj R-squared	0.9769			Root MSE	0.14155

Source: Author's Estimation

Table 10.9 presents a regression analysis exploring the relationship between various financial sources and non-tax revenue in the state of Tripura. The regression analysis highlights the importance of strategic financial management in Tripura's development. Leveraging the strengths of other financial institutions and optimizing the use of NABARD funds could significantly enhance non-tax revenue. At the same time, reforms in SDL and NSSF utilization are essential for sustainable growth.

Table 10.9: Determinants of Debt Road Map for Enhancing Non-Tax Revenue

Inntr	Coefficient	Std. Err.	t	P>t
InSDL	0.2495127	0.2068884	1.21	0.246
InNSSF	-0.4346124	0.4975585	-0.87	0.396
InNABARD	0.1751343**	0.0726365	2.41	0.029
Constant	5.194132	3.091963	1.68	0.114

Source: Author's Estimation

Note: * denotes significant at 1 percent or less level of significance, ** denotes 5 percent or less level of significance.

An increase in SDLs appears to positive impact non-tax revenue, but the effect is not statistically significant. This suggests that SDLs might not directly enhance non-tax revenue. Contributions from the NSSF are associated with a negative impact on non-tax revenue, though the relationship

is weak and not statistically significant. Investments or loans from NABARD have a positively significant influence on non-tax revenue. This is significant at less than 5 percent level of significance. NABARD funding may have potential if optimized further. Funding from other financial institutions has a strong and statistically significant positive impact on non-tax revenue. This indicates that these institutions play a critical role in enhancing non-tax revenue.

Table 10.10: ANOVA for Debt Road Map for Enhancing Non-Tax Revenue

Source	SS	Df	MS	Number of observation	20
Model	4.19187028	4	1.02548	F(4, 15)	13.74
Residual	1.14380505	14	0.0505	Prob.> F	0.000
Total	5.33567532	18	0.26716	R-squared	0.7856
Adj. R-squared	0.7285			Root MSE	0.27614

Source: Author's Estimation

Table 10.10 shows the ANOVA of the above regression model. The high R-squared and adjusted R-squared values confirm the goodness of fit of the model which accounts for the dependent variable is highly explained by the explanatory variables. The high value of F indicates the entire model is meaningful.

By this structured approach, Tripura can create a comprehensive and sustainable debt roadmap, ensuring fiscal stability and promoting economic growth.

10.3 Identification of Potential areas for Betterment of the Fiscal Health

In order to improve the fiscal health position of the state, the state needs more capital expenditure in some important potential areas. The following potential areas and priorities are identified in consultation with the state administration.

1. Need for Superspeciality Hospital like AIIMS:

The demand for health care facilities is a long term demand for the people of the state as there is a lack of sufficient multi-speciality and superspeciality hospital available in Tripura. For critical health treatment the people move to Silchar Medical College or Guwahati or Kolkata for their treatment. In the entire Northeast, only one AIIMS is constructed recently at Guwahati. Agartala is the second best city in the Northeast and the state also deserves to get a new AIIMS. The construction of new AIIMS at the state capital Agartala can sort out not only the health problems of the state but also resolve the health problems of the neighbouring states Mizorum, Manipur and

also the neighboring country Bangladesh. It can create lots of opportunities in order to improve the state GSDP and also fiscal health. The lots of positive externalities of it are mentioned in the following.

Positive Externalities of the AIIMS on the economy:

- Improvement of health care facilities of the state at large
- Improvement of medical education with meritorious students and doctor-teachers coming from other states
- Reducing unemployment for the youth of the state especially associated with health sector
- Income generation from Logistics, transportation associated with these health care facilities
- Economic opportunities for the entrepreneurs associated with logistics and transportation and some trickle-down effect can happen in the long run
- Possibilities of increase in revenue of the state through tax revenue
- Possibilities of increase in revenue of the ULB (Agartala Municipal Corporation) through non-tax revenue

2. Need for Medical Tourism

Medical tourism is a new concept of tourism. The tourist coming for their treatment can be called as medical tourists. Peoples of Bangladesh come regularly India and moves Delhi, Kolkata, Chennai for their medical treatment and they use Agartala Airport as a corridor. On the basis of interview made with the Land Port Manager, Integrated Check Post at Akhaura, Agartala, more than 50 percent visitor enter into India for their health treatment and they travel by the air to other cities in India. If the state provides the superspeciality health care facilities to these foreigners then the state can earn huge revenue and can improve the fiscal health. The lots of positive externalities of it are mentioned in the following.

Positive Externalities of Medical Tourism on the economy:

- Reducing unemployment of the state especially associated with the medical tourism
- Income generation from Logistics, transportation associated with the medical tourism
- Economic opportunities for the entrepreneurs associated with logistics and transportation
- Possibilities of increase in foreign currencies
- Possibilities of increase in revenue of the Local Bodies (both ULBs and RLBs) through non-tax revenue

3. More Focus on Tourism

Tourism is another potential area to improve the state's GSDP and fiscal position. Tripura is geo-environmentally unique compare to other Himalayan states for its excellent scenic beauty. Tripura tourism is based on ecology and environment (Eco-tourism) and also based on spiritual and cultural. There is a huge prosperity to develop tourism sector in Tripura. But, in order to develop, it needs sufficient capital expenditure for construction of roads, construction of guesthouses with all accessible facilities at tourist places, online booking facilities etc. The following suggestions are recommended for the betterment of tourism sector and to improve the economy of the state.

Identification and Mapping of the Tourists places: The department should take the initiatives to identify and mapping of the prospective visiting places (both existing and to be constructed newly). The department can think about prospective new tourist spot or places based on eco-tourism and village tourism. We can think about some Tribal model villages based on their ethnic culture which can be more attractive to the visitors. Promotion of attractive wildlife sanctuary is also essential in the tourist map. Table 10.11 shows the district-wise tourism places in Tripura. The tourist spots are divided into four categories viz. religious places, wildlife and eco-tourism places, heritage places and aquatic places. The state Tripura is rich in wildlife and eco-tourism followed by religious places, heritage places. It is observed that most of the tourist spots are located at Gomati district followed by Sepahijala district. There are eight tourist places in Gomati district and five places in Sepahijala district. There are three aquatic bodies in the state viz. Dumboor lake in Dhalai district, Chabimura in Gomati district and Neermahal in Sepahijala district. Hydro-electric power project at Dumboor is not successful in power generation as the installed capacity is very small, however this aquatic body can be a high income generating tourist spot. A map (Figure 10.3) have been designed and inserted in the next page in showing important tourist places in Tripura.

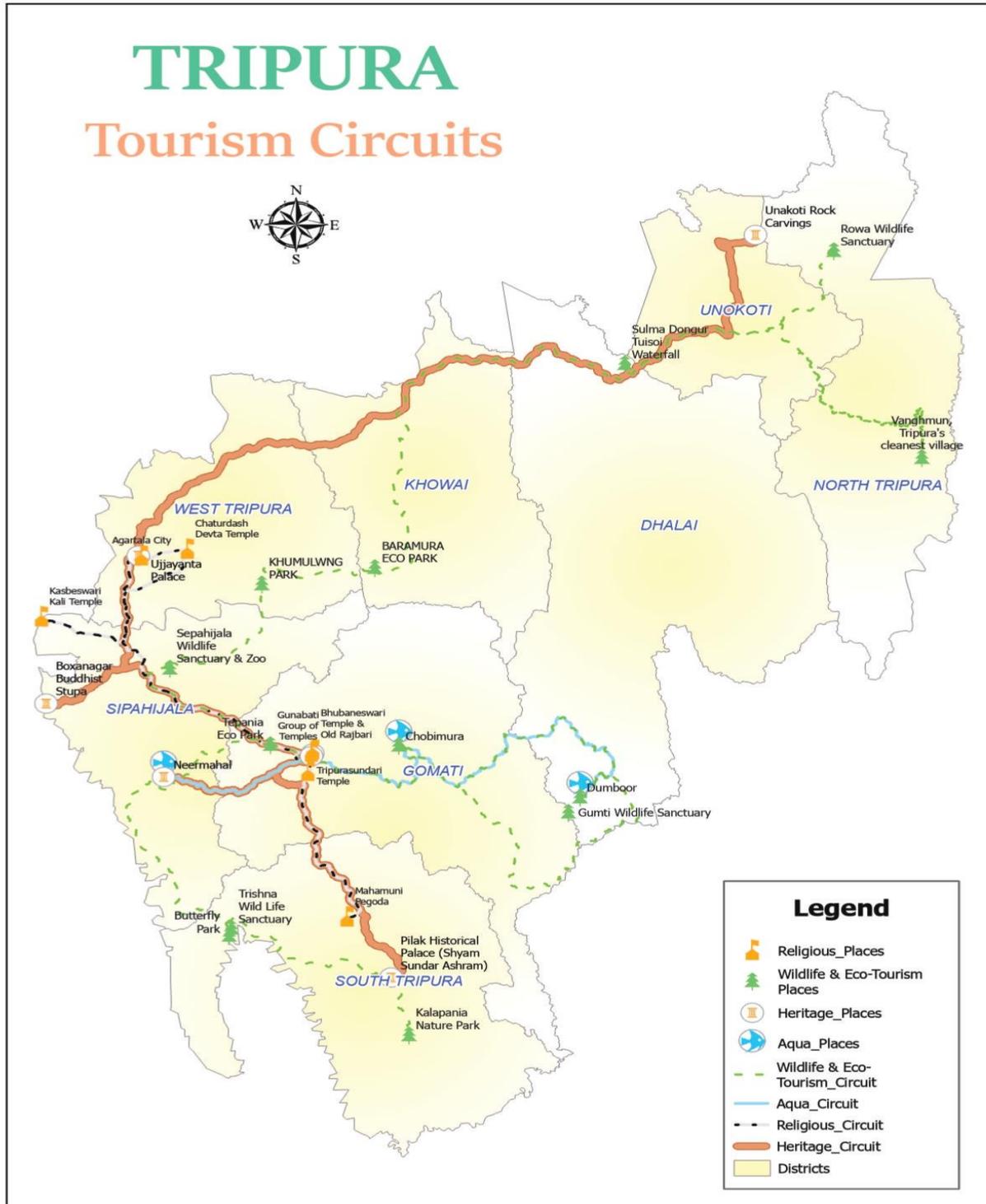
Table 10.11: District-wise Tourism Places in Tripura

Sl.	Tourist Places	District	Religious Places	Wildlife & Eco-Tourism	Heritage Places	Aquatic Places
1	Dumboor Lake	Dhalai		✓		✓
2	Sulma Dongur Tuisoi Waterfall	Dhalai		✓		
3	Bhubaneswari Temple & Old Rajbari	Gomati	✓		✓	
4	Chabimura	Gomati		✓		✓
5	Gunabati Group of Temples	Gomati	✓		✓	
6	Tepania Eco-Park	Gomati		✓		
7	Tripurasundari Temple	Gomati	✓			
8	Gomati Wildlife Sanctuary	Gomati & Dhalai		✓		
9	Baramura Eco-Park	Khowai		✓		
10	Jampui Hill & Tripura's Cleanest Village	North		✓		
11	Rowa Wildlife Sanctuary	North		✓		
12	Buddhist Stupa	Sepahijala			✓	
13	Kasbeswari Kali Temple	Sepahijala	✓			
14	Neermahal	Sepahijala			✓	✓
15	Sepahijala Wildlife Sanctuary	Sepahijala		✓		
16	Bharat Bangla Maitree Uddyan	South				
17	Kalapania Nature Park	South		✓		
18	Mahamuni Pegoda	South	✓			
19	Pilak	South			✓	
20	Trishna Wildlife Sanctuary & Butterfly Eco Park	South		✓		
21	Unakoti	Unakoti			✓	
22	Agartala City	West	✓			
23	Chaturdash Devta Temple	West	✓			
24	Khumulwng Eco Park	West		✓		
25	Ujjayanta Palace	West			✓	

Source: Author's Documentation

Designing of Tourism Circuit: Designing of an effective tourism circuit is more helpful and attractive to the tourists. Tourism circuit includes how the visitors travel from beginning to ending with all details about timing of visit, regulatory mode of journey and transportation facilities, accommodation and refreshment facilities, cost details for each spot, good administration and hassle free law and order situation. A map (Figure 10.4) have been designed and inserted below in showing tourism circuit in Tripura.

Figure 10.4: Tourism Circuit in Tripura



Source: Author's drawn

Need for better Infrastructure at the Tourist Places: Improved and smooth road condition, good network connectivity, excellent logistic facilities at the tourist places are the pre-condition for designing a tourist circuit. A large amount of capital expenditure is required to improve the better infrastructure but that can be incremental in raising the revenue in the long run. A toll tax can be charged to recover the cost of infrastructure (capital expenditure).

Positive Externalities of Tourism on the economy:

- Reducing unemployment of the state especially associated with the tourism
- Income generation from Logistics, transportation associated with the tourism
- Economic opportunities for the entrepreneurs associated with logistics and transportation
- Possibilities of increase in revenue of the state through tax revenue
- Possibilities of increase in revenue of the Local Bodies (both ULBs and RLBs) through non-tax revenue

4. Extraction of Medicinal Plants & Formation of Medicine Research Hub

The state is very rich in having flora and fauna. Scientific promotion and commercial use of the state's bio-diversity, flora and fauna would be more helpful in developing the state. The state has a huge potential in forming the medicine research hub as there is an availabilities of large number and varieties of medicinal plants and other herbs of medical importance.

5. Exploring the Possibilities of Green Energy

Tripura has a high potential of green energy. Green energy can help to reduce the air pollution from energy production with a lower energy cost. There are different types green energy viz. solar energy, wind energy, hydroelectric and biomass energy. The state has 60.2 percentage of area of forest. Green energy can provide energy access to remote areas of the state and vulnerable section of the society.

Extraction of natural gas is important for reducing the fuel consumption of the state which is also beneficial for sustainable development of the environment.

Though there is a tradable relationship of Energy with Bangladesh; but more production of energy can generate more revenue.

6. Strengthening of Public Digital Infrastructure

Strengthening of public digital infrastructure is one of the important priorities and potential areas. In order to collect the revenue (both tax and non-tax) digitalization should be strengthened. Apart from that there are other externalities such as ensuring easy access to essential government services like DigiLocker, Aadhaar, and Unified Mobile Application for New-age Governance (UMANG). It is also important in providing efficient and accessible bureaucratic services, such as e-Governance portals and e-Courts, with transparency and digital tracking, digital public services. It would be helpful in accessing E-health platforms like the Ayushman Bharat Digital Mission, online education platforms under National Education Policy (NEP 2020). It would be also helpful for online equity and commodity trading of the people belongs to the state.

10.4 Strength, Weakness, Opportunities and Challenges for the Sustainable Development

Table 10.11 shows the strength, weakness, opportunities and challenges of the state.

Table 10.11: A SWOC Analysis for the Sustainable Development of Tripura

Strengths	Weaknesses	Opportunity	Challenges
Rich in Natural Resources.	Agriculture based economy. Only about 27 per cent of the total geographical area of the state is under cultivation. The rest is hill, hillocks and hilly terrain.	Possibilities of commercial cropping/horticulture/floriculture/Pisciculture, even in the hilly terrain. Terrace method may be followed for that. Possibility of medicinal plants and other herbs of medical importance.	Struggling of farmers for their survival due to poor opportunity of income earning. Struggling of tea garden workers due to non-commercial production and poor wage structure. Communication bottleneck and geographical isolation from the main parts of the country, which put the state into the cost dis-advantageous position for any economic activity. Sub-optimal exploration/use of the natural resources.
Existence of natural gas-based power plants.	Low per-capita income due to poor base of industrialization. Lack of physical and marketing infrastructures.	Large number of educated youths, the potential manpower for the upcoming industries.	High rate of unemployment, especially among the educated youths. Shortage of skilled and trained man power/human capital.

	Slow and sub-optimal rate of exploration.	Opening up of bi-lateral trade relationship with the neighbouring countries. Natural Gas based power plants.	Poor internal communication and inaccessibility to many hilly remote areas.
Rich in Environmental resources due to densely forest area.	Unauthorized deforestation and lack of proper monitoring by the concerned public authority. Poor actions and measures on environmental protection.	Possibility for developing Eco-tourism and Village based tourism. Promotion of attractive wildlife sanctuary. Possibility of linking the rich tribal culture and tradition with tourism. Scientific promotion and commercial use of the state's bio-diversity, flora and fauna.	Degrading mutual relationship between local tribes and forest resources. Underutilization of natural resources.
	Higher Central dependency of the state owing to persistent inability in own revenue generation.	Possibility of revenue generation through review of direct taxation from the potential tax payers and other non-tax revenues. Revival of the PSUs in the line of commercial viability.	Lack of efforts in tax collection as well as exploration of newer tax base. There is a possibility of revenue generation through review of direct taxation from the potential tax payers.
Legacy of varied and rich tribal culture and heritage in the field of weaving, handicrafts, health care and culture.	Lack of monitoring, supervision and grass-root level support for survival and flourishing of local weaving, handicrafts and other resources.	Higher market support and demand for weaving and handicrafts of the varied and rich tribal heritage, even in outside of the State.	----
	Poor health-care facilities in terms of physical as well as human capital. Lack of super speciality hospital and medical colleges like AIIMS.	A persistent observation is that the people from neighbouring states are availing treatments from main lands and even the people from Bangladesh are going for their medical treatment to Kolkata and other Indian cities through Agartala Airport. Possibility of boosting up of the economy through hospitality, health and education sectors.	Dependency for health services on other neighbouring states especially for life support and critical diseases. Greater possibility of health and education hub.
	The state is in 5 th seismic zone.		Congested housing and trafficking especially in urban

	<p>Improper design of urban planning.</p> <p>Poor traffic signaling system.</p> <p>Poor dredging system of the rivers.</p>		<p>areas would be devastating during natural calamities such as earthquake, flood and heavy rain.</p>
<p>Like other states of the NER, the state has a huge tourism potential. This can lead to viable livelihood for many and sustainable development.</p>	<p>Lack of proper planning, coordination among various line departments, developing of the tourism circuits, required hospitality management.</p>	<p>A good number of historically important tourist spots, heritage sites, picturesquely beautiful places are there in Tripura.</p>	<p>A gross negligence towards the tourism potentials.</p> <p>Delinked tourism circuits.</p> <p>Poor hospitality and tourism services.</p> <p>Continuous destruction of the heritage places owing to the inaction of the State and the ASI.</p>

10.5 Recommendations

For the sustainable debt road map the following suggestions and recommendations are given.

- To reduce reliance on debt, focus on diversifying the economy and implementing policies that promote long-term growth is needed.
- Enhancing tax efficiency can increase revenue without further increasing borrowing, ensuring better fiscal health. A balanced approach is essential to manage this ratio by adopting policies that stimulate economic growth and reduce the reliance on borrowing.
- To maintain fiscal prudence, reduce fiscal deficits, especially during recessions, by targeting high-return investments and cutting wasteful expenditures. Continued prioritization of efficient revenue collection is crucial for managing debt servicing costs. A larger share of borrowed funds should be allocated to capital expenditure to boost economic productivity. Monitoring the impact of these investments is vital to ensure that borrowed resources are being used effectively.
- To avoid a potential debt trap, Tripura should ensure loans which could be productively used through proper monitoring. Focus should be given on using loans to boost state income and drive overall economic betterment.

- Capital expenditure plays a vital role in funding road construction projects in Tripura's villages, which can significantly boost the state's revenue. By investing on infrastructure, such as roads, the state can improve market access for farmers, could be reduced transportation costs, and attract businesses. This will increase tourism, and enhanced social integration, all of which contribute to higher revenue and finally it will improve economic growth. Improved roads will be facilitate also better healthcare and education access, empowering rural communities, reducing poverty, and fostering long-term development that supports overall state prosperity.

For the potential thrust areas mentioned in Section 10.3, five potential areas such as establishment of AIIMS, tourism, medicinal research hub, development of green energy and digital public infrastructure are identified and recommended for special funding mentioned in the following Table 10.12.

Table 10.12: Proposed Amount Needed for Potential areas for Improvement of the Fiscal Health of the State

Sl.	Potential Area	Amount Proposed (in Rs. Crore)
1.	Establishing AIIMS	850.00
2.	Developing Tourism Infrastructure	250.00
3.	Medicinal Plants & Formation of Medicine Research Hub	100 .00
4.	Developing the infrastructure for Green Energy	150 .00
5.	Strengthening of Digital Public Infrastructure	150.00
	Total Amount Proposed	1500.00

Source: Author's recommendations

- The projected Rs.1500 crore is recommended for the allocations on tourism, healthcare, green energy, medicinal research hub and organic farming. Out of the two important sectors viz construction of AIIMS and tourism is important for enhancing fiscal health. These investments may be more useful in promoting long-term economic growth if a balanced strategy is combined with strategic monitoring.
- Establishing AIIMS is the highest priority and for that Rs.850 crore (about 56 percent) of the total amount is proposed. The state government of Tripura is prepared in order to provide all the support in accordance with the capacity of the state because the establishment like AIIMS is really meaningful here in Tripura.

- In the state Tripura, the tourism contributes significantly to the state's revenue because of its rich cultural legacy, varied wildlife, breathtaking natural scenery, historical landmarks like rock carvings, and distinctive tribal customs, all of which draw tourists looking for a genuine experience and generate jobs in a variety of industries like hospitality and handicrafts. Keeping it in mind the developing tourism infrastructure Rs.250 crore is a significant investment aimed at enhancing the state's tourism sector, potentially boosting revenue and creating jobs. Additional investment in tourism infrastructure could provide a quicker return on investment, boosting fiscal health through increased revenue streams.
- The availability of various medicinal plants, including *Andrographispaniculata*, *Aquillariamalaceensis*, *Asparagus reticulatus*, *Baeopamoniari*, *Centellaasiatica*, *Hemidesmusindicus*, *Holorrheapubescens*, *Hydrocarpuskurzi*, *Oroxylumindicum*, and *Euphorbia nerifolia*, makes the Medicinal Plants & Medicine Research Hub significant in Tripura. The allocation of Rs.100 crore is recommended to foster innovation and diversity in the health industry by advancing research and development in medicinal plants.
- For green energy and strengthening digital public infrastructure to have the greatest possible impact on environmental and financial objectives, rules and incentives should be in place to promote their funding. With an emphasis on green energy projects, the potential for green energy is enormous, and the state's commitment to environmental preservation, and sustainable development through human capital formation, an allocation of Rs.150 crore each for these two potential areas is recommended.

Chapter - 11

Recommendations of the Study

The chapter highlights the recommendations as per the Terms of References given for the study.

TOR # 1:

To enhance the revenue productivity the following suggestions are recommended.

- The secondary sector and tertiary sector should be focused in order to enhance more revenue capacity. The impact of secondary sector is more than the tertiary sector in generating the revenue.
- The state should increase capital expenditure in order to generate more revenue in future. The infrastructural development especially for the rural area is needed in this respect.
- Though the total tax buoyancy and own taxes of the state are elastic and impressive, however the state can take proper steps to increase tax responsiveness.
- The growth rate of non-tax revenue is smaller than state own tax revenue. The buoyancy of the non-tax revenue is not impressive. There is a scope of generating more non-tax revenue through enhancing user fee.
- For the projected revenue receipt and projected expenditure of the state during 2026-27 to 2030-31, natural logarithmic method is recommended as it captures year-on-year changes including long run aspects of revenue and expenditure of the state. The projected pre-devolution revenue deficit is estimated and recommended of Rs.172642.66 crore during 2026-31 period.
- In order to meet the gap between the Central Government employees' DA and State employees' DA the salary and wage calculation is done by increasing 30 percent boost up during 2026-27. Thereafter, another 7 percent DA is added annually including the usual 10.4 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.
- For pension expenditure, boosting of 30 percent is recommended from 2026-27 to equate the Central Govt. employee DA. Thereafter, another 7 percent DA is added annually including the usual 14.5 percent (calculated according to Natural Logarithmic Growth method) year on year increase in growth is recommended from 2027-28 onwards yearly for the next three years.

TOR # 2

For enhancing Non-tax Revenue through user charges

- The stamp duty and registration charges for purchasing a property in Tripura is presently 5 percent based on the valuation of property. The present duty for the same can be enhanced to 7.5 percent, so that the non-tax revenue of the state can be improved.
- A minimum stamp duty (2 percent) is recommended for Will registration in order to improve the fiscal health of the state.
- In order to enhance the non-tax revenue, the state can think about the user charges from the stakeholders. There are different areas such as food storage and warehousing; road and bridges; lodging and parking place; tourist spots; charges from auditorium and banquet hall etc. where the government can escalate some user charges. There is a scope to enhance non-tax revenue through increase in user charges; because in Table 3.7 of Chapter 3, it is observed that the amount collected from food storage and warehousing head is very negligible amount. The growth of revenue collected from food storage and warehousing is negative and insignificant. Road and bridges is another potential area where revenue can be increased more imposing fine against the traffic rule breaker through strict surveillance.
- A minimum stamp fee is also recommended for Kabinama. The state can think about the adoption of it.

TOR # 3:

For Revenue and Capital Expenditure

- It is observed that the trend of non-committed (other) revenue expenditures has increased sharply after 2017-18. In order to maintain better financial health of the state, it is recommended to reduce non-committed expenditure of the different departments.
- The capital expenditure should be increased especially in the economic services. Enhancing capital expenditure can promote the development of the state in the long run. Special focus should be given to the infrastructure viz. non-conventional energy sources, telecommunications, road and transport service, tourism. Apart from that, some other areas should also prioritized such as crop husbandry, Food, Storage & Warehousing, Agricultural Research and Education, rural activities through different government programmes, foreign trade as the amount of expenditures are very small. The amount of capital expenditure should

be maintained in case of animal husbandry, fisheries, power project, and village small industries as per the spending made during 2022-23.

For Improving Efficiency in Public Spending

- Though allocative efficiency is better in education sector compare to national average, but it is observed the trend of allocation of fund as percentage of GSDP is decreasing from 2017-18. The allocation of fund on health is just at par with national average which is also not sufficient for the state which is situated at the remote corner of the country. Therefore, it is recommended for allocation of more fund as percentage of GSDP on education and health, because it can improve the human capital of the state.
- It is observed that the mean technical efficiency of the education sector is less than one. In order to improve the technical efficiency of the education department, the state should take the necessary measures to improve the output viz. physical infrastructure and human capital infrastructure (Teacher-student ratio).

TOR # 4

The state is maintaining fiscal deficit as per FRBM Act, 2005. The state should maintain the fiscal deficit as a percentage of GSDP below 3 percent and the total outstanding liabilities as a percentage of GSDP below 30 percent. It should be maintained in the long run for sustainable fiscal health.

TOR # 5

The major percentage of internal debt taken by the state come from market loan (SDL), NABARD and through special securities issued to NSSF. NABARD is providing loan for construction of rural infrastructure and the rate of interest is 1.5 percent less than bank rate. It is recommended that the state can take loan from NABARD especially for the construction of rural infrastructure as the rate of interest is comparatively lower.

TOR # 6

The state is implemented FRBM Act, 2005 (TFRBM). The state has maintained fiscal deficit as per the FRBM Act, 2005. The MTFP achieving report is very good and it should be continued in the long run.

TOR # 7

The performance of the rural local bodies and urban local bodies is satisfactory as the state has adopted decentralization policy. On the basis of the satisfactory performance and evaluation of the previous Finance Commission, the following recommendations are given for both Rural Local Bodies (RLBs) and Urban Local Bodies (ULBs). The recommended amount of 30 percent hike in 2026-27 is based on the last financial year of the 15th Finance Commission and there after 10 percent CAGR is proposed in addition for the following years for both RLBs and ULBs.

- It is recommended to provide Rs.1216 crore rural local bodies for the period 2026-27 to 2030-31 for the development to the rural local bodies.
- For the development of urban local bodies Rs.907.98 crore is recommended for the period 2026-27 to 2030-31. Out of that Rs.361.42 crore is recommended for water supply, sanitation, sewage, drainage and solid waste management and Rs.241.31 crore is for construction of road, street light, cremation ground etc. Rs.305.25 crore is recommended for the state specific project for the urban area.

For TTAADC area Rs.5745 crore is recommended for the development of the tribal people. Some suggestions and recommendations are given in order to improve the development of the local bodies in Tripura.

- Village councils should diversify revenue sources through improved taxation and fees, supported by capacity building. Declining Central Finance Commission grants call for stable financial support and efficient resource use. Greater focus on capital expenditure and infrastructure projects is essential for sustainable growth.
- A long-term financial strategy that makes use of government subsidies and PPPs will improve financial stability. Long-term sustainability for TTAADC and an improvement in quality of life can be achieved by concentrating on infrastructure and effective revenue management.
- It is suggested that the effort of diversification of revenue sources is needed to improve and stabilize income of the ULBs. Optimizing capital receipts, ensuring effective use of grants, and exploring additional funding sources (like PPPs) for capital projects will help meet future infrastructure demands. Monitoring and Efficiency with fluctuating state and central grants, a more predictable funding model or alternative funding sources could provide greater financial stability.

- After Kerala, Tripura is the second-largest producer of natural rubber with a production of 1,10,717 metric tons per year in India (Economic Review, 2023-24). It accounts for about 9 percent of the country's total rubber production. A significant portion of rubber cultivation in Tripura falls under the jurisdiction of the Tripura Tribal Areas Autonomous District Council (TTAADC). The TTAADC administration should consider introduction of tax to enhance the revenue of the state.
- In the TTAADC area, the authority can think about the imposition of tax on the production and consumption of country-liquor viz Langi (Chuwak) and Gora. Tripura has a tradition of producing these alcoholic beverages, which are often brewed using traditional methods with locally available ingredients, including rice, herbs, and wild plants. The legalization and taxation of country-liquor, similar to other northeastern states like Meghalaya and Mizoram could help to increase the revenue of the TTAADC area.
- In Tripura, tribal land rights have been protected by the Constitution and various laws, including the Tripura Land Revenue and Land Reforms Act, 1960, and the Forest Rights Act, 2006. The Tripura Tribal Areas Autonomous District Council (TTAADC) has played a crucial role in ensuring these rights and has prevented the alienation of land from tribal to non-tribal individuals. The Act has not confirmed the legal right to sell land; however, the apex authority is empowered to impose ownership rights for tribal people, so that wealth tax can be imposed on the said land. TTAADC also can generate revenue from selling or buying of land through the Land Revenue System.

TOR # 8

The state has taken several measures to enhance the performance of its different departments and public enterprises, but the performances of the PSEs are not satisfactory, even most of them are making losses and surviving also. The following recommendations are given for improvement of these PSEs as well as the fiscal health of the state.

- To improve the efficiency of the PSEs, strict monitoring by the appropriate authority is needed and incremental benefit of the employees should be performance based in order to avoid the loss in this sector.
- Merging TUTCL and TRTC into a single entity is recommended for better management and use of each other's resources. Tripura's urban magnitude is not sizable enough that it requires

a separate urban transport enterprise. After merging of these two can be more efficient and making profitable.

- THHDCL needs to expand its markets across India by distributing its product across all handicrafts shops in India and sell products through e-commerce.
- TTDC needs to expand their markets to increase their margin by developing ways of distribution of their products across all premium tea leaf shops in India. Online selling through e-commerce can be another option in making more sales as well as more margin for sustainability.
- TJML needs to be dissolved as quick as possible, and present manpower can be absorbed by any other PSU under the Directorate of Industries & Commerce, Govt. of Tripura, such as Tripura Industrial Development Corporation (TIDCL), and all physical assets can also be handed over to TIDCL.

TOR # 9

Tripura's reliance on central sources has grown over the past year and its own power output has declined, TSECL needs to investigate other power-generating sources in the state, especially renewable sources. TSECL must implement prepaid meters throughout the states, particularly with government departmental supplies, in order to reduce its losses and enhance its financial health. It must rely on its own resources in the long run for the expansion of machines and transmission lines, in most cases, TSECL has expanded under the central government schemes.

TOR # 10

The increase in outstanding guarantees, particularly their high proportion of revenue receipts in recent years, underscores the need for cautious fiscal management to avoid unsustainable debt burdens.

- The increase in outstanding liabilities will put pressure on the debt burden which may affect the sustainable development of the state. The government should assess the risks associated with issuing guarantees and prioritize projects with high economic returns. A robust monitoring system for contingent liabilities is suggested to ensure regular tracking and accountability.
- To mitigate the impact of guarantees on revenue, the government should focus on expanding revenue streams through economic reforms and investments in growth sectors. A plan is

needed to manage the contingent liabilities that may materialize, ensuring that unexpected fiscal shocks do not disrupt development priorities.

TOR # 11

The major subsidies are given to the agriculture however the performance of this sector is not satisfactory. Following suggestions are given in order to improve the situation.

- It is important to establish robust mechanisms to evaluate the effectiveness of subsidy programs and their alignment with development goals. The enhanced revenue receipts through diversified economic activities to accommodate future subsidy requirements without compromising fiscal stability.
- To maintain budgetary stability and promote the well-being of its community, the Government of Tripura must efficiently oversee the distribution of funds and make sure that development priorities are met.

TOR # 12

The state has done satisfactory performance the recommendations suggested by the previous Finance Commissions. The state has taken efforts in expansion and deepening of tax net. The state has performed better in moving towards replacement rate of population growth compare to national average. The state's disaster management policy prioritizes total risk management and vulnerability reduction. However, following recommendations are given in order to improve the performance.

- Overall health infrastructure is not satisfactory in the state. The state should focus more on it during the next Finance Commission period (2026-27 to 2030-31).
- A strong monitoring mechanism is recommended to build up tracking progress and outcomes, ensuring accountability and transparency in money use.
- Keeping an eye on the effective use of funds for operational and developmental objectives should be ensured by strict oversight and monitoring of the income and capital expenditure heads.
- An emergency fund for maintenance purposes should be allocated as a portion of the funds to cover operational expenditures. The funds under the Panchayat Development Plan (PDP) should be increased to enhance the functioning of panchayats and ensure the provision of essential civic services effectively.

TOR # 13

Based on the analysis of the debt productivity metrics, for the sustainable debt road map and for the development of potential thrust areas, the following suggestions and recommendations are given for ensuring fiscal sustainability and economic growth.

- To reduce reliance on debt, focus on diversifying the economy and implementing policies that promote long-term growth is needed.
- Enhancing tax efficiency can increase revenue without further increasing borrowing, ensuring better fiscal health. A balanced approach is essential to manage this ratio by adopting policies that stimulate economic growth and reduce the reliance on borrowing.
- To maintain fiscal prudence, reduce fiscal deficits, especially during recessions, by targeting high-return investments and cutting wasteful expenditures. Continued prioritization of efficient revenue collection is crucial for managing debt servicing costs. A larger share of borrowed funds should be allocated to capital expenditure to boost economic productivity. Monitoring the impact of these investments is vital to ensure that borrowed resources are being used effectively.
- To avoid a potential debt trap, Tripura should ensure loans which could be productively used through proper monitoring. Focus should be given on using loans to boost state income and drive overall economic betterment.
- Capital expenditure plays a vital role in funding road construction projects in Tripura's villages, which can significantly boost the state's revenue. By investing on infrastructure, such as roads, the state can improve market access for farmers, could be reduced transportation costs, and attract businesses. This will increase tourism, and enhanced social integration, all of which contribute to higher revenue and finally it will improve economic growth. Improved roads will be facilitate also better healthcare and education access, empowering rural communities, reducing poverty, and fostering long-term development that supports overall state prosperity.
- In order to improve the fiscal health of the state, five potential areas such as establishment of AIIMS, tourism, medicinal research hub, development of green energy and digital public infrastructure are identified and recommended for special funding.
- The projected Rs.1500 crore is recommended for the allocations on tourism, healthcare, green energy, medicinal research hub and organic farming. Out of the five, two important sectors viz construction of AIIMS and tourism are very much important for enhancing fiscal health.

- For establishing AIIMS, Rs.850 crore is recommended for construction in the first phase. Rs.250 crore for developing tourism infrastructure, Rs.100 crore for formation of medicine research hub, Rs.150 crore for developing the infrastructure for green energy and Rs.150 crore for strengthening of digital public infrastructure is recommended.

Reference

Directorate of Economics & Statistics, Government of Tripura, Economic Review of Tripura (2011-12 to 2023-2024), <https://ecostat.tripura.gov.in> accessed date 11 August 2024

Caves, D. W., Christensen, L. R., & Diewert, W. E. (1982). The Economic Theory of Index Numbers and the Measurement of Input, Output, and Productivity. *Econometrica*, 50(6), 1393–1414. <https://doi.org/10.2307/1913388> .

Charnes, A. Cooper, W.W. and Rhodes, E. (1978). Measuring the efficiency of decision making units, *European Journal of Operational Research*, 2 (6), 429-444. [https://doi.org/10.1016/0377-2217\(78\)90138-8](https://doi.org/10.1016/0377-2217(78)90138-8).

Coelli, T. J. (1996). Centre for efficiency and productivity analysis (CEPA) working papers. Department of Econometrics University, of New England Armidale, Australia, 1-50.

Das, M and Das, S (2025). Infrastructure, Performance and Enrolment Demand in Rural and Urban General Degree Colleges in Barak Valley, Assam in ‘Rural Habitat, Environment and Development: Changing Nature and Challenges’ by Saptarshi Mitra (ed.), Eastern Book House, Guwahati, 159-181.

Das, S. and Singh, P. (2019). Rural Women Empowerment and its Relationship with Economic Development: A Study of Cachar District of the State Assam, *IASSI Quarterly: Contributions to Indian Social Science*, Vol. 38(2), pp.313-332

Department of Finance, Government of Tripura, Budget At A Glance (2004-05 to 2022-23), <https://finance.tripura.gov.in/budget> accessed date 21st October 2024

Directorate of Economics & Statistics Government of Tripura, Some Basic Statistics of Tripura (2014, 2016, 2018, 2020 and 2022), https://ecostat.tripura.gov.in/some_basic_statistics accessed date 23rd October 2024

Finance Department of Tripura Tribal Areas Autonomous District Council (TTAADC), Budget Estimates (From the Year 2012-13 to 2022-23)

Gupta, S., Jalles, J.T. & Liu, J. (2022). Tax Buoyancy in Sub-Saharan Africa and its Determinants. *International Tax and Public Finance* 29, 890–921. <https://doi.org/10.1007/s10797-021-09694-x>.

Mohanty, Ranjan Kumar, Bhanumurthy, N. R (2018). Assessing Public Expenditure Efficiency at Indian States, NIPFP Working Paper Series, National Institute of Public Finance and Policy, New Delhi, No.225, 1-36.

Office of the Accountant General, Tripura, Finance Accounts VOL I (2004-05 to 2022-23), https://cag.gov.in/ae/tripura/en/state-accounts-report?defuat_account_report_type=359
accessed date 16 August 2024

Office of the Accountant General, Tripura, Finance Accounts VOL II (2004-05 to 2022-23), https://cag.gov.in/ae/tripura/en/state-accounts-report?defuat_account_report_type=359
accessed date 17 August 2024

Prasetyo, Ahmed Danu, Zuhdi, Ubaidillah (2013). The Government Expenditure Efficiency towards the Human Development, *Procedia Economics and Finance*, 5, 615 – 622.

Redseth, Kenneth Levold, Holmen, R. B, Kuosmanen, T, Scheyen, H (2024). Nonparametric estimation of allocative efficiency using indirect production theory: Application to container ports in Norway, *Journal of Productivity Analysis*, 1-13. <https://doi.org/10.1007/s11123-024-00719-1>

Reserve Bank of India (RBI), Handbook of Statistics on Indian States (2004-05 to 2022-23), <https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20States> accessed date 14 August 2024

Shah, S. (2021), An Evaluation of the State Finances of Tripura (2006-07 to 2016-17), XV Finance Commission, Government of India. <https://fincomindia.nic.in/commission-reports-fifteenth>

Singh, P. and Das, S. (2013). Rural Women Empowerment and Economic Development: A Study in Cachar District of Assam, *Journal of Social and Economic Policy*, 10(1), 53-66.

