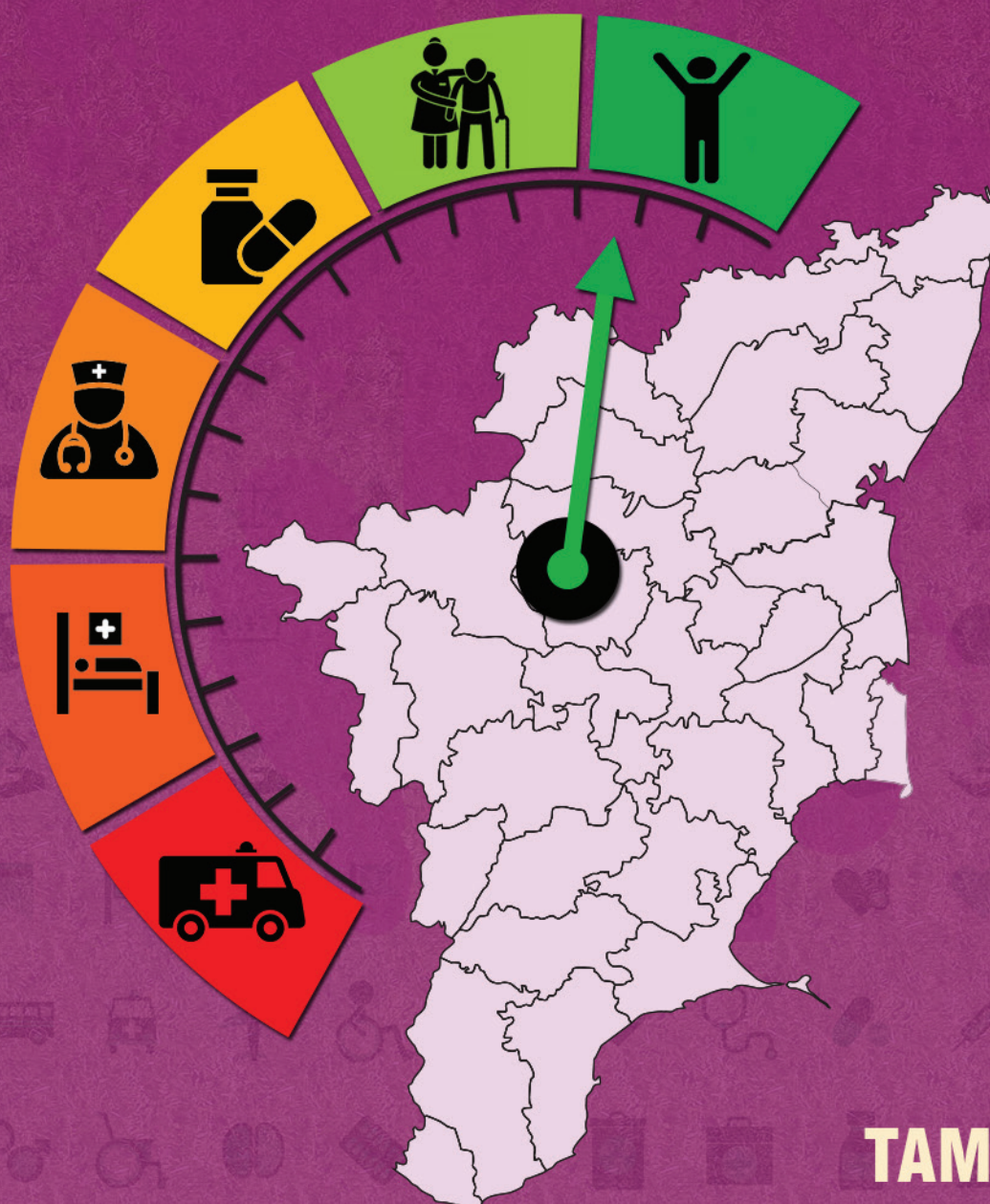


HEALTH DOSSIER 2021

Reflections on Key Health Indicators



TAMIL NADU

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
2 nd	Villupuram, Salem, Krishnagiri & Vellore	
4 th	Virudhunagar	Tiruchirapalli
6 th	Tiruppur	Cuddalore
8 th	Kancheepuram	Madurai
10 th	Thirunelveli	Namakkal
12 th	Ramanathapuram	Preambulur
13 th	Villupuram	Virudhunagar

TAMIL NADU

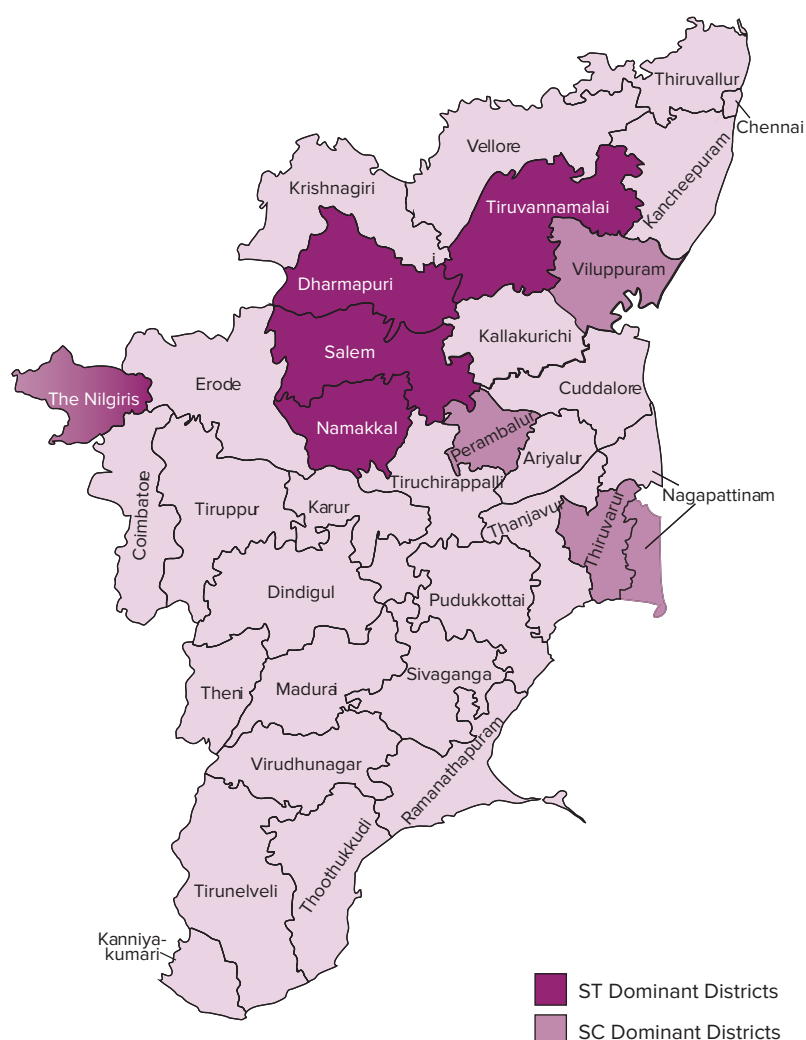
1. BACKGROUND

1.1 State Profile

Tamil Nadu is positioned^a 11th in India for a geographical spread of 1,30,058 km². The State is divided into 32 districts^b and estimated to have a population of over 7.21 crores^c, which accounts for approximately 5.94% of India's total population. It is projected that the population would reach around 7.6 crores by 2021^d. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.44 crores (20.01%) and 0.08 crores (1.10%), respectively. Out of the 32 districts, top five ST dominant districts account for 45.71% of ST population, and top five SC dominant districts account for 16.40% of SC population in the State (Annexure 1.1; fig 1).

The total length of roads^e in the Tamil Nadu is 2,61,436 km (5.23%^f), in which the length of the national highways is 4,946 km (4.3%^g) and

Figure 1: ST & SC Dominant Districts



^a Including all States & UTs; RHS 2019

^b RHS 2019

^c Census 2011

^d Census Population Projection 2019 Report

^e Basic Road Statistics 2019, MoRTH

^f Percentage of total length of roads in Tamil Nadu

^g Percentage of total length of National Highways in the country

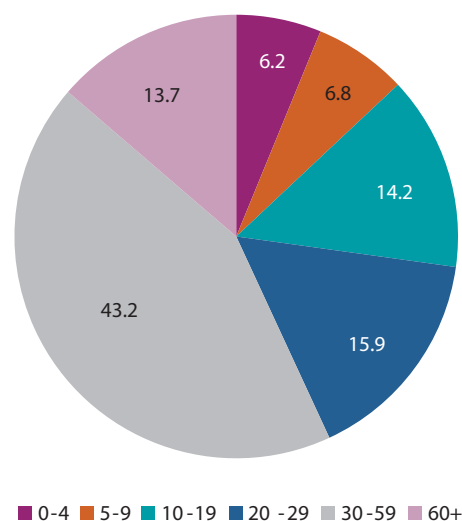
state highways is 12,095 km (6.91%^h). In the State, 51.6% of the population constitute the rural population, and 48.4% constitute the urban population^[3].

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 32 districts, 9 districts have population of 30 lakhs and above, 7 districts have a population between 20-30 lakhs, 13 districts have a population between 10-20 lakhs, and 3 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 908 females for every 1000 males is higher than the national average of 899 (Annexure 1.2). It is estimated that there are 14.2% of the total population in the age group of 10-19 years, 59.1% within 20 to 59 years; while 13.7% is 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 16.5 & 7.4 in 2005 to 14.2 & 6.1 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 73.5% in 2001 to 80.1% in 2011, with male & female literacy rates being 86.8% and 73.4%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 44.3% for higher education, 82.03% for senior secondary education, 93.92% for secondary education, 99.94% for elementary education, and 103.89% for primary education.

Figure 2: Tamil Nadu - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 13.7%^[2] of the Tamil Nadu's total population. The life expectancy at 60 years of age is 18.1 and 20.0 for males and females, respectively (2014-2018). In Tamil Nadu, 54.0% of elderly females and 19.0% elderly males living in urban areas and 66.0% of elderly females and 30.0% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 15.8 in 2011; which are 15.5 for males and 16.1 for females, 16.7 in rural & 14.8 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 30% for men and 32% for women as opposed to the national average of 31% for both (Elderly in India 2016).

^h Percentage of total length of State Highways in the country

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 97% (SRS MMR Bulletin 2007-09) to 60 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Tamil Nadu, 88.1% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report- Dindigul, Karur, Namakkal, Theni, and Tiruvannamalai districts reported good ANC coverage, ranging between 95.7% - 98.7%. Whereas, Cuddalore, Kancheepuram, Kanniyakumari, Thoothukudi and Virudhunagar districts reported relatively low ANC coverage, ranging between 76.1% - 84.2%. As reported in HMIS 2019-20, around 100.0% of the deliveries took place in institutions, out of which 54.3% took place in public health facilities. Total percentage of C-sections (44.3%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 52.2% are conducted at private facilities in the State. Around 1.7% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years slightly decreased from 55.0% (NFHS-4) to 53.4% (NFHS-5). Anaemia in females of reproductive age group is almost thrice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 37 (2005) to 15 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^m and Still Birth (per 1,000 live births) rates have also significantly decreased from 26.2 and 11.2 (2005) to 10 and 4 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 68.9 (2006-10) to 72.1 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5, Nagapattinam, Ramanthapuram, Thoothukkudi, Vellore and Virudhunagar districts reported low SRBsⁿ ranging between 722- 799; while Dharmapuri, Namakkal, Sivaganga, The Nilgiris, and Theni districts reported high SRBs ranging between 1035- 1130.

Full vaccination^o coverage for children between 12 – 23 months of age has improved from 76.1% (NFHS 4) to 90.4% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also increased from 48.3% (NFHS 4) to 55.1% (NFHS 5). An increase in childhood anaemia from 50.7% to 57.4% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per NFHS 5 report, Erode, Kanniyakumari, Sivaganga, Thiruvallur and Thiruvallur districts reported relatively low stunting rates ranging from 17.3 to 19.8, and Karur, Madurai, Nagapattinam, Pudukottai and Tiruppur districts

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m Neonatal Mortality Rate

ⁿ Sex Ratio at Birth

^o NFHS 5 Tamil Nadu Factsheet, based on information from vaccination card only

reported high stunting rates ranging from 30.6 to 33.6. For under-5 wasting - Coimbatore, Madurai, Pudukottai, Ramanathapuram, Salem and Thanjavur districts reported a low burden ranging from 7 to 10.1; and Dindigul, Erode, Karur, Sivaganga, Thiruvavur, Thoothukudi, and Tiruchirappalli reported a high burden ranging from 18.4 to 22.8.

2.3 Family Planning

The TFR^p reduced from 1.7 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in the State is reported as 7.5%, while the unmet need for spacing is 3.0%. Pudukottai district reported the highest total unmet need (12.2%) and Tiruppur reported the lowest (4.6%). Approximately 65.5% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 57.8% and 0.1% among males.

2.4 Communicable Diseases

The State has 32 functional IDSP units in place^[12]. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 17.31% of total disease burden (Annexure 1.4). Diarrheal diseases, dietary iron deficiency, and drug-susceptible are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6^q). For TB, the annualized total case notification rate is 124 and NSP^r success rate is 80 as opposed to the national averages of 163% and 79%, respectively^[12]. For NLEP^s, the reported prevalence rate of 0.37 per 10,000 population is less than the national average of 0.61^[12]. In FY 2019-20, 5 deaths due to Dengue, and none due to Malaria, and Kala Azar are reported in the State^[12].

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 62.0% of total disease burden in the State is from premature deaths and 38.0% is from disability or morbidity. Ischaemic heart disease, diabetes type 2, self-harm other means, falls and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 68.0% and injuries contribute to 14.69% of DALYs in the State. Tamil Nadu is positioned 5th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 4.9% of women and 20.1% of men used any kind of tobacco, while 0.4% of women and 29.2% of men consumed alcohol. Overall, metabolic factors (high fasting plasma glucose, high systolic blood pressure, high body-mass index, high LDL cholesterol) and ambient particulate matter pollution are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 14,65,361 crores. The State is positioned 12th out of 32 states in terms of per capita^t of ₹ 1,93,964. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 1,621, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^u as a share of Total Health Expenditure is 45.9%, which is less than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural

^p Total Fertility Rate

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r New Smear Positive

^s National Leprosy Eradication Programme

^t Directorate of Economics and Statistics (Status as on 01.03.2020)

^u Out of Pocket Expenditure

areas is estimated to be around ₹ 2,691 in public facilities, ₹ 30,480 in private facilities; whereas for urban areas, it is around ₹ 2,433 in public facilities and ₹ 37,735 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,387 in public facilities & ₹ 35,273 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,648 in public facilities and ₹ 32,468 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 27% in rural and 24% in urban areas; whereas for diagnostics, it is 32% in rural and 38% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time with no shortfall in the required SCs, PHCs and CHCs (Annexure 2, Figure 9). Currently, there are 8713 SCs, 1420 PHCs and 385 CHCs are in place, against the required 7321 SCs, 1216 PHCs and 304 CHCs. Similarly, in urban settings, there are 464 PHCs in place against the required 800, which accounts to a shortfall of 42%. Tamil Nadu has 32 DHs, 278 SDHs and 26 government medical colleges. In the State, 100% of DHs (32), 54.67% of SDHs (152), and 91.75% of CHCs (367) serve as functional FRUs. In tribal catchments, there are 543 SCs, 94 PHCs and 21 CHCs in place, against the required 213 SCs, 32 PHCs and 8 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 4285 HWCs (2444 SHCs, 1381 PHCs & 460 UPHCs) are operationalized in the State as of 22nd December 2021^v.

In the State, 31 districts are equipped with MMUs under the NRHM, and none under the NUHM. The State has 82% of required ASHAs in position under the NRHM and none under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 5 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 3613.03 availed (events) OPD services and 129.23 availed (events) IPD services. As per the NSSO data (2017-18), 63% of all OPD cases in rural areas and 41% in urban areas; and 57% of all IPD cases in rural areas & 42% in urban areas utilized public health facilities. The public health facility utilization in the State is above the national averages for both (Annexure 1.6).

^v AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^w

Indicator	Tamil Nadu 2011 ¹	India
Total Population (In Crore)	7.21	121.08
Rural (%)	51.60	68.85
Urban (%)	48.40	31.14
Scheduled Caste population (SC) (in crore)	1.44 (20.01%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.08 (1.10%)	10.45 (8.63%)
Total Literacy Rate (%)	80.09	72.99
Male Literacy Rate (%)	86.8	80.89
Female Literacy Rate (%)	73.44	64.64
Number of Districts in the Tamil Nadu ²	32	
Number of districts per lakh population in Tamil Nadu (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	3
	≥ 10 Lakhs - <20 Lakhs	13
	≥20 Lakhs - <30 lakhs	7
	≥30 Lakhs	9
ST SC Dominant (Top 5) Districts of Tamil Nadu ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
The Nilgiris - 4.46%	Thiruvavarur - 34.08%	
Dharmapuri - 4.18%	The Nilgiris - 32.08%	
Tiruvannamalai - 3.69%	Nagapattinam - 31.54%	
Salem - 3.43%	Perambalur - 31.01%	
Namakkal - 3.30%	Viluppuram - 29.37%	
Top 5 ST dominant district accounts for - 45.71%	Top 5 SC dominant district accounts for - 16.40%	

1.2 Key Health Status & Impact Indicators

Indicators	Tamil Nadu	India
Infant Mortality Rate (IMR) ³	15	30
Crude Death Rate (CDR) ³	6.1	6
Crude Birth Rate (CBR) ³	14.2	19.7

^w Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	60	113
Neo Natal Mortality Rate (NNMR) ⁴	10	23
Under Five Mortality Rate (U5MR) ⁴	17	36
Still Birth Rate ⁴	4	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	72.1	69.4
Sex Ratio at Birth ⁴	908	899

1.3 Key Health Infrastructure Indicators^x

Indicators				Numbers (Total)
Number of District Hospitals ²				32
Number of Sub District Hospital ²				278
Number of Government (Central + State) Medical College ⁶				26
Number of Private (Society + Trust) Medical Colleges ⁶				24
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	2444	2451	4917	6560
PHC-HWC	1381	1421	1421	1421
UPHC-HWC	460	420	420	420
Total-HWC	4285	4292	6758	8401
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	304	385	-26.64	
Number of Primary Health Centres (PHC)	1,216	1,420	-16.78	
Number of Sub Centres (SC)	7,321	8,713	-19.01	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	32	152	367	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	800	464	42.00	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	8	21	-162.50	
Number of PHC	32	94	-193.75	
Number of SC	213	543	-154.93	

^x Sources are mentioned at the end of Annexure 1

Patient Service ⁹	Tamil Nadu	India
IPD per 1000 population	129.23	62.6
OPD per 1000 population	3613.03	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	95.17	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019) ⁷	Tamil Nadu	India
% DALY ^z accountable for CMNNDs ^{aa}	17.31	27.46
% DALY accountable for NCDs	68	61.43
% DALY accountable for Injuries	14.69	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator ⁸	Tamil Nadu	India
Level of Birth Registration (%)	84.4	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	44	20.7
RMNCHA+N		
Maternal Health ⁹	Tamil Nadu	India
% 1st Trimester registration to Total ANC Registrations	93.1	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	88.1	79.4
Total Reported Deliveries	9,42,869	21410780
% Institutional deliveries to Total Reported Deliveries	100	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	54.3	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	45.7	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	44.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	37.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	52.2	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	1.7	53.4
Neonatal ⁹	Tamil Nadu	India
% live birth to Reported Birth	99.4	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	12.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	76.2	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Tamil Nadu	India
Sick New Born Care Unit (SNCU)	73	895
New Born Stabilization Unit (NBSU)	147	2418
New Born Care Corner (NBCC)	2267	20337
Child Health & Nutrition¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	53.8	60.6
Children under 5 years who are underweight (weight-for-age) (%)	22	32.1
Child Immunization¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on in-formation from vaccination card only (%)	90.4	83.8
Children age 12-23 months who have received BCG (%)	97.6	95.2
Children age 12-23 months who have received the first dose of measles-containing vaccine (MCV) (%)	95.8	87.9
Family Planning¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Tamil Nadu	India
Number of districts with functional IDSP unit	32	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Tamil Nadu	India
Annualized total case notification rate (%)	124	163
New Smear Positive (NSP) Success rate (in %)	80	79
National Leprosy Eradication Programme (NLEP)¹¹	Tamil Nadu	India
Prevalence Rate/10,000 population	0.37	0.61
Number of new cases detected	4,252	1,14,359
Malaria, Kala Azar, Dengue¹¹	Tamil Nadu	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	5	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	23.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	26.6	30.7

Non-Communicable Disease		
Diabeties and Hypertension ¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.3	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.5	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	7.5	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.1	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above) ¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	4.9	8.9
Men who use any kind of tobacco (%)	20.1	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	25.4	18.8
Injuries		
Road Traffic Accident ¹²	Tamil Nadu	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	5	N/A
Total number of fatal Road Accidents	9,813	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	18.4	33.7
Number of persons killed in Road Accidents	10525	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU) ¹¹	Tamil Nadu	India
Number of Districts equipped with MMU under NRHM	31	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Tamil Nadu	India
102 Type	0	9955
104 Type	0	605
108 Type	941	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	950	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators			
ASHA ¹³	Tamil Nadu	India	
Total number of ASHA targeted under NRHM	3242	946563	
Total number of ASHA in position under NRHM	2650	904211	
% of ASHA in position under NRHM	81.74	96	
Total number of ASHA targeted under NUHM	NA	75597	
Total number of ASHA in position under NUHM	NA	64272	
% of ASHA in position under NUHM	NA	85	
Community Process ¹¹	Tamil Nadu	India	
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	15015	554847	
Number of Mahila Arogya Samitis (MAS) formed	1025	81134	
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Tamil Nadu	India	
DH	31	796	
CHC	385	6036	
PHC	1462	20273	
UHC	11	126	
UPHC	420	3229	
Human Resource for Health ¹⁴			
HRH Governance		Tamil Nadu	
Specialist Cadre Available in the state (Y/N)		Yes	
HR Policy available (Y/N)		No	
Implementation of HRIS (Y/N)		No	
HR Integration initiated (Y/N)		Yes	
Public Health Cadre available (Y/N)		Yes	
Overall Vacancies (Regular + contractual)	Specialists (%)	17	
	Dentists (%)	23	
	MO MBBS (%)	19	
	Nurse (%)	9	
	LT (%)	25	
	ANM (%)	15	
HRH Distribution		Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴		1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴		6 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴		2:1	2:1

Ranking: Human Resource Index of Tamil Nadu¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	21611	17440	12180	5260	9431	63.75
Staff Nurse	35736	21714	21181	533	14555	
Lab Technician	7729	3620	3376	244	4353	
Pharmacists	3729	3855	3516	339	213	
MO MBBS ^{dd}	7374	5729	5122	607	2252	
Specialist ^{ee}	7904	5386	4671	715	3233	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Tamil Nadu		India	
Per Capita Government Health Expenditure (in ₹)	1,621		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.8		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	45.9		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Tamil Nadu		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	63	41	33	26
IPD - % of hospitalized cases using public facility	57	42	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	172	303	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1180	1139	845	915
IPD - Per hospitalized case (in INR) - Public	2691	2443	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	30480	37735	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	32	38	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	27	24	53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3387	3648	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	21,005	31,708	20,692	26,701
State Health Expenditure	Tamil Nadu		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.9		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

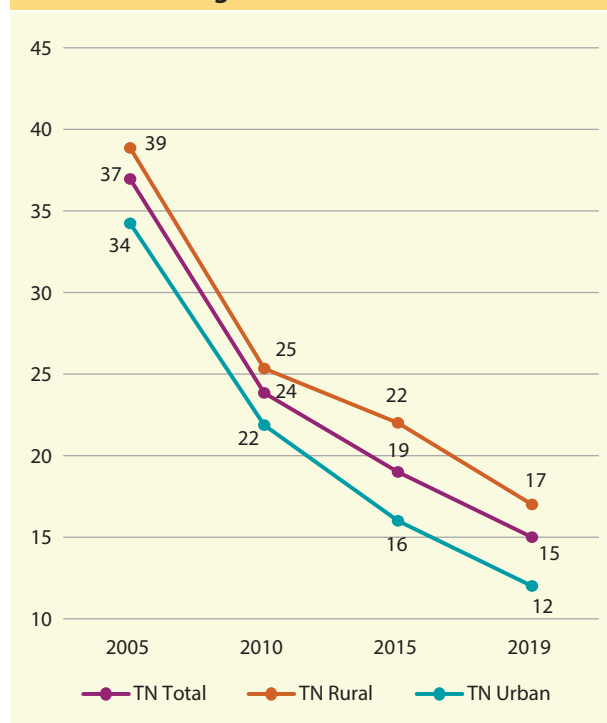


Figure 2: CBR & CDR Trend

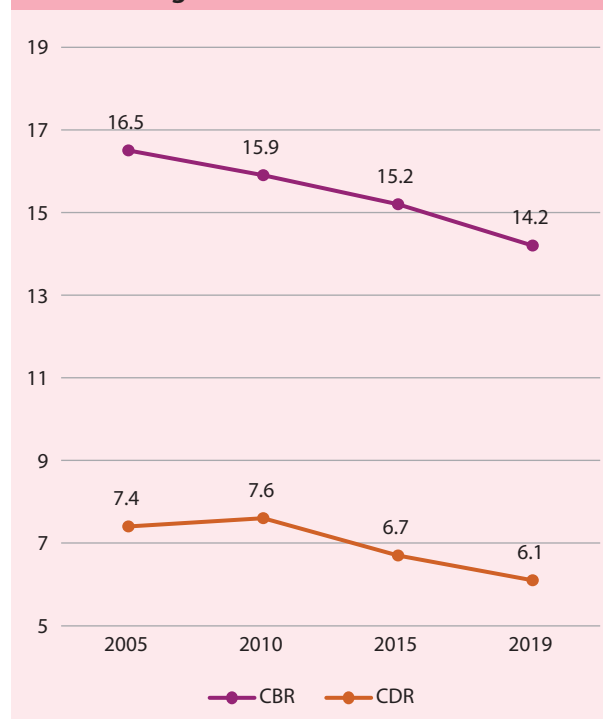


Figure 3: Life Expectancy At Birth Trend

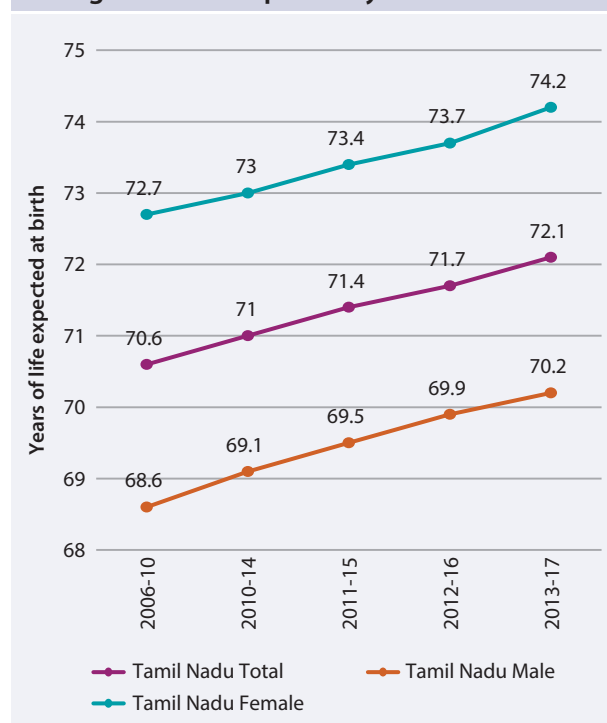


Figure 4: NNMR, TFR & Still Birth Trend

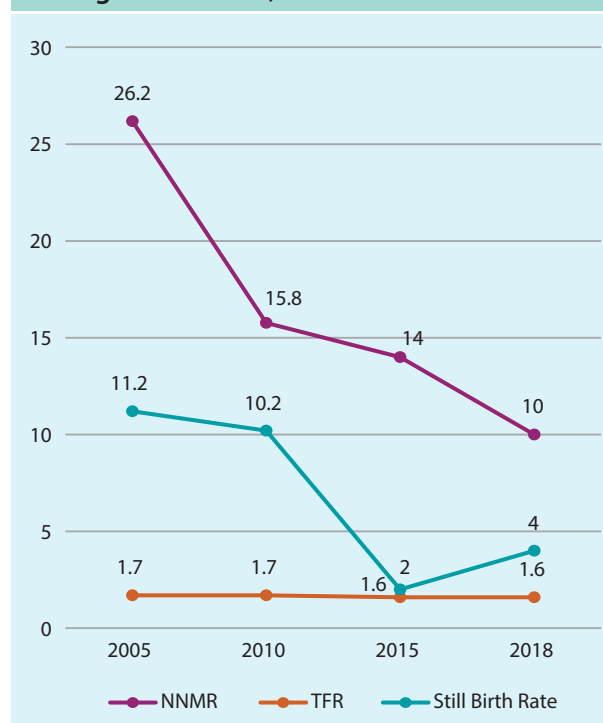


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

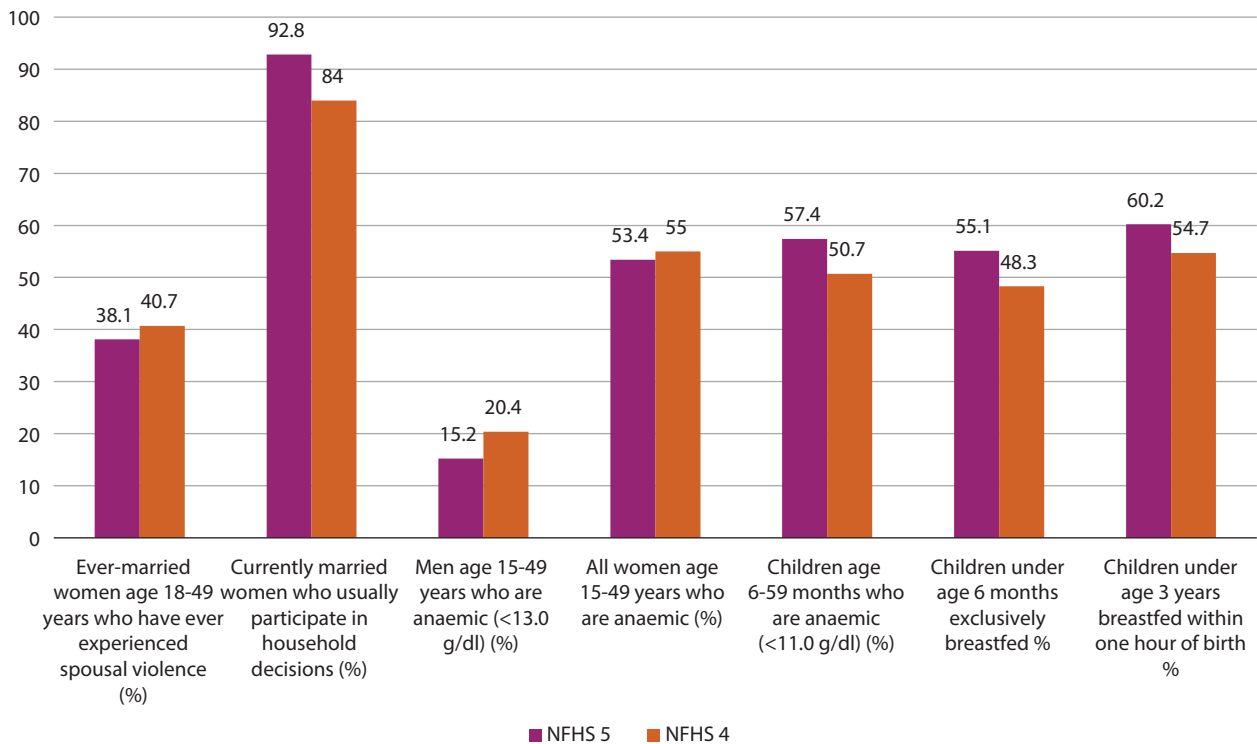


Figure 6: Top 15 causes of DALYs, 1990-2019

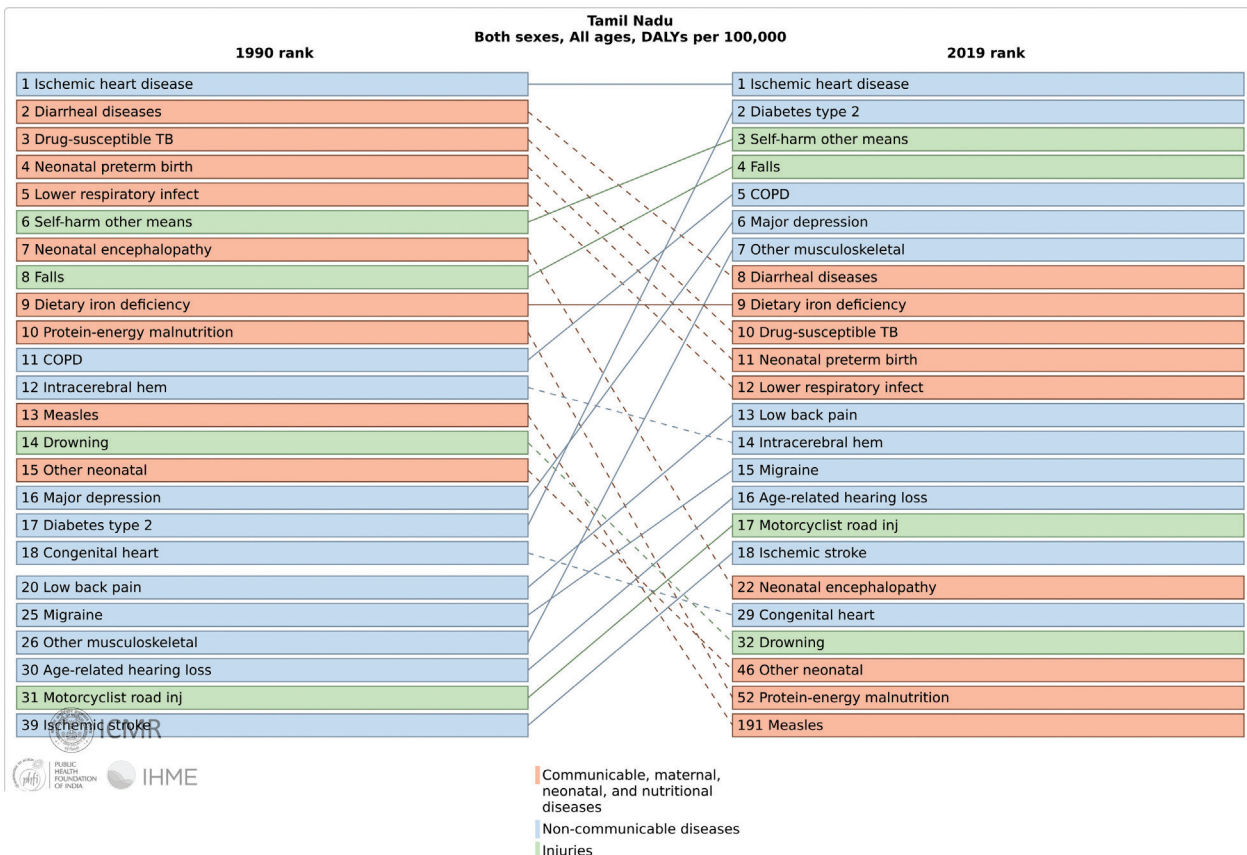


Figure 7: Top 15 risk of DALYs, 1990-2019

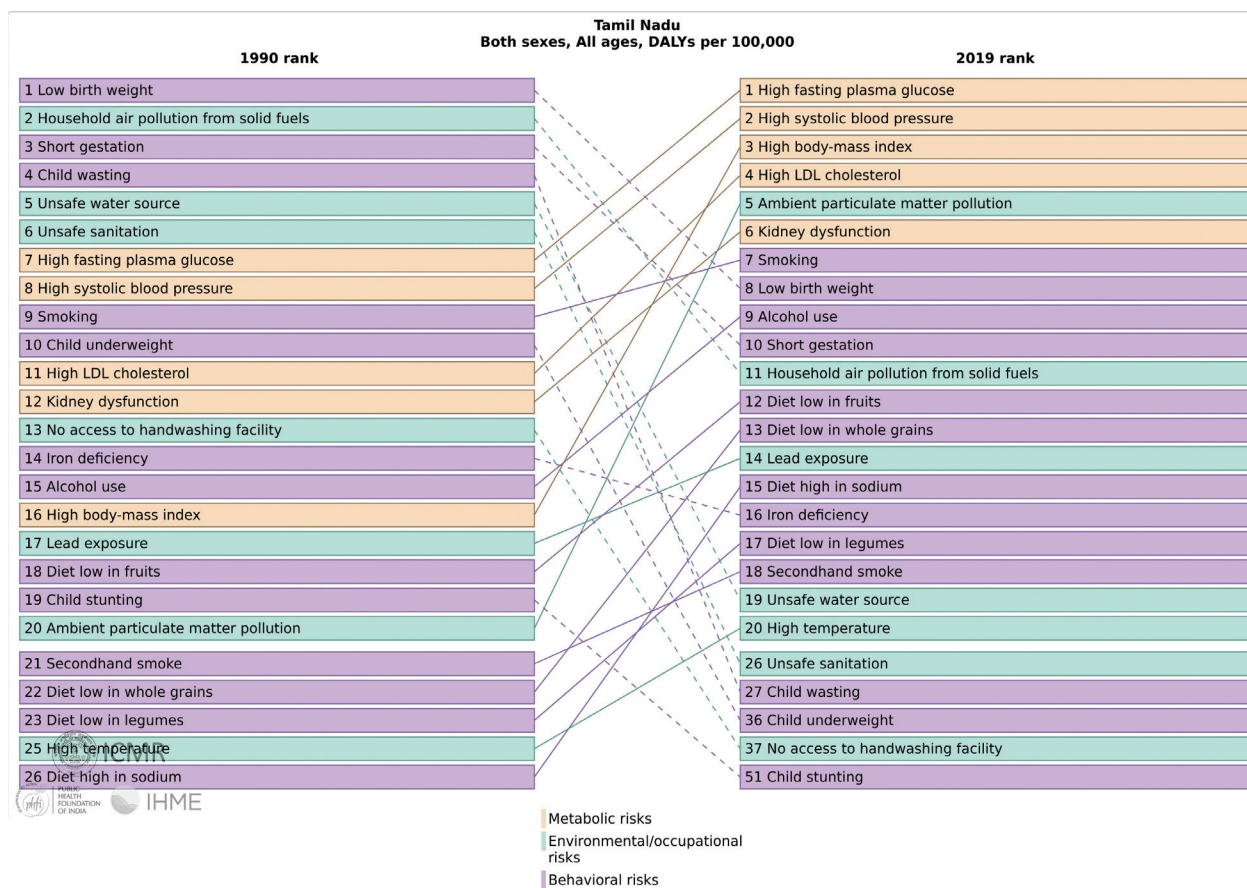


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)



Figure 9: Year Wise Health Infrastructure Shortfall (%)

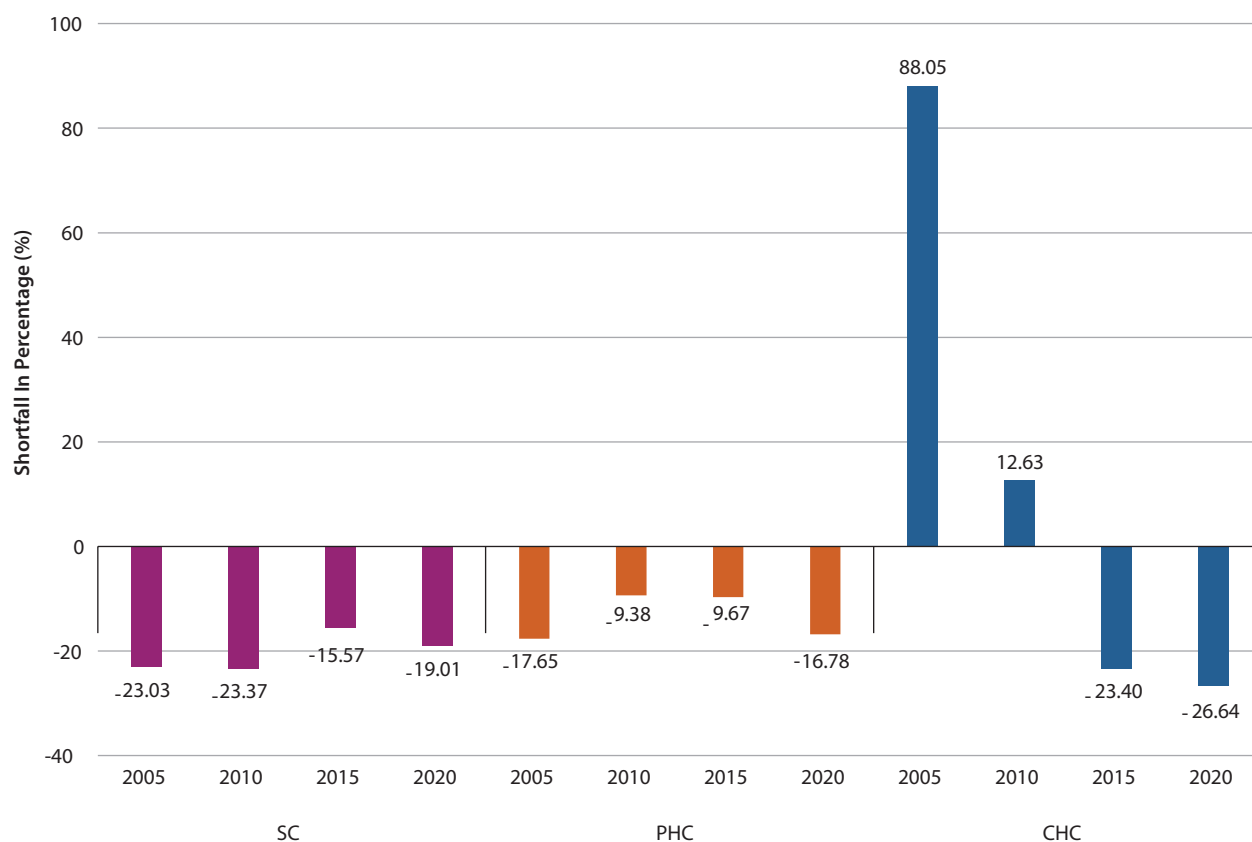
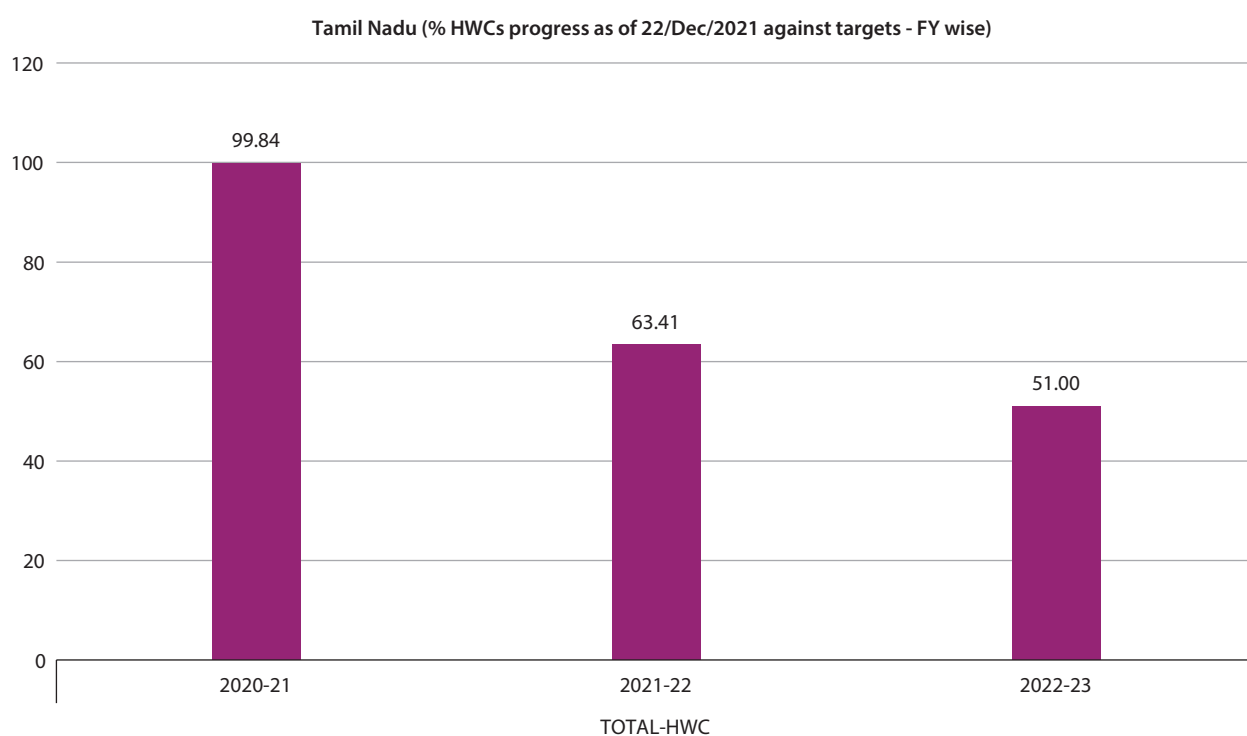


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																			
S. No.	States/Districts	Data Source		Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)			Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)
1	Tamil Nadu		NFHS 4 Total	954	64.1	NA	16.3	53.2	1.9	0.8	10.1	81.1	98.9	76.1	30.7	27.1	19.7		
2	Tamil Nadu		NFHS 5 Urban	893	61.1	88.9	10.4	67.6	4.8	2.6	8.1	88.8	99.8	89.4	17.9	22.2	13.9		
3	Tamil Nadu		NFHS 5 Rural	867	71.4	79.6	15.2	69.5	4.7	1.2	6.9	90.8	99.4	91.3	15	27.2	15.2		
4	Tamil Nadu		NFHS 5 Total	878	66.5	84	12.8	68.6	4.8	1.8	7.5	89.9	99.6	90.4	16.3	25	14.6		
5	Ariyalur		NFHS 5 Total	807	71.1	74.6	12.4	61.4	8.3	0.9	7	91.4	100	90.8	11.7	25.3	15.1		
6	Chennai		NFHS 5 Total	859	58.2	94.8	1.9	65.8	4.9	1.7	6.9	89.9	100	100	15.1	20.4	18.3		
7	Coimbatore		NFHS 5 Total	952	61	89.3	19.8	66.5	5	3.1	9.1	90	100	94.5	11.6	23	7		
8	Cuddalore		NFHS 5 Total	819	64.4	78.3	12.6	65.3	2.7	1.8	9.2	82.2	99.2	77.3	23.2	20.2	13.9		
9	Dharmapussurri		NFHS 5 Total	1052	75.5	79	16.7	70	6.4	0.4	8.5	94.5	99.6	96.1	8.1	28.7	16.9		
10	Dindigul		NFHS 5 Total	816	71.9	78.2	20.5	74.2	6.9	1.1	6.3	96.2	97	96.4	20.7	27.1	21.1		
11	Erode		NFHS 5 Total	807	77.7	82.4	13.7	70.6	3.6	1.8	4.9	93.9	100	97.2	19.1	19.4	20.9		
12	Kancheepuram		NFHS 5 Total	889	59.7	82.6	10	69.3	4.7	2.3	7.2	76.1	100	81.5	21.7	20.6	15.7		
13	Kanniyakumari		NFHS 5 Total	880	64.1	97.7	4.3	70.3	2.9	1.5	4.9	84.2	100	96	22.1	17.3	11.4		
14	Karur		NFHS 5 Total	839	74.6	78.2	13.3	65.8	3.9	0.9	7.5	95.7	100	84	13.3	33.6	18.4		
15	Krishnagiri		NFHS 5 Total	857	73.6	78.6	20.3	70	6	0.4	4.9	93.1	99.6	90.3	7.1	29	10.4		
16	Madurai		NFHS 5 Total	815	66.3	83.9	11.5	69.7	6.4	3.1	8.7	89.5	100	92.9	25	32.4	9.5		
17	Nagapattinam		NFHS 5 Total	799	70.9	87.8	6.3	65.9	5.8	1.8	8.5	93.1	99.7	94.6	14.4	32.3	12.5		
18	Namakkal		NFHS 5 Total	1130	68.8	87.7	14.2	65.2	4.1	1.9	6.5	97.8	100	84.4	12.9	25.2	10.3		

19	Perambalur	NFHS 5 Total	887	75.5	81.1	21.4	63.1	7.7	0.9	11.4	92.2	100	94	12.6	29.1	15.9
20	Pudukkottai	NFHS 5 Total	804	72.9	81.1	11.6	68	6			91.6	100	75.9	22.3	32.2	9.5
21	Ramanathapuram	NFHS 5 Total	787	69.7	84.1	14.7	72.2	6.5			88.2	99.6	91.1	19.9	26.4	17.7
22	Salem	NFHS 5 Total	900	67.5	81.6	23.7	69	4			85	100	81.8	6.7	23.6	10.1
23	Sivaganga	NFHS 5 Total	1127	67.7	85.3	4.5	67.3	4.9			90.9	100	81.5	16	27.6	22.8
24	Thanjavur	NFHS 5 Total	934	70.6	83.8	4.1	64.8	4.9			93.7	100	66.7	18.2	19.6	8.3
25	The Nilgiris	NFHS 5 Total	1035	74.5	89.1	11.1	77.9	4.5			92.5	100	98	18.8	26.7	17.3
26	Theni	NFHS 5 Total	1057	67.4	85.7	16	70.6	8.2			98.7	100	95.2	17.3	20.2	15.5
27	Thiruvallur	NFHS 5 Total	991	57.4	83.6	13.4	67.9	3.8			85.4	100	88.6	26.3	18.1	17
28	Thiruvavur	NFHS 5 Total	901	75.2	89.3	9.1	70.2	4.3			92.3	100	97.1	18.7	19.8	18.4
29	Thoothukkudi	NFHS 5 Total	734	57.8	88.5	8.9	67.6	6.6			80.7	100	100	19.9	20.3	18.4
30	Tiruchirappalli	NFHS 5 Total	919	67.8	83.6	13.5	68.1	6.8			90.5	98.6		12.4	27.6	20.9
31	Tirunelveli	NFHS 5 Total	939	61.3	85.6	10.7	69.8	5			85	100	95.5	8.7	29.4	12
32	Tiruppur	NFHS 5 Total	1016	59.9	87.1	10.5	69.3	3.8			93.5	100	NA	16.7	21.5	15.3
33	Tiruvannamalai	NFHS 5 Total	848	69.6	79.8	11.6	71.9	3.1			97.7	99.1		3.6	30.6	14.8
34	Vellore	NFHS 5 Total	722	71.4	81.6	14.9	65.2	3.1			95.4	99.5	97.2	9.9	29.8	13.1
35	Viluppuram	NFHS 5 Total	916	77.6	75.4	19	71.6	3.2			94.9	99.1		19.8	23.9	12.4
36	Virudhunagar	NFHS 5 Total	730	51.3	84.1	15.5	68.1	3.1			83.4	97.8		18.5	29.2	14.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

NOTES

[illegible]

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