



DAIRYING IN TAMIL NADU

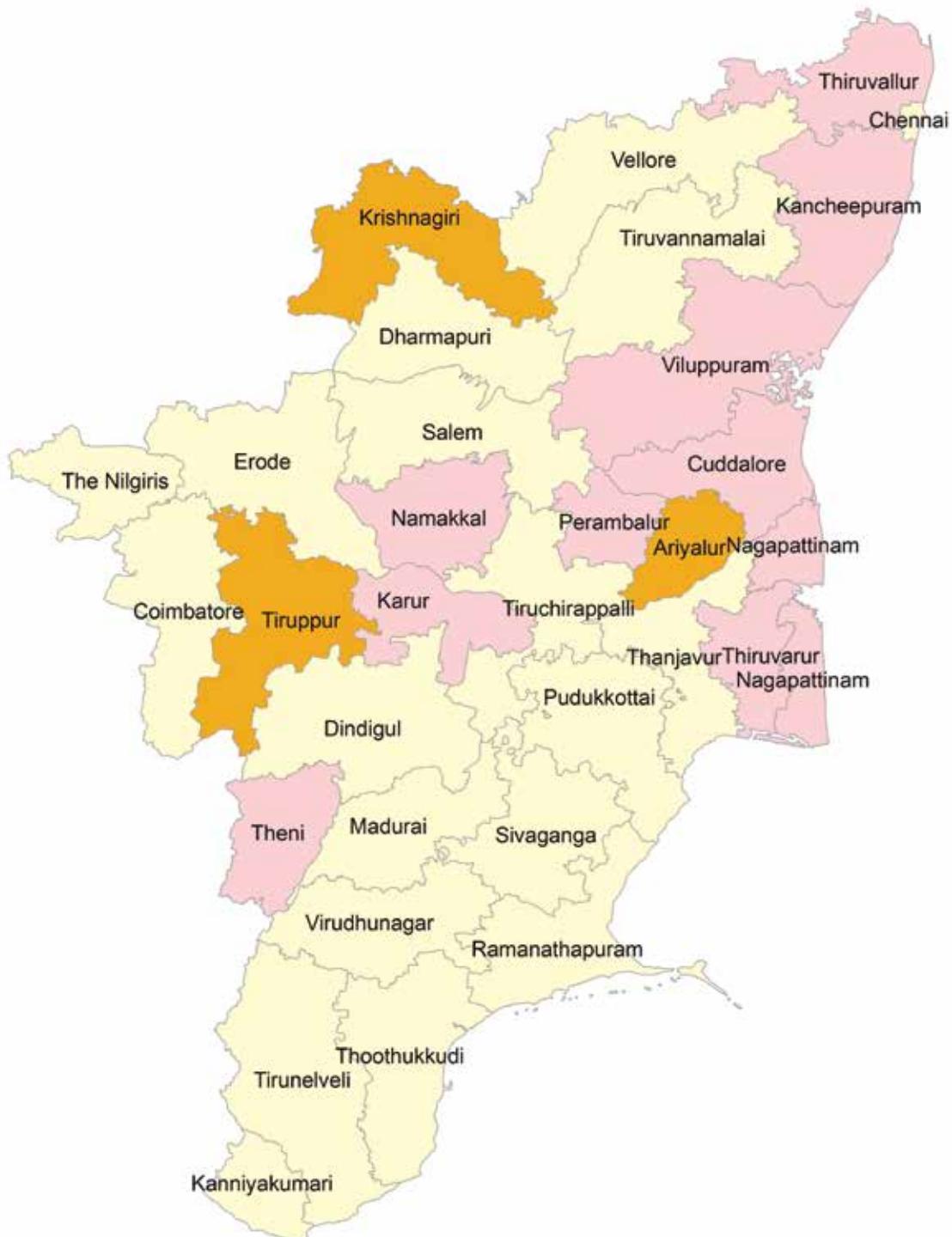


A STATISTICAL PROFILE 2014



Tamil Nadu

Formation of districts: Census 1991 to 2011



Census year

2001

2011



FOREWORD

In this compilation of the statistical profile of the dairy sector in various States, the main landmarks or highlights are: Trends in human demographics, animal population and production; Inputs for enhancement of productivity such as breeding, health and nutrition; and Government expenditure, along with supporting resources.

This review includes statistical tables on selected parameters for each State taken as a whole, along with time-series data for districts wherever available. Since spatial presentation of data can yield insights not immediately comprehensible from tables, thematic maps for selected parameters (with data both at a point of time as well as changes over a period of time) have also been included.

The objective of this publication is to provide a detailed presentation of various parameters, underlying factors, and their inter-linkages so as to enable effective planning and implementation of development interventions. We also hope that a wide range of readers, students, researchers, veterinarians, planners, scientists, administrators, policy makers and academics, as well as other development practitioners and professionals in government and non-governmental organisations, will find this publication useful for their studies and projects.

Although a wealth of information is available on many aspects of dairying from different sources, it is not only scattered but also there are inconsistencies on the same aspect in data maintained by different agencies. While limited data could mean being less informed, extensive information could mean an overload and defeat the very purpose of organising it. This review, therefore aims at balancing the most comprehensive information with the most relevant. We sincerely thank government and non-government agencies for providing information. While extreme care has been taken in juxtaposing data, some errors cannot be ruled out.

This publication "Dairying in Tamil Nadu – A Statistical Profile 2014" is amongst a series of similar publications for different states being brought out by National Dairy Development Board (NDDB).

Dilip Rath

Managing Director, NDDB

December 2014
Anand, Gujarat



INDEX

I. GENERAL STATISTICS

I.1. Tamil Nadu at a Glance

I.1.1: General Statistics: Tamil Nadu vs. India	2
I.1.2: Formation of Districts in Tamil Nadu	4
I.1.3: Change in Name of Districts	4

I.2. Social Statistics: Human Population

I.2.1: Human Population by Residence and Sex – 2001	5
I.2.2: Human Population by Residence and Sex – 2011	7
I.2.3: Rural Households, Electricity and Tap Water Supply – 2001 and 2011	9
I.2.4: District-wise SC and ST Population – 2001 and 2011	11

I.3. State Economy

I.3.1: Net State Domestic Product (NSDP) and Per Capita Income	13
I.3.2: Value of Output: Agriculture and Livestock	15
I.3.3: Revised Budget Estimate for Animal Husbandry Department, Tamil Nadu	16
I.3.4: Fund Utilisation Under Rashtriya Krishi Vikas Yojna (RKVY) for Animal Husbandry in Tamil Nadu	17
I.3.5: Fund Utilisation Under Rashtriya Krishi Vikas Yojna (RKVY) for Dairying in Tamil Nadu	18

II. LIVESTOCK CENSUS

II.1. Animal Population

II.1.1: Summary of Livestock Census (1992-2012) - Tamil Nadu	20
II.1.2: District-wise Total Bovine Population	21
II.1.3: District-wise Female Population	22
II.1.4: District-wise Breedable Population	23
II.1.5: District-wise In-milk Population	25
II.1.6: District-wise Milch Population	26
II.1.7: District-wise Male Population	27

II.2. Sex Ratio in Dairy Animals

II.2.1: District-wise Male - Female Ratio	28
---	----

II.3. Wet-Dry Ratio of Dairy Animals

II.3.1: District-wise Wet-Dry Ratio	29
---	----

II.4. Livestock Density

II.4.1: District-wise Density of Total Livestock and Bovine	30
II.4.2: District-wise Density of Poultry and Small Ruminants	31

II.5. Breed-wise Population

II.5.1: District and Breed-wise Population of Indigenous Cattle in Tamil Nadu - 2007	33
II.5.2: District-wise Male, Female and Milch Animals of Alambadi and Bargur Breeds - 2007	34
II.5.3: District-wise Male, Female and Milch Animals of Jellicut and Kangayam Breeds - 2007	35
II.5.4: District-wise Male, Female and Milch Animals of Manapari and Umlacherry Breeds - 2007	36
II.5.5: District-wise Male, Female and Milch Animals of Other Graded and Non-Descript Indigenous Breeds - 2007	37
II.5.6: District and Breed-wise Population of Exotic and Crossbred Animals in Tamil Nadu - 2007	38
II.5.7: District-wise Male, Female and Milch Animals of Jersey and Holstein Friesian Exotic and Crossbreds - 2007	39
II.5.8: District-wise Male, Female and Milch Animals of Other Exotic and Crossbreds and Total Exotic and Crossbreds - 2007	40
II.5.9: District and Breed-wise Population of Buffalo in Tamil Nadu - 2007	41
II.5.10: District-wise Male, Female and Milch Animals of Murrah and Toda Buffalo Breeds - 2007	42
II.5.11: District-wise Male, Female and Milch Animals of Other Graded and Non-Descript Buffalo Breeds - 2007	43

III. CATTLE AND BUFFALO BREEDS

III.1. Distribution of Native Breeds of Tamil Nadu

III.1.1: Distribution of Cattle Breeds of Tamil Nadu	46
III.1.2: Distribution of Buffalo Breeds of Tamil Nadu	50

III.2. Performance of Breeds

III.2.1: Performance of Cattle and Buffalo Breeds	51
---	----

IV. MILK PRODUCTION

IV.1. Production Performance

IV.1.1: Year-wise In-milk Bovine Population, Milk Yield and Milk Production	54
IV.1.2: Year and District-wise In-milk Bovine Population	55
IV.1.3: Year and District-wise In-milk Indigenous Cattle Population	57
IV.1.4: Year and District-wise In-milk Crossbred Cattle Population	59
IV.1.5: Year and District-wise In-milk Buffalo Population	61



IV.2. Production Performance: Milk Yield	
IV.2.1: Year and District-wise Bovine Milk Yield	63
IV.2.2: Year and District-wise Indigenous Cattle Milk Yield	65
IV.2.3: Year and District-wise Crossbred Cattle Milk Yield	67
IV.2.4: Year and District-wise Buffalo Milk Yield	69
IV.3. Production Performance: Milk Production	
IV.3.1: Year and District-wise Bovine Milk Production	71
IV.3.2: Year and District-wise Indigenous Cattle Milk Production	73
IV.3.3: Year and District-wise Crossbred Cattle Milk Production	75
IV.3.4: Year and District-wise Buffalo Milk Production	77
IV.3.5: Year and District-wise Milk Production Density	83
IV.4. Production Performance: Milk Availability	
IV.4.1: Year and District-wise Per Capita Milk Availability.....	85
IV.5. Production Performance: Milk Utilisation	
IV.5.1: Milk Utilisation Pattern in Households (1993-94 to 2012-13)	87
V. VETERINARY INFRASTRUCTURE AND SERVICE DELIVERY SYSTEM	
V.1. Veterinary Infrastructure	
V.1.1: Year and District-wise Veterinary Institutes	90
V.1.2: District-wise AI Centres – Government Agencies	91
V.1.3: District-wise AI Centres – Cooperatives.....	92
V.1.4: District-wise AI Centres Established by Private AI Workers of TNLDA.....	93
V.2. Service Delivery System - Artificial Insemination	
V.2.1: District-wise AI Performed by Government Agencies – Cattle	95
V.2.2: District-wise AI Performed by Government Agencies – Buffaloes.....	96
V.2.3: District-wise AI Performed by Government Agencies – Bovine	97
V.2.4: District-wise AI Performed by Cooperatives - Cattle	98
V.2.5: District-wise AI Performed by Cooperatives - Buffaloes	99
V.2.6: District-wise AI Performed by Cooperatives - Bovine	101
V.3. Service Delivery System - Animal Health	
V.3.1: District-wise Vaccination Performed for Foot-and-Mouth Disease by Government of Tamil Nadu	102
V.3.2: District-wise Vaccination Performed for Haemorrhagic Septicaemia by Government of Tamil Nadu ...	103
V.3.3: District-wise Vaccination Performed for Black Quarter by Government of Tamil Nadu	104
V.3.4: District-wise Bovine Vaccination	105
V.3.5: District-wise Bovine Treated	106
V.3.6: District-wise Bovine Castration	107
VI. FEED RESOURCES	
VI.1. Feed Resources - Fodder	
VI.1.1: Area under Fodder Crops and Gross Sown Area	110
VI.1.2: District-wise Irrigated and Unirrigated Area under Jowar Fodder Crop	111
VI.2. Feed Resources - Availability vs. Requirement	
VI.2.1: District-wise Dry Matter (DM) Availability, Requirement and Balance	113
VI.2.2: Availability, Requirement and Surplus/Deficit of Feed Nutrient.....	115
VI.3. Feed Resources - Consumption	
VI.3.1: Feed and Fodder Consumption – By Animal.....	115
VII. AGRICULTURE	
VII.1. Agro-Climatic Zones	
VII.1.1: Details of Agro-Climatic Zones.....	118
VII.2. Land Use Pattern	
VII.2.1: District-wise Land Use Pattern	121
VII.3. Area and Production	
VII.3.1: District-wise Area under Crops and Production of Cereals and Pulses.....	122
VII.3.2: District-wise Area under Crops and Production of Food Grains and Oilseeds.....	123
VII.3.3: District-wise Area under Crops and Production of Sugarcane and Cotton.....	124
VII.4. Land Holding and Water Resources	
VII.4.1: Operational Holdings in Tamil Nadu	125
VII.4.2: Net Irrigated Area under Different Sources of Irrigation	125
VII.4.3: Major River Basins of Tamil Nadu	125
VII.4.4: Medium River Basins of Tamil Nadu – West-Flowing Rivers with Catchment Area	127
VII.5. Rainfall	
VII.5.1: District- wise Average Annual Rainfall	128
VII.6. Ground Water Status	
VII.6.1: Distribution of Blocks According to Ground Water Status	130
GLOSSARY	131

PART I : GENERAL STATISTICS

The state of Tamil Nadu has been one of the largest economy in the country. Of late, a range of local factors like water for irrigation, electricity for industry, agitations etc. have restrained growth rate in the GDP. With phenomenal growth in the tertiary sector, the reliance on agriculture and allied sector has reduced considerably, with the percentage share of NSDP from agriculture and allied sector declined to as low as 7.5 per cent in 2013-14. The Livestock sub-sector is emerging as the mainstay for rural population of Tamil Nadu with its share to the agriculture & allied sector GDP has increased to 34 per cent in 2013-14.

According to the Census of India 2011, the population of the state grew by 15 per cent during the decade ending 2011 and touched at 7.2 crore. Tamil Nadu is one of the most urbanised states and the seventh most populous state in the country. The Chennai Metropolitan Region and other northern districts have about one-third of the state's population. The Scheduled Caste population accounts for one-fifth of the total population. The literacy rate has been much above national average and the male-female literacy gap has narrowed down. The sex ratio improved from 986 female per 1,000 males in 2001 census to 996 in 2011 census and was higher than national average of 943.





I.1. Tamil Nadu at a Glance

TABLE I.1.1: General Statistics: Tamil Nadu vs. India

Particulars	Unit	Year	Tamil Nadu	India
State Geography & Rural Infrastructure				
Geographical Area	'000 sq. km	2011	130.1	3,287.3
Districts	nos	2011	32	640
Sub-Districts	"	"	215	5,924
Villages	'000	"	15.9	640.9
Households	million	"	18.5	249.4
Rural Households				
2001	'000	2001	8,284	137,414
2011	"	2011	9,528	168,565
Rural Households with Electricity				
2001	%	2001	71	44
2011	"	2011	91	55
Rural Households with Tap water supply				
2001	%	2001	60	24
2011	"	2011	80	31
Human Population				
Population	million	2011	72.1	1,210.1
Urban (As % of total)	%	"	48.4	31.2
Rural (As % of total)	"	"	51.6	68.8
Density of Population	per sq. km	"	555	382
Scheduled Castes (As % of total)	%	"	20.0	16.6
Scheduled Tribes (As % of total)	"	"	1.1	8.6
Sex Ratio	Ratio	"	996	943
Literacy Rate (excluding population of 0 to 6 age group)				
Male	%	2011	86.8	80.9
Female	"	"	73.4	64.6
Urban	"	"	87.0	84.1
Rural	"	"	73.5	67.8
Per Capita Income (at current prices)	₹	2012-13	98,550	69,585
Livestock Population				
Bovine	million	2012	22.7	512.0
Indigenous Cattle	"	"	9.6	299.9
Crossbred Cattle	"	"	2.5	151.2
Buffaloes	"	"	6.4	39.7
Small Ruminants	"	"	0.8	108.7
Poultry	"	"	12.9	200.2
Livestock Population				
Bovine	million	2007	30.8	529.7
Indigenous Cattle	"	"	13.2	304.8
Crossbred Cattle	"	"	3.8	166.0
Buffaloes	"	"	7.3	33.1
Small Ruminants	"	"	2.0	105.3
Poultry	"	"	17.2	212.1
Number of Major Cattle Breeds	nos	"	3	30
Number of Major Buffalo Breeds	"	"	1	12



I.1. Tamil Nadu at a Glance

TABLE I.1.1: General Statistics: Tamil Nadu vs. India

Particulars	Unit	Year	Tamil Nadu	India
Livestock Production				
Milk Production - Total	'000 MT	2013-14	7,049	137,686
Crossbred Cattle	"	"	5,822	33,154
Indigenous Cattle	"	"	623	28,104
Buffaloes	"	"	605	70,109
Goats	"	"	-	4,983
Per Capita Milk Availability (estimated)	grams/day	"	260	302
Egg Production	million	"	14,123	73,438
Estimated Meat Production	'000 MT	"	464	6,235
Marine & Inland Fish Production	"	"	620	9,426
Wool Production	'000 Kg	"	1.8	47,909
Veterinary Infrastructure*				
Veterinary Institutes	nos	2013-14	2,579	57,724
Semen Stations	"	2011-12	4	54
AI Centers (Govt)	"	2013-14	3,429	77,765
Veterinary Services				
AI Done (Govt)	'000	2013-14	4,762	41,165
Vaccination Done				
H.S. Vaccination	"	2013-14	509	
B.Q. Vaccination	"	"	380	
FMD Vaccination	"	"	20,080	
Total Bovine	"	"	20,969	
Treatment	"	"	13,295	
Castration	"	"	165	
Agricultural Resources				
Forest Cover	%	2011-12	16.34	21.30
Pasture and Grazing Land	'000 ha	"	110	10,296
As % of total reporting area	%	"	0.85	3.4
Area Under Fodder Crops	'000 ha	"	240	7,736
Gross Irrigated Area As % Gross Cropped Area	%	"	60	47
Cropping Intensity	%	"	118	139
Irrigation Intensity	%	"	119	140
Production of Major Crops				
Cereals	'000 MT	2012-13	5,393	238,792
Pulses	"	"	212	18,342
Oilseeds	"	"	802	30,941
Sugarcane	"	"	34,014	341,199
Fodder Production	MMT	2008	25	933
Ground Water Status (2009 vs 2004)				
Safe	% of Blocks	2009 & (2004)	35 (38)	73 (71)
Semi Critical	"	"	17 (15)	9 (10)
Critical	"	"	9 (9)	3 (4)



I.1. Tamil Nadu at a Glance

TABLE I.1.1: General Statistics: Tamil Nadu vs. India

Particulars	Unit	Year	Tamil Nadu	India
Over Exploited	% of Blocks	2009 & (2004)	36 (37)	14 (15)
Salinity Affected	"	"	3 (2)	1(1)

* Figures for India are for 2011-12.

SOURCES: Census 2001 & 2011, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.

18th and 19th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Minutes of the Meeting of Technical Committee on Direction for improvement of Animal Husbandry Statistics held during 24th to 25th July, 2014, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Dynamic Ground Water Resources of India as on 31st March, 2009, Central Ground Water Board, Ministry of Water Resources, Govt. of India.

Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

Ministry of Statistics and Programme Implementation, Govt. of India.

TABLE I.1.2: Formation of Districts in Tamil Nadu

New Districts	Year of Formation	Carved out of
Dharmapuri	1965	Salem
Pudukkottai	1974	Tiruchirappalli and Thanjavur
Erode	1979	Coimbatore
Sivaganga	1985	Ramanathapuram
Dindigul	1985	Madurai
Thoothukkudi	1986	Tirunelveli
Virudhunagar	1987	Ramanathapuram
Tiruvannamalai	1989	Vellore
Nagapattinam	1991	Thanjavur
Cuddalore	1993	South Arcot
Viluppuram	1993	South Arcot
Karur	1995	Tiruchirappalli
Perambalur	1995	Tiruchirappalli
Theni	1996	Madurai
Kancheepuram	1997	Chengalpattu MGR
Thiruvallur	1997	Chengalpattu MGR
Thiruvarur	1997	Thanjavur
Namakkal	1997	Salem
Ariyalur	2001, 2007	Perambalur
Krishnagiri	2004	Dharmapuri
Tiruppur	2009	Coimbatore and Erode

SOURCE: District Administration websites of Govt. of Tamil Nadu.

TABLE I.1.3: Change in Name of Districts

Old Name	New Name
Kamarajar	Virudhunagar
Madras	Chennai
Pasumpon Muthuramalinga Thevar	Sivaganga
Periyar	Erode
Tirunelveli-Kattabomman	Tirunelveli
Tiruvannamalai-Sambuvarayar	Tiruvannamalai
Chidambaranar	Thoothukkudi
North Arcot Ambedkar	Vellore
Anna	Dindigul

SOURCE: District Administration websites of Govt. of Tamil Nadu.

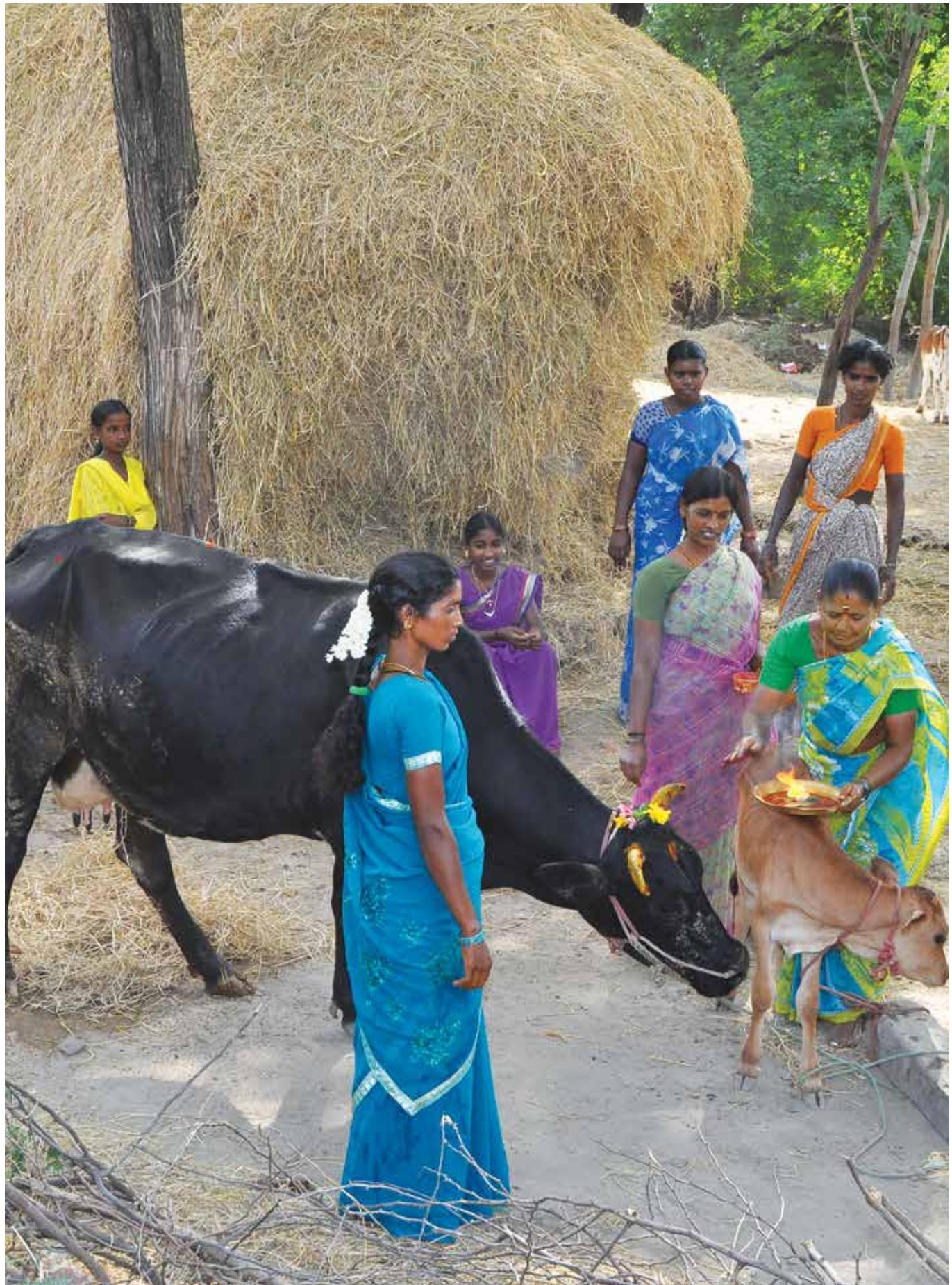


I.2. Social Statistics: Human Population

TABLE I.2.1: Human Population by Residence and Sex –2001

Districts	Rural ('000)			Urban ('000)			Total ('000)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
TAMIL NADU	17,531	17,390	34,922	13,869	13,615	27,484	31,401	31,005	62,406
Ariyalur	308	309	617	39	40	79	347	349	696
Chennai	0	0	0	2,220	2,124	4,344	2,220	2,124	4,344
Coimbatore	735	717	1,452	1,441	1,379	2,820	2,176	2,096	4,272
Cuddalore	772	759	1,531	379	375	754	1,151	1,134	2,285
Dharmapuri	1240	1,160	2,400	233	222	456	1,474	1,383	2,856
Dindigul	629	621	1,250	339	334	673	968	955	1,923
Erode	705	682	1,388	604	590	1,194	1,309	1,272	2,582
Kancheepuram	676	666	1,343	781	754	1,535	1,457	1,420	2,877
Kanniyakumari	290	293	582	543	551	1,094	832	844	1,676
Karur	311	314	624	155	157	311	466	470	936
Madurai	573	561	1,134	730	714	1,444	1,303	1,275	2,578
Nagapattinam	576	583	1,159	163	167	330	739	750	1,489
Namakkal	482	466	948	277	268	545	760	734	1,493
Perambalur	207	208	414	39	40	79	246	248	494
Pudukkottai	601	611	1,211	124	125	248	724	735	1,460
Ramanathapuram	433	452	885	150	152	302	583	604	1,188
Salem	852	774	1,626	711	679	1,390	1,564	1,453	3,016
Sivaganga	405	424	829	162	164	326	567	588	1,155
Thanjavur	726	741	1,468	370	378	749	1,097	1,120	2,216
The Nilgiris	152	156	308	226	228	455	378	384	762
Theni	255	247	502	298	294	592	553	541	1,094
Thiruvallur	629	626	1,255	768	732	1,500	1,397	1,357	2,755
Thiruvarur	464	469	932	117	120	237	581	589	1,169
Thoothukkudi	439	468	908	328	337	665	767	805	1,572
Tiruchirappalli	639	641	1,279	570	569	1,139	1,209	1,210	2,418
Tirunelveli	689	727	1,416	645	663	1,308	1,334	1,390	2,724
Tiruvannamalai	896	890	1,785	200	201	401	1,096	1,090	2,186
Vellore	1,088	1,081	2,169	653	655	1,308	1,741	1,736	3,477
Viluppuram	1,277	1,256	2,533	215	212	427	1,492	1,468	2,960
Virudhunagar	483	491	974	388	390	777	870	881	1,751

SOURCE: Census 2001, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.



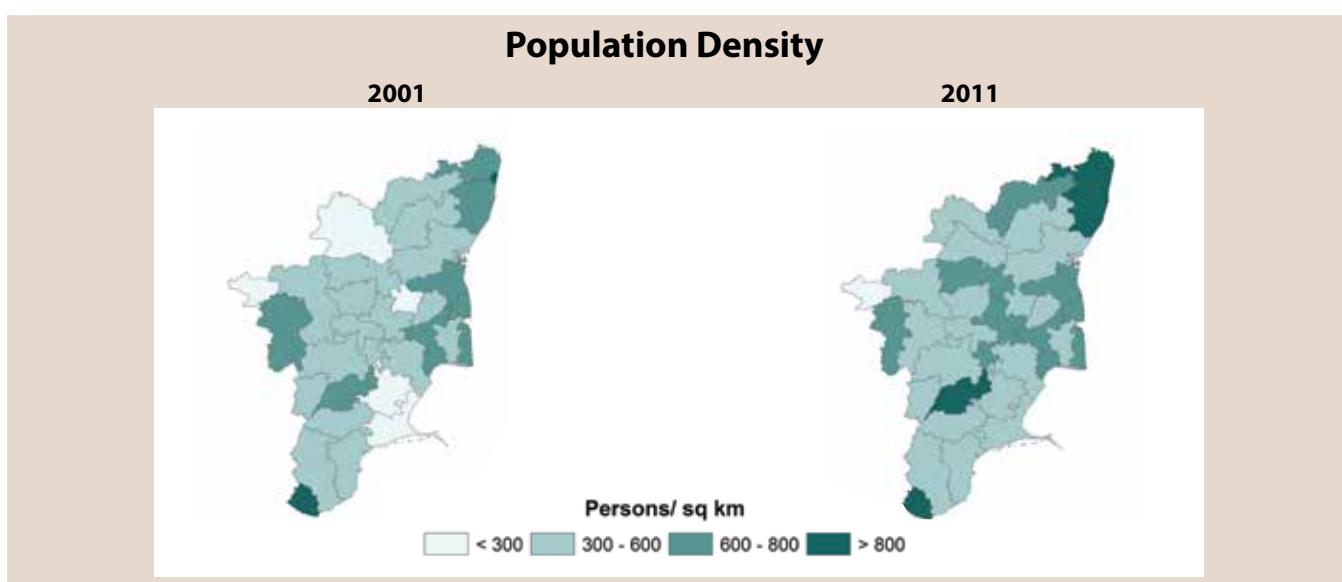
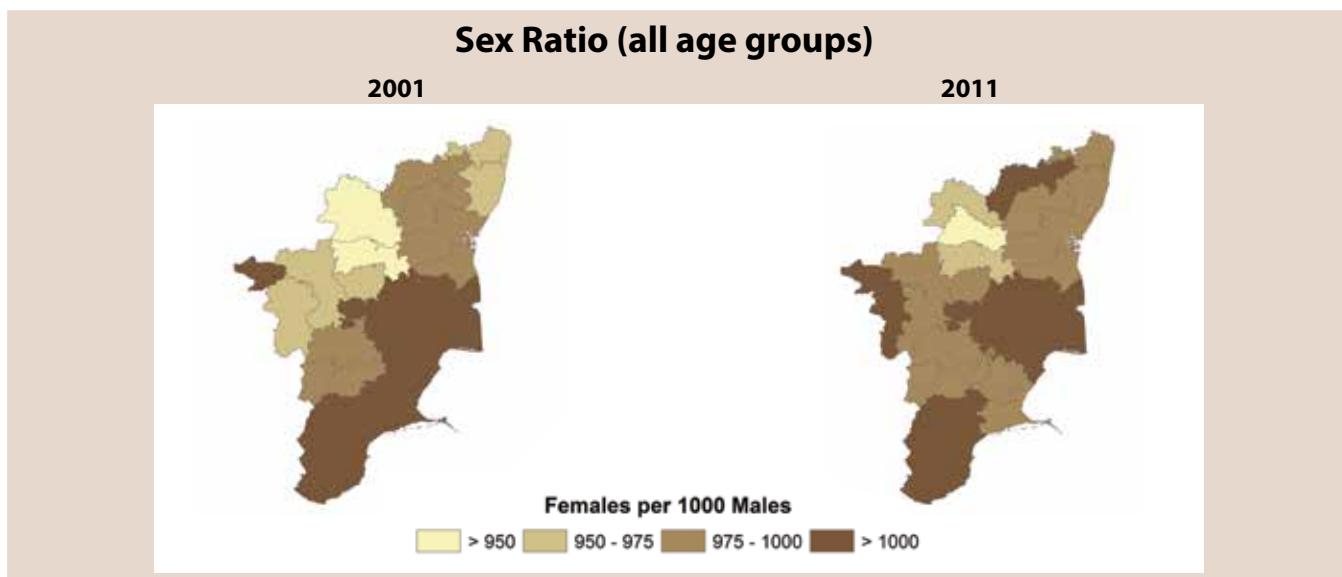
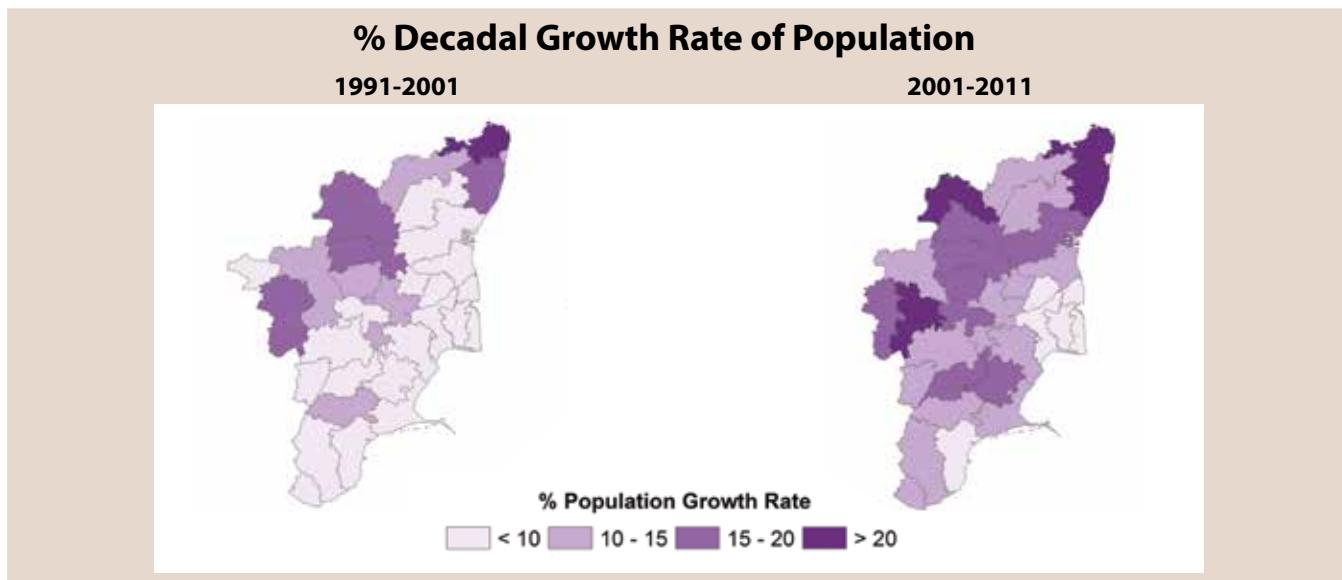


I.2. Social Statistics: Human Population

TABLE I.2.2: Human Population by Residence and Sex –2011

Districts	Rural ('000)			Urban ('000)			Total ('000)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
TAMIL NADU	18,679	18,551	37,230	17,459	17,459	34,917	36,138	36,009	72,147
Ariyalur	333	338	671	41	42	84	375	380	755
Chennai	0	0	0	2,336	2,311	4,647	2,336	2,311	4,647
Coimbatore	419	420	839	1,310	1,309	2,619	1,729	1,729	3,458
Cuddalore	869	852	1,721	443	442	885	1,312	1,294	2,606
Dharmapuri	643	603	1,246	131	130	261	774	733	1,507
Dindigul	679	673	1,352	402	406	808	1,081	1,079	2,160
Erode	552	541	1,094	577	581	1,158	1,130	1,122	2,252
Kancheepuram	735	725	1,460	1,278	1,260	2,538	2,013	1,985	3,998
Kanniyakumari	165	166	331	761	778	1,540	926	944	1,870
Karur	313	317	630	216	219	435	528	536	1,064
Krishnagiri	742	709	1,451	218	211	428	960	920	1,880
Madurai	601	590	1,191	925	922	1,847	1,526	1,512	3,038
Nagapattinam	619	632	1,252	179	186	365	798	818	1,616
Namakkal	521	510	1,030	349	348	696	869	857	1,727
Perambalur	234	234	468	48	49	97	282	283	565
Pudukkottai	646	656	1,302	158	159	316	803	815	1,618
Ramanathapuram	475	468	943	208	203	411	683	671	1,353
Salem	883	825	1,708	898	876	1,774	1,782	1,700	3,482
Sivaganga	462	464	926	206	206	413	669	670	1,339
Thanjavur	765	789	1,555	417	434	851	1,182	1,223	2,406
The Nilgiris	146	154	300	214	221	436	360	375	735
Theni	291	285	575	335	336	670	626	620	1,246
Thiruvallur	650	649	1,300	1,226	1,203	2,428	1,876	1,852	3,728
Thiruvarur	500	507	1,006	127	131	258	627	638	1,264
Thoothukkudi	430	443	873	435	442	877	865	885	1,750
Tiruchirappalli	689	696	1,384	664	674	1,338	1,352	1,370	2,722
Tirunelveli	769	788	1,557	752	768	1,520	1,521	1,556	3,077
Tiruppur	479	479	958	767	754	1,521	1,246	1,233	2,479
Tiruvannamalai	990	980	1,970	246	249	495	1,236	1,229	2,465
Vellore	1,117	1,117	2,234	845	857	1,702	1,962	1,975	3,936
Viluppuram	1,481	1,458	2,940	259	260	519	1,741	1,718	3,459
Virudhunagar	480	482	962	487	493	980	968	975	1,942

SOURCE: Census 2011, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.



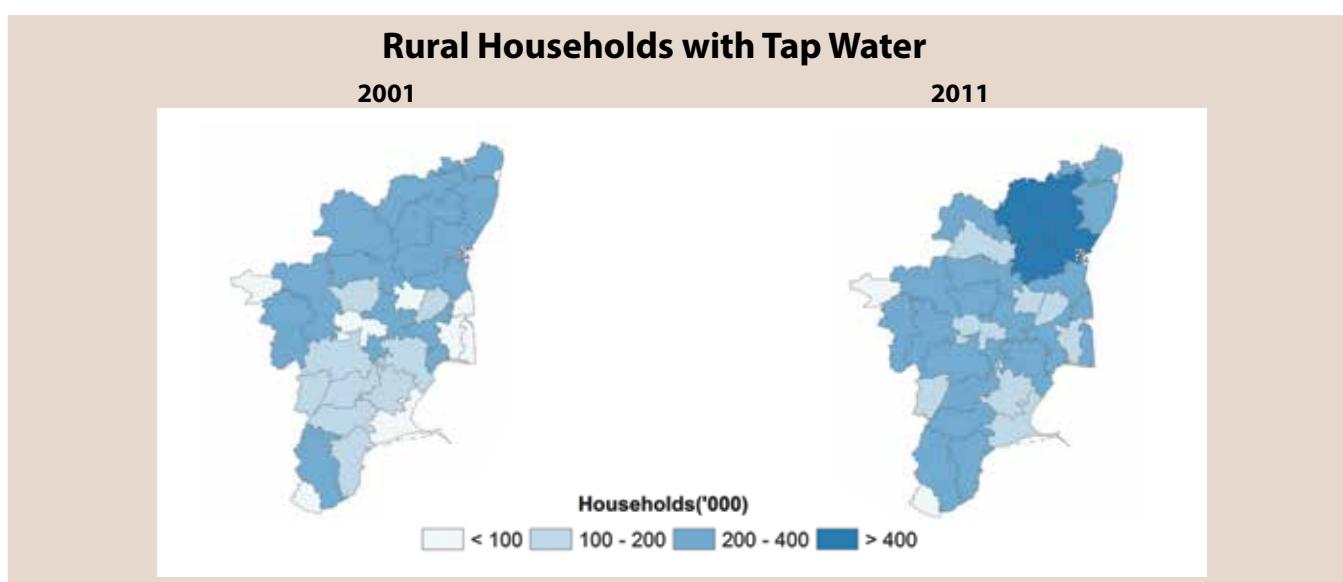
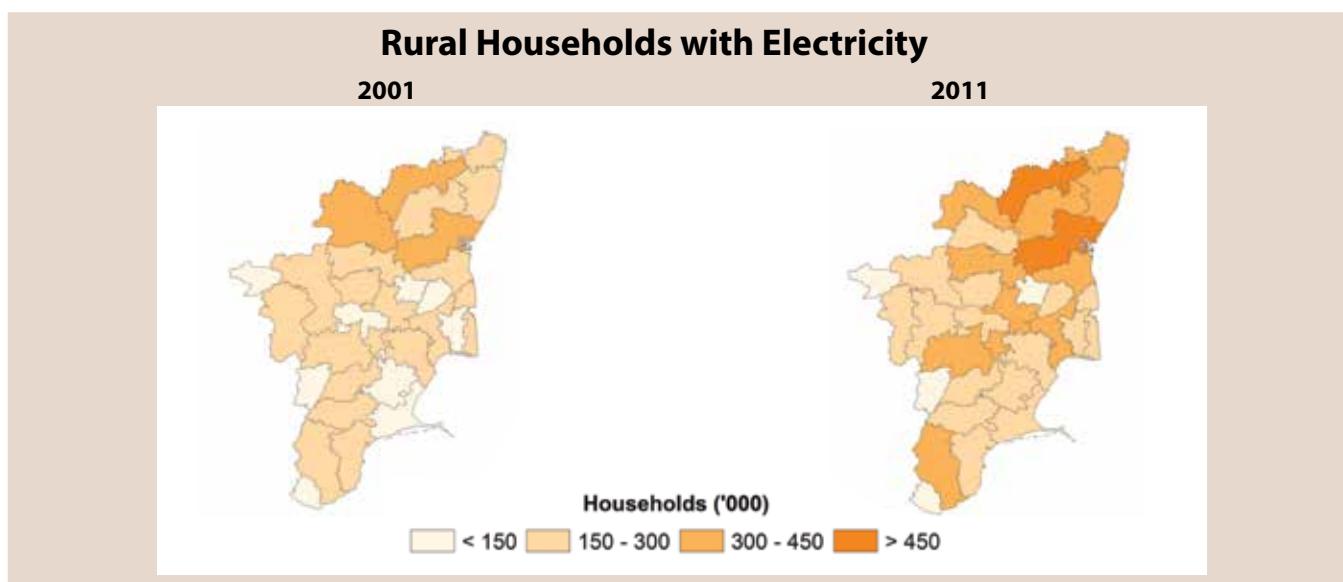
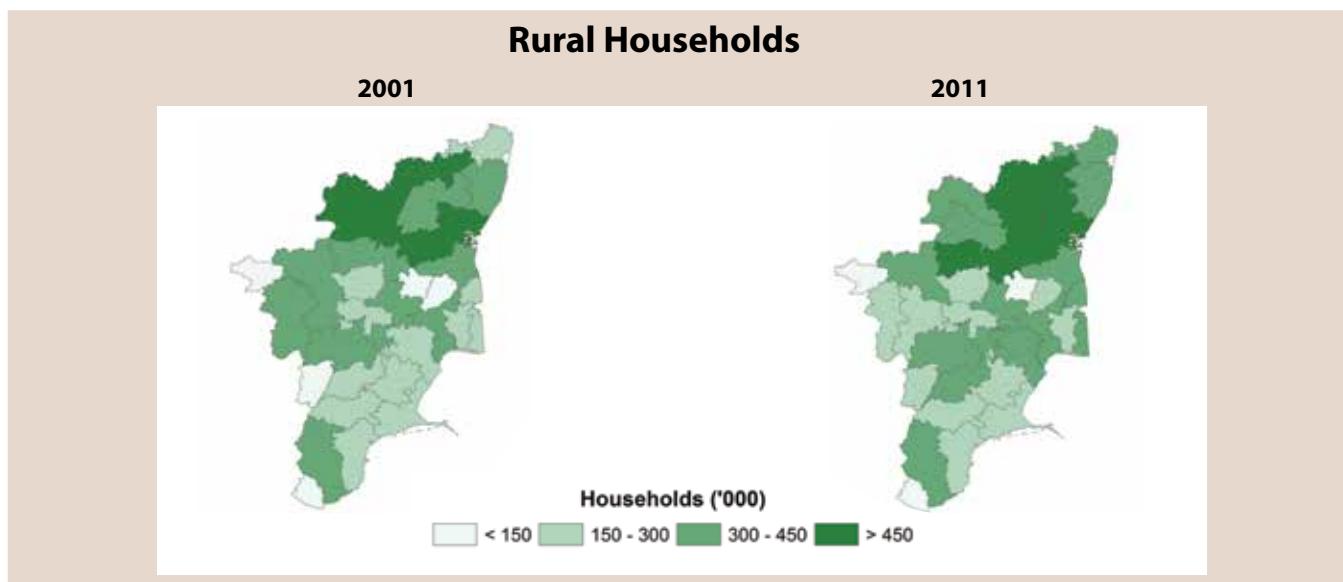


I.2. Social Statistics: Human Population

TABLE I.2.3: Rural Households, Electricity and Tap Water Supply - 2001 and 2011

Districts	Rural Households ('000)		Rural Households with Electricity ('000)		Rural Households with Tap Water (inclusive – treated & untreated) ('000)	
	2001	2011	2001	2011	2001	2011
TAMIL NADU	8,284	9,528	5,890	8,683	5,005	7,581
Ariyalur	148	176	96	158	107	153
Chennai	0	0	0	0	0	0
Coimbatore	388	242	272	214	273	201
Cuddalore	348	423	259	400	223	345
Dharmapuri	537	310	368	276	244	171
Dindigul	306	351	192	305	196	281
Erode	383	324	280	283	210	238
Kancheepuram	302	361	229	335	214	307
Kanniyakumari	131	85	96	82	55	65
Karur	159	168	111	153	99	142
Krishnagiri		343		307		258
Madurai	277	315	195	288	192	281
Nagapattinam	272	323	166	298	87	201
Namakkal	256	283	191	257	142	206
Perambalur	103	124	78	112	72	103
Pudukkottai	258	310	160	281	131	233
Ramanathapuram	202	229	128	200	73	134
Salem	405	452	298	400	206	322
Sivaganga	193	235	137	214	101	159
Thanjavur	334	391	214	353	206	319
The Nilgiris	77	83	54	77	52	67
Theni	127	157	89	145	107	147
Thiruvallur	290	332	222	307	227	296
Thiruvarur	223	262	137	242	100	197
Thoothukkudi	225	235	177	220	144	202
Tiruchirappalli	308	357	210	322	214	310
Tirunelveli	352	419	284	397	229	382
Tiruppur		283		254		219
Tiruvannamalai	404	473	296	438	276	403
Vellore	483	537	351	491	295	453
Viluppuram	545	679	413	632	354	567
Virudhunagar	250	265	185	245	177	221

SOURCE: Census 2001 and 2011, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.





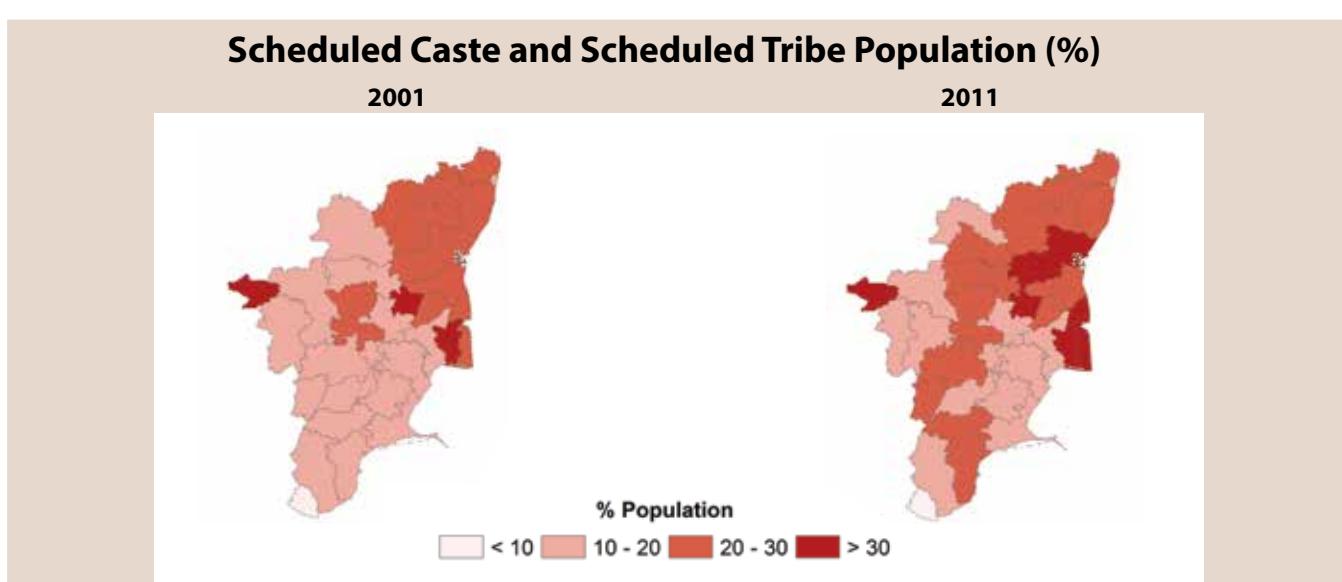
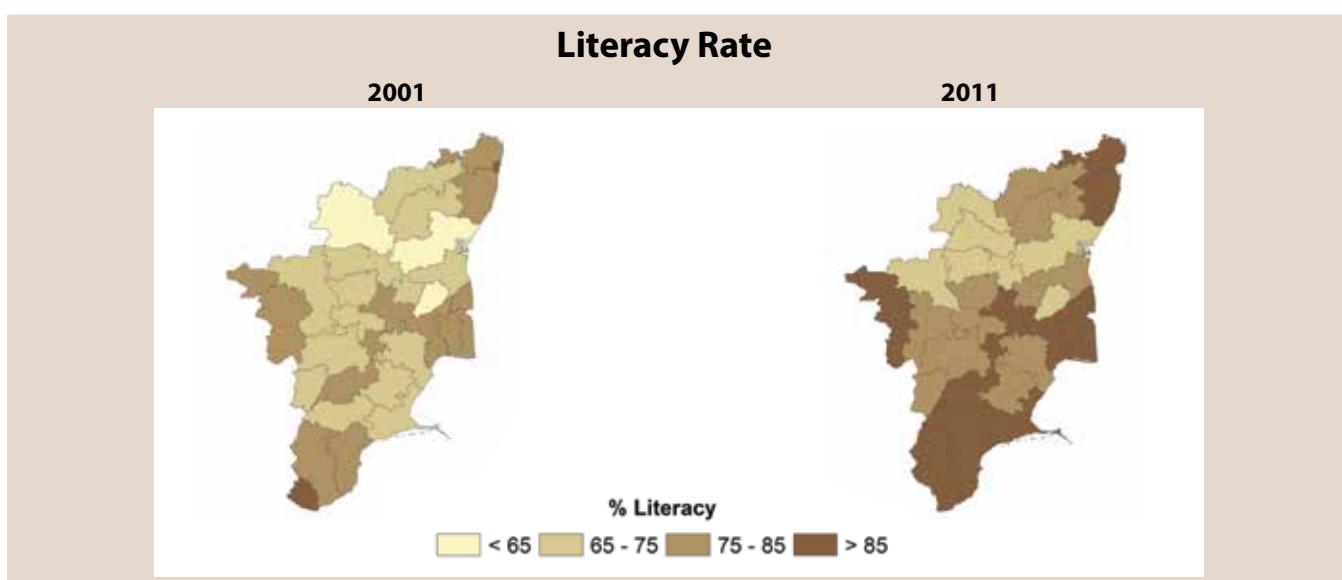
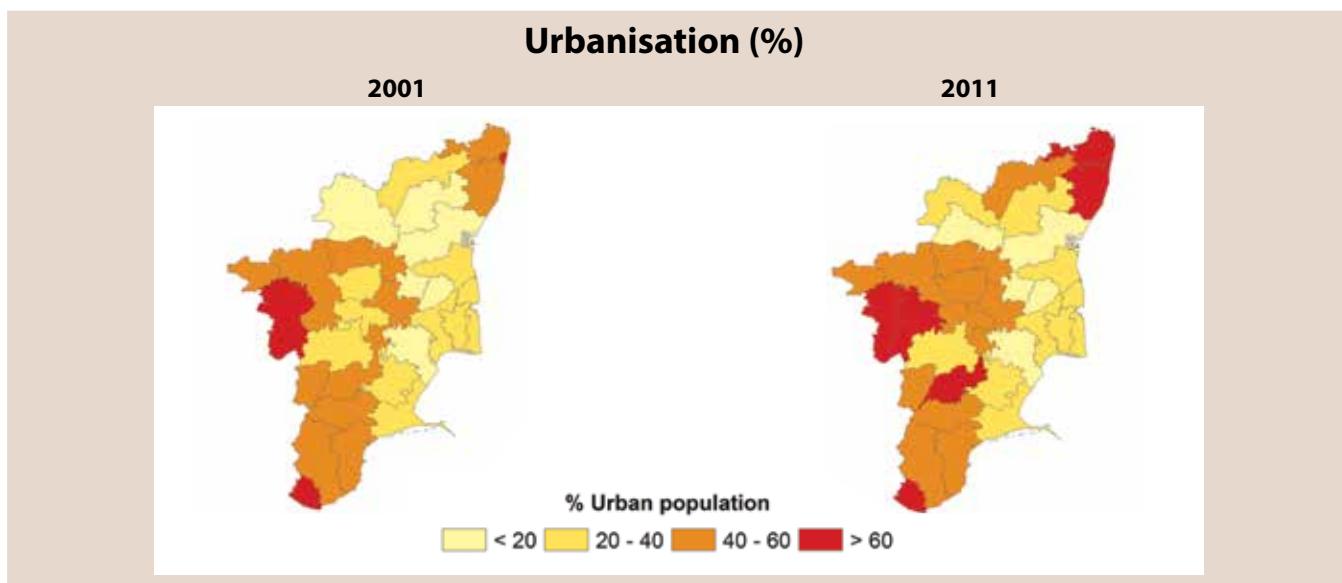
I.2. Social Statistics: Human Population

TABLE I.2.4: District-wise SC and ST Population – 2001 and 2011

Districts	SC Population ('000)		ST Population ('000)	
	2001	2011	2001	2011
TAMIL NADU	11,858	14,438	651	795
Ariyalur	151	176	9	11
Chennai	598	780	7	10
Coimbatore	631	536	29	28
Cuddalore	634	764	12	16
Dharmapuri	417	245	60	63
Dindigul	376	452	6	8
Erode	422	369	18	22
Kancheepuram	722	948	27	41
Kanniyakumari	68	74	5	7
Karur	190	221	1	1
Krishnagiri		267		22
Madurai	323	409	6	11
Nagapattinam	441	510	3	4
Namakkal	281	345	51	57
Perambalur	149	175	3	3
Pudukkottai	249	285	1	1
Ramanathapuram	216	249	1	1
Salem	476	581	104	119
Sivaganga	189	228	1	1
Thanjavur	400	455	4	4
The Nilgiris	238	236	28	33
Theni	212	258	2	2
Thiruvallur	601	822	38	47
Thiruvarur	378	431	3	3
Thoothukkudi	289	348	3	5
Tiruchirappalli	399	467	19	18
Tirunelveli	481	570	8	10
Tiruppur		396		5
Tiruvannamalai	468	565	73	91
Vellore	714	860	63	73
Viluppuram	811	1,016	64	75
Virudhunagar	332	400	2	2

SC: Scheduled Caste, **ST:** Scheduled Tribe

Source: Census 2001 and 2011, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.





I.3. State Economy

TABLE I.3.1: Net State Domestic Product (NSDP) and Per Capita Income

Sector	At Current Prices (₹ crores)									
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
State Domestic Product	193,645	228,846	276,711	313,812	359,391	430,013	527,912	600,461	671,192	769,476
1. Agriculture	19,461	23,494	29,425	33,562	37,394	51,288	64,909	72,350	67,450	83,470
2. Forestry & Logging	1,643	2,093	2,963	3,129	4,153	4,568	6,168	6,430	6,821	7,238
3. Fishing	1,461	2,361	2,451	2,469	2,849	3,457	3,611	3,631	3,656	3,734
4. Agriculture & Allied (1+2+3)	22,564	27,948	34,839	39,159	44,396	59,310	74,688	82,411	77,929	94,443
As % of NSDP	11.65	12.21	12.59	12.48	12.35	13.79	14.15	13.72	11.61	12.27
Sub-total of Primary	23,908	29,299	36,448	40,870	46,494	61,510	77,290	85,473	81,421	98,343
As % of NSDP	12.35	12.80	13.17	13.02	12.94	14.30	14.64	14.23	12.13	12.78
Sub-total of Secondary	54,189	64,484	78,262	87,639	92,260	116,361	146,944	169,304	191,866	205,670
As % of NSDP	27.98	28.18	28.28	27.93	25.67	27.06	27.84	28.20	28.59	26.73
Services	115,549	135,063	162,001	185,304	220,637	252,141	303,677	345,684	397,905	465,462
As % of NSDP	59.67	59.02	58.55	59.05	61.39	58.64	57.52	57.57	59.28	60.49
Per Capita Income (₹)	30,062	35,243	42,288	47,606	54,137	64,338	78,473	88,697	98,550	112,331

Sector	At 2004-05 Prices (₹ crores)									
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
State Domestic Product	193,645	221,588	256,286	272,340	286,744	316,760	359,961	386,768	402,603	428,739
1. Agriculture	194,61	21,787	25,299	23,925	23,085	24,577	26,342	29,138	25,629	27,917
2. Forestry & Logging	1,643	1,734	1,717	1,765	1,743	1,799	1,854	1,877	1,953	2,030
3. Fishing	1,461	2,073	2,106	1,938	1,918	1,968	2,181	2,256	2,277	2,295
4. Agriculture & Allied (1+2+3)	22,564	25,593	29,122	27,627	26,745	28,344	30,377	33,270	29,859	32,241
As % of NSDP	11.65	11.55	11.36	10.14	9.33	8.95	8.44	8.60	7.42	7.52
Sub-total of Primary	23,908	26,839	30,388	28,904	27,897	29,568	31,705	34,767	31,431	33,862
As % of NSDP	12.35	12.11	11.86	10.61	9.73	9.33	8.81	8.99	7.81	7.90
Sub-total of Secondary	54,189	624,83	70,868	73,945	71,655	87,395	102,551	109,155	114,883	117,220
As % of NSDP	27.98	28.20	27.65	27.15	24.99	27.59	28.49	28.22	28.54	27.34
Services	115,549	132,266	155,031	169,491	187,192	199,797	225,706	242,846	256,289	277,657
As % of NSDP	59.67	59.69	60.49	62.24	65.28	63.08	62.70	62.79	63.66	64.76
Per Capita Income (₹)	30,062	34,126	39,166	41,314	43,193	47,394	53,507	57,131	59,113	62,589

SOURCE: Ministry of Statistics and Programme Implementation, Govt. of India.

NOTE: This estimates are as on 01-03-2014.





I.3. State Economy

TABLE I.3.2: Value of Output: Agriculture and Livestock

Item	At Current Prices						
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Value of Output (₹ billion)							
Agriculture & Allied	323.22	390.12	518.69	529.03	622.38	785.63	971.04
Agriculture	192.83	235.24	289.65	314.23	358.95	457.01	555.91
Livestock	89.79	96.35	115.35	141.54	173.28	223.28	300.10
Milk	54.21	60.00	68.97	81.60	93.59	110.89	128.97
Meat	18.34	18.76	24.06	33.25	45.11	63.59	116.54
Egg	7.48	6.40	9.44	11.86	14.34	22.04	20.94
Dung	5.16	5.68	6.71	7.29	8.88	11.99	13.69
Others^	4.61	5.51	6.17	7.54	11.36	14.78	19.96
Share of Value of Output to Agriculture and Allied (%)							
Agriculture	59.66	60.30	55.84	59.40	57.67	58.17	57.25
Livestock	27.78	24.70	22.24	26.75	27.84	28.42	30.91
Share of Value of Output to Livestock Output (%)							
Milk	60.37	62.27	59.79	57.65	54.01	49.66	42.98
Meat	20.42	19.47	20.86	23.49	26.03	28.48	38.83
Egg	8.33	6.64	8.18	8.38	8.27	9.87	6.98
Dung	5.74	5.89	5.82	5.15	5.12	5.37	4.56
Others^	5.13	5.72	5.35	5.33	6.56	6.62	6.65

Item	At Constant Prices (2004-05)						
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Value of Output (₹ billion)							
Agriculture & Allied	323.22	359.89	402.72	387.17	408.00	409.65	442.42
Agriculture	192.83	214.78	249.46	233.1	228.26	226.08	238.49
Livestock	89.79	94.89	102.76	105.55	121.98	131.06	149.42
Milk	54.21	60.00	60.87	61.12	72.05	73.44	73.92
Meat	18.34	16.76	20.66	21.6	24.23	27.77	45.47
Egg	7.48	7.24	9.36	9.76	10.25	12.62	11.40
Dung	5.16	5.54	5.81	6.30	6.34	7.34	7.77
Others^	4.61	5.36	6.06	6.75	9.11	9.88	10.86
Share of Value of Output to Agriculture and Allied (%)							
Agriculture	59.66	59.68	61.94	60.21	55.95	55.19	53.91
Livestock	27.78	26.37	25.52	27.26	29.9	31.99	33.77
Share of Value of Output to Livestock Output (%)							
Milk	60.37	63.23	59.23	57.91	59.07	56.04	49.47
Meat	20.42	17.66	20.11	20.47	19.86	21.19	30.43
Egg	8.33	7.63	9.11	9.25	8.40	9.63	7.63
Dung	5.74	5.84	5.65	5.97	5.20	5.60	5.20
Others^	5.13	5.65	5.90	6.40	7.47	7.54	7.27

[^] Wool and Hair, Silkworm Cocoons & Honey, Increment in Stock.

SOURCE: Ministry of Statistics and Programme Implementation, Govt. of India.



I.3. State Economy

TABLE I.3.3: Revised Budget Estimate for Animal Husbandry Department, Tamil Nadu

Activities	Revised Estimate (₹ crore)					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Veterinary Services and Animal Health	100.48	133.05	144.8	182.16	210.45	224.19
<i>Veterinary Hospitals and Dispensaries</i>	82.84	111.10	133.34	162.67	172.89	200.83
<i>Institute of Veterinary Preventive Medicine</i>	3.55	4.99	5.16	6.22	6.65	5.63
<i>Rinderpest Eradication Programme</i>	1.01	1.02	1.01	1.25	1.19	1.15
<i>Establishment of ADIU</i>	2.46	3.38	3.83	4.51	4.60	5.23
<i>Other Items</i>	10.62	12.56	1.46	7.51	25.12	11.35
Direction, Supervision and Policy Formation	21.80	37.21	27.38	33.93	34.80	43.00
Cattle Development	21.73	30.22	25.83	42.33	117.41	107.28
Poultry Development	2.27	2.89	1.69	2.03	2.43	3.01
Sheep Development	2.15	3.33	2.63	3.30	97.75	142.28
Piggery Development	0.83	0.71	0.80	0.68	0.42	0.43
Fodder Development	0.49	0.80	0.62	1.46	16.72	25.78
Tribal Development	0.00	0.00	0.00	0.00	0.00	2.42
Extension and Training	0.06	0.07	0.06	0.02	0.07	0.06
Special Central Assistance Scheme	0.52	0.70	0.65	0.85	56.43	71.30
Externally Aided Project	3.57	3.84	3.45	5.17	11.26	10.10
General Education	0.32	0.32	0.00	0.33	0.36	0.09
Hill Area Development	0.48	0.62	0.80	0.22	0.25	1.32
Agriculture Research Education Training	54.73	60.69	80.04	104.31	139.49	166.70
Loan and Advance	0.00	0.00	0.00	0.00	0.30	0.22
Capital Outlay on Animal Husbandry	11.29	4.01	2.76	1.87	34.31	81.24
Capital on Agriculture	0.00	0.00	0.00	0.00	0.00	0.03
Secretariat	4.02	4.64	4.20	4.65	4.60	4.21
Public Works	1.75	1.83	1.81	1.90	22.00	25.00

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



I.3. State Economy

TABLE I.3.4: Fund Utilisation Under Rashtriya Krishi Vikas Yojna (RKVY) for Animal Husbandry in Tamil Nadu

Parameters	Fund Utilisation (₹ Crore)						
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Grand Total
Fodder Development/Azolla Cultivation	5.77	0.50	0.17	15.89	13.17		35.50
Creation of Mobile Diagnostic Lab/ Mobile Input Units for Animal Health/ Novel Diagnostic and Vaccine Delivery/Up gradation of Vaccine Production Lab/Coolers of Vaccine Storage	4.11	4.45	1.99	7.82	15.99		34.35
Genetic Upgradation and Development of Livestock/ Small Ruminants/Supply of Goat to SHG	0.85	6.33	3.11	3.36	4.50	10.46	28.62
Improving Animal Husbandry Practices/ Delivery of Vet Services in Villages					14.78		14.78
Buffalo Calves Development/Genetic up gradation of cattle and Buffalo/Enhancement of Fertility of cow/Establishment of Jersey CB Bull farm	3.20	1.56	0.96	3.79	4.30		13.81
Establishment of Ultra Sound Scanning Facilities						8.82	8.82
Others			0.50	1.56	6.10		8.16
Establishment of Liquid Nitrogen Plant				5.5			5.50
Establishment of mother unit cum hatchery unit in TAPCO lands				4.76			4.76
Identification and Traceability of Breedable Bovine	2.18						2.18
Empowering women through Animal Husbandry				3.55			3.55
Piggery Development				3.26			3.26
Establishment of Mineral Mixture Manufacturing /By-pass Protein Supplement Manufacturing Unit/Supply of Mineral Mix-ture/Manufacturing of Feed Blocks	1.44		0.50				1.94
Controlling Diseases of Poultry				3.04			3.04
Strengthening of Frozen Semen Bank			0.38	2.29			2.67
PC Based Collection Stations/Skill Development for technical staff/Study tour to farmers	1.83		0.23				2.06
Chaff Cutter and Silos	0.66	0.70					1.36
Total Outlay	20.04	13.54	7.46	49.87	64.16	19.28	177.44*

SOURCE: Rashtriya Krishi Vikas Yojana, Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India.

Accessed on 20th November 2014 from [http://rkvymis.dacnet.nic.in/\(S\(b45m3vuag0dywcmrhs12x2g5\)\)/reports/SectorWiseApprovedCost.aspx](http://rkvymis.dacnet.nic.in/(S(b45m3vuag0dywcmrhs12x2g5))/reports/SectorWiseApprovedCost.aspx).

* Includes ₹ 3.08 Crore utilised during 2007-08.



I.3. State Economy

TABLE I.3.5: Fund Utilisation Under Rashtriya Krishi Vikas Yojna (RKVY) for Dairying in Tamil Nadu

Parameters	Fund Utilisation (₹ Crore)							
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Grand Total
Setting-up/ strengthening of milk products plant					14.99	6.50	16.47	37.96
Others			1.05		8.54	13.92		23.51
Setting-up/ strengthening of BMC				1.00	4.00	2.90		7.90
Induction of animals/breed improvement/animal rearing	1.62						4.59	6.21
Setting-up/strengthening of dairy plant					4.78		0.50	5.28
Capacity building	0.81		1.21		3.10			5.12
Support for dairy development/milk production/ procurement							3.98	3.98
Setting-up/ strengthening of dairy farms/ units		0.70				3.10		3.81
Providing AMCU/ milking machine	2.02	0.70	0.60					3.32
Setting-up/ strengthening of clean milk infrastructure	2.22	0.10	0.40					2.72
Support for milk marketing					0.70	1.21		1.91
Total Outlay	6.67	1.50	3.26	1.00	36.11	27.63	25.54	101.72

SOURCE: Rashtriya Krishi Vikas Yojana, Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India.

Accessed on 20th November 2014 from [http://rkvymis.dacnet.nic.in/\(S\(b45m3vuag0dywcmrhs12x2g5\)\)/reports/SectorWiseApprovedCost.aspx](http://rkvymis.dacnet.nic.in/(S(b45m3vuag0dywcmrhs12x2g5))/reports/SectorWiseApprovedCost.aspx).



PART II : LIVESTOCK CENSUS

The '19th Livestock Census -2012' shows an overall 27 per cent decline in the total bovine population in Tamil Nadu at 9.6 million as compared to the previous census of 2007. The decline in population has been registered across all categories like indigenous cattle, crossbred cattle and buffalo. The sharpest fall of 61 per cent was seen in total buffalo population followed by a fall in indigenous cattle by 35 per cent and crossbred cattle by 14 per cent. Crossbred cattle constituted more than 65 per cent of the total bovine population of the state.

The sex ratio figures of 2012 census reveal increase in the number of females across all categories as compared to the males. The number of females increased from 81 per cent in 2007 to 86 per cent in 2012 for crossbred cattle, 65 per cent to 70 per cent for indigenous cattle and 75 per cent to 87 per cent for buffaloes.

The drop in the number of milch animals (in-milk and dry, cows and buffaloes combined), was 15 per cent from 5.1 million in 2007 to 4.4 million in 2012. The number of animals in-milk has decreased from 3.6 million to 3.1 million showing a drop of 12 per cent. The proportion of in-milk animals to milch population continued to remain above 65 per cent.

At the time of publication of this document, district-wise figures of '19th Livestock Census-2012' were not available for the state of Tamil Nadu. The contents would be revised and uploaded on NDDB's Knowledge Portal in due course of time.





II.1. Animal Population

TABLE II.1.1: Summary of Livestock Census (1992-2012) - Tamil Nadu

Population	Livestock Census				
	1992	1997	2003	2007	2012
Total Bovine	12,477,704	11,787,719	10,799,458	13,197,711	9,594,473
Total Cattle	9,275,264	9,046,456	9,141,043	11,188,709	8,814,042
Total Exotic/Crossbred Cattle	1,834,733	3,505,567	5,139,944	7,382,678	6,354,494
Female	1,361,615	2,445,311	4,147,354	5,982,589	5,467,646
under 1 year	315,469	547,761	865,528	1,425,879	1,140,730
1 to 2.5 years	201,128	385,262	692,883	1,052,210	915,908
In-milk	505,640	987,963	1,664,934	2,233,705	2,302,985
Dry	218,317	387,633	687,559	837,767	779,993
Milch	723,957	1,375,596	2,352,493	3,071,467	3,082,978
Not Calved Even Once	76,360	91,848	167,129	305,635	254,052
Others	44,701	44,844	69,321	127,393	73,978
Males	473,118	1,060,256	992,590	1,400,089	886,848
Total Indigenous Cattle	7,440,531	5,540,889	4,001,099	3,806,031	2,459,548
Female	4,089,732	3,224,270	2,402,310	2,457,681	1,723,004
under 1 year	814,321	659,386	430,932	527,866	326,481
1 to 3 years	658,884	547,867	443,533	458,305	322,688
In-milk	1,420,151	1,235,744	831,827	842,894	615,592
Dry	808,226	559,983	509,445	397,538	298,386
Milch	2,228,377	1,795,727	1,341,272	1,240,432	913,978
Not Calved Even Once	264,370	129,675	124,096	157,741	116,686
Others	123,780	91,615	62,477	73,337	43,171
Males	3,350,799	2,316,619	1,598,789	1,348,350	736,544
Total Buffaloes	3,202,440	2,741,263	1,658,415	2,009,002	780,431
Female	2,733,982	2,234,949	1,390,199	1,513,863	680,151
under 1 year	558,197	496,930	263,127	319,705	129,722
1 to 3 years	369,872	349,401	225,671	258,971	127,588
In-milk	978,562	908,106	518,392	551,583	264,565
Dry	441,800	373,503	274,455	254,494	112,985
Milch	1,420,362	1,281,609	792,847	806,077	377,550
Not Calved Even Once	131,479	78,775	69,712	93,788	34,805
Others	254,072	28,234	38,842	35,322	10,486
Males	468,458	506,314	268,216	495,139	100,280

SOURCE: 15th, 16th, 17th, 18th and 19th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.1. Animal Population

TABLE II.1.2: District-wise Total Bovine Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	7,441	5,541	4,001	3,806	1,835	3,506	5,140	7,383	3,202	2,741	1,658	2,009
Ariyalur				105.2				99.5				16.1
Chengalpattu MGR	652.3				62.5				380.3			
Chennai	19.5	6.7	2.4	2.3	4.0	17.5	1.6	0.8	29.0	29.5	2.7	2.9
Coimbatore	258.6	147.6	40.0	29.6	138.4	210.1	322.5	313.8	148.4	96.5	40.9	36.5
Cuddalore		213.8	152.8	91.3		274	190.3	246.4		74.6	38.4	19.8
Dharmapuri	499.9	362.2	121.9	170.2	45.9	163.6	175.8	282.2	129.0	176.0	100.1	64.7
Dindigul	140.2	113.5	72.6	45.5	84.8	165.6	172.5	204.9	97.5	114.3	68.1	80.7
Erode	208.1	119.2	148.2	129.9	123.8	241.8	250.4	419.5	264.5	267.1	230.0	242.5
Kancheepuram		287.8	289.0	342.4		129.8	75.8	279.2		167.7	115.7	154.4
Kanniyakumari	37.9	35.4	5.6	6.5	54.8	47.3	96.1	83.2	23.6	14.4	6.1	2.5
Karur		50.7	50.0	36.5		74.7	67.7	84.8		88.1	65.5	55.6
Krishnagiri			162.9				136.6				18.9	
Madurai	273.9	124.0	62.4	79.3	102.3	137.0	164.2	269.8	104.6	54.8	12.4	6.2
Nagapattinam	531.1	204.2	162.1	128.9	60.9	45.4	130.2	172.0	176.5	76.7	56.7	31.8
Namakkal		144.2	56.9	35.2		80.6	165.4	250.8		295.3	182.2	219.9
Perambalur		182.2	119.0	18.2		108.3	165.2	108.7		78.7	22.3	5.0
Pudukkottai	380.6	311.6	265.2	422.6	43.1	116.4	68.1	259.6	78.8	93.1	32.0	84.0
Ramanathapuram	176.6	138.5	70.3	1.7	32.7	24.9	58.3	130.3	26.6	25.0	3.9	3.5
Salem	513.7	151.7	165.3	123.6	83.9	189.1	428.6	440.6	455.6	133.5	176.5	146.6
Sivaganga	233.1	184.4	210.0	161.7	14.4	70.9	70.6	66.2	44.0	25.8	15.2	7.8
South Arcot	257.3				186.8				100.0			
Thanjavur	358.0	183.7	207.1	174.4	79.4	134.7	282.6	272.3	91.4	57.6	34.5	28.2
The Nilgiris	21.2	7.9	12.4	7.8	20.6	46.8	40.7	29.6	5.2	4.2	3.4	1.1
Theni		86.0	22.6	24.8		60.1	79.1	112.0		39.7	12.0	5.4
Thiruvallur		118.9	184.6	98.9		115.7	77.3	225.3		147.9	111.9	194.5
Thiruvarur		188.9	167.5	103.4		68.9	164.6	166.1		71.2	18.3	7.7
Thoothukkudi	137.3	98.9	60.9	301.9	34.1	46.4	102.5	657.1	63.8	46.7	20.9	319.2
Tiruchirappalli	595.7	212.7	101.6	112.2	151.3	127.3	252.7	317.6	313.4	87.3	49.6	47.0
Tirunelveli	202.6	142.1	127.3	142.9	106.9	167.3	291.4	361.4	145.2	111.0	78.8	114.8
Tiruvannamalai	590.0	467.1	230.6	204.2	89.7	249.5	250.8	513.1	87.1	65.6	23.2	22.7
Vellore	431.1	334.0	177.6	182.0	180.7	241.7	324.1	391.7	175.7	103.3	29.4	34.0
Viluppuram	852.0	860.4	488.1	424.3	83.6	96.6	336.0	441.4	227.1	159.6	49.0	33.1
Virudhunagar	69.9	62.4	64.2	98.7	50.2	53.7	198.1	182.4	35.1	36.2	40.0	20.9

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.1. Animal Population

TABLE II.1.3: District-wise Female Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	4,090	3,224	2,402	2,458	1,362	2,445	4,147	5,983	2,734	2,235	1,390	1,514
Ariyalur				68.1				84.0				12.9
Chengalpattu MGR	370.2				36.3				320.4			
Chennai	17.2	5.9	1.6	1.9	3.8	15.8	1.0	0.5	26.8	27.8	1.7	1.9
Coimbatore	144.2	88.3	18.1	13.8	95.4	158.0	278.7	254.4	130.7	85.9	36.3	29.9
Cuddalore		126.2	94.7	72.0		193.3	152.9	190.5		58.8	30.8	15.4
Dharmapuri	319.2	224.6	75.5	120.1	38.8	113.2	149.8	249.6	117.4	138.4	88.6	56.2
Dindigul	66.2	65.3	40.3	30.1	56.6	111.8	145.1	188.3	76.9	92.1	59.9	70.3
Erode	126.5	67.8	99.5	80.9	79.6	152.5	191.4	341.1	238.2	213.9	202.7	181.9
Kancheepuram		165.4	172.5	231.3		73.7	56.6	220.0		123.4	91.8	119.6
Kanniyakumari	28.1	29.5	3.9	4.7	48.0	37.5	78.9	74.1	16.8	10.5	4.1	1.8
Karur		32.3	34.7	26.2		54.2	57.0	77.6		72.9	57.9	49.4
Krishnagiri			103.8				123.0					16.5
Madurai	155.7	72.4	37.6	51.9	86.0	103.7	135.8	250.1	88.7	47.5	10.1	5.2
Nagapattinam	321.5	136.4	118.7	90.4	47.8	33.8	103.7	141.2	145.4	63.9	45.1	25.2
Namakkal		76.9	32.7	23.6		66.6	141.7	206.4		268.7	160.7	177.1
Perambalur		99.2	72.8	8.7		74.4	138.6	72.6		63.7	19.3	2.8
Pudukkottai	187.8	164.6	149.7	256.1	31.7	73.7	44.8	192.7	64.4	78.0	22.3	57.1
Ramanathapuram	88.3	76.8	46.0	0.5	25.6	18.8	44.5	103.5	21.7	20.1	2.9	2.5
Salem	248.8	90.4	104.2	74.3	67.0	133.7	369.9	375.6	435.6	114.3	156.6	113.6
Sivaganga	108.3	102.7	125.7	109.1	10.2	43.4	51.5	54.6	32.9	18.3	11.2	6.0
South Arcot	139.4				131.1				86.9			
Thanjavur	195.3	109.4	124.6	103.9	62.4	78.3	191.9	222.7	75.3	48.0	28.6	22.3
The Nilgiris	18.4	6.5	10.1	6.3	18.9	39.4	34.5	24.8	4.2	3.1	2.7	0.9
Theni		46.0	12.9	14.3		47.0	67.7	106.5		33.9	8.9	4.1
Thiruvallur		69.9	121.7	54.9		74.7	58.1	127.4		126.1	90.2	108.6
Thiruvarur		127.1	112.6	67.9		54.7	133.5	137.6		57.1	14.4	6.2
Thoothukkudi	81.8	65.3	37.9	242.5	27.8	33.6	80.4	525.7	46.4	33.3	16.2	241.3
Tiruchirappalli	338.7	127.9	68.3	67.6	115.7	90.8	202.6	264.7	262.9	73.0	42.8	38.4
Tirunelveli	118.2	92.4	87.6	101.8	81	125.8	236.6	271.6	120.2	89.0	62.8	83.0
Tiruvannamalai	287.4	241.1	107.6	110.1	62.7	158.9	189.3	430.1	75.4	53.8	16.6	16.8
Vellore	249.2	191.0	90.8	105.3	136.8	177.0	275.1	339.9	146.9	77.4	24.9	25.7
Viluppuram	445.5	480.2	255.8	255.5	57.9	61.3	256.1	303.4	168.5	111.4	33.9	23.7
Virudhunagar	34.0	42.9	40.5	63.6	40.5	45.8	156.7	151.3	31.6	30.7	29.8	14.0

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.1. Animal Population

TABLE II.1.4: District-wise Breedable Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	2,946	2,291	1,750	1,701	946	1,705	2,935	4,031	1,991	1,563	1,014	1,065
Ariyalur				48.4				54.8				9.0
Chengalpattu MGR	282.3				26.1				251.3			
Chennai	13.1	3.5	1.3	1.6	3.0	9.7	0.9	0.4	21.9	17.1	1.6	1.5
Coimbatore	98.0	59.4	13.4	9.6	59.8	106.1	203.0	175.4	87.5	56.8	26.7	21.2
Cuddalore		89.2	68.5	45.4		135.9	108.9	121.5		40.4	22.5	10.3
Dharmapuri	242.2	159.4	56.5	85.4	27.7	79.0	105.7	166.3	82.0	94.9	63.8	37.2
Dindigul	44.5	48.5	30.3	21.3	40.2	78.0	97.4	123.9	53.7	64.8	42.3	47.5
Erode	84.9	46.0	70.7	54.0	54.6	102.9	134.6	225.8	156.0	144.6	145.4	122.6
Kancheepuram		117.6	125.7	164.6		53.6	41.7	150.0		94.7	69.1	86.2
Kanniyakumari	19.3	21.3	2.6	3.4	32.4	27.1	55.8	49.7	12.3	8.1	3.0	1.3
Karur		22.8	24.7	17.4		37.4	39.0	49.6		48.8	40.0	33.1
Krishnagiri			81.5				89.0				12.4	
Madurai	107.2	51.7	28.5	36.1	59.7	71.3	97.4	163.9	61.7	32.9	7.8	3.8
Nagapattinam	224.8	89.2	83.3	61.8	33.0	23.2	69.0	94.6	100.2	42.3	33.5	17.0
Namakkal		53.9	23.7	16.7		47.0	98.5	138.1		171.1	115.4	118.6
Perambalur		73.3	52.1	5.8		52.7	93.7	47.8		47.5	13.8	1.8
Pudukkottai	130.0	119.2	109.2	174.3	21.8	52.3	33.0	125.9	45.4	57.6	16.6	39.6
Ramanathapuram	64.4	55.6	33.1	0.4	16.6	13.8	31.1	70.6	15.3	15.2	2.2	1.8
Salem	180.4	63.7	76.0	50.6	46.1	91.9	262.2	251.8	310.1	81.6	112.6	77.1
Sivaganga	73.8	70.3	88.7	72.7	6.4	28.9	35.1	35.4	21.7	12.7	9.1	4.2
South Arcot	102.3				94.3				72.8			
Thanjavur	134.7	75.8	92.2	70.6	43.1	53.9	132.7	150.4	54.2	34.5	21.6	15.6
The Nilgiris	11.4	5.5	7.9	4.8	12.2	31.7	26.9	16.4	2.9	2.4	2.0	0.7
Theni		35.5	9.1	10.7		32.2	47.3	71.2		24.4	6.5	2.9
Thiruvallur		54.5	90.3	45.9		55.9	43.4	109.3		98.5	69.9	94.5
Thiruvarur		92.8	77.5	46.8		39.0	92.3	91.2		41.2	10.4	4.4
Thoothukkudi	57.5	46.9	27.3	151.8	18.9	24.9	57.1	327.0	33.0	25.4	12.1	163.4
Tiruchirappalli	239.1	87.7	47.2	47.4	79.6	60.8	145.6	179.4	191.4	50.4	29.7	26.3
Tirunelveli	79.7	63.7	64.2	79.3	56.0	85.6	167.5	206.1	83.7	62.0	45.8	68.4
Tiruvannamalai	197.9	173.8	77.8	78.1	42.6	114.6	132.9	295.3	55.1	38.6	12.3	10.4
Vellore	186.2	133.9	65.6	73.6	100.6	123.1	201.4	227.0	113.4	55.4	18.8	17.9
Viluppuram	349.2	346.7	189.9	180.2	44.7	41.8	179	211.2	144.0	78.0	25.0	16.6
Virudhunagar	23.4	29.6	30.6	42.6	26.2	30.7	113.4	100.6	21.2	21.3	22.2	9.7

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.





II.1. Animal Population

TABLE II.1.5: District-wise In-milk Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	1,420	1,236	832	843	506	988	1,665	2,234	979	908	518	552
Ariyalur				22.6				29.4				4.7
Chengalpattu MGR	142.0				12.2				132.6			
Chennai	9.5	2.9	1.1	1.0	2.1	7.4	0.7	0.3	16.7	14.0	1.3	1.0
Coimbatore	55.4	35.1	6.8	5.4	34.3	62.2	115.1	101.6	53.5	33.8	13.7	12.2
Cuddalore		51.0	32.0	22.2		69.3	56.2	62.1		24.8	11.3	4.7
Dharmapuri	90.8	62.5	19.4	35.7	12.7	39.2	58.8	92.3	45.7	48.1	31.0	20.4
Dindigul	16.4	25.0	12.9	10.1	22.6	45.8	58.8	72.2	23.6	38.0	22.6	25.4
Erode	41.4	26.3	35.2	25.9	28.7	59.5	76.6	119.3	87.6	85.8	73.8	61.4
Kancheepuram		69.3	54.3	80.9		32.1	21.6	81.6		60.2	32.8	46.3
Kanniyakumari	9.8	14.7	1.2	1.5	19.5	20.5	38.0	30.4	7.8	5.9	2.0	0.7
Karur		11.0	13.9	10.7		17.9	22.2	30.6		27.2	22.7	20.0
Krishnagiri			35.1				54.0				6.3	
Madurai	63.3	27.5	14.0	18.2	36.1	43.2	58.5	110.0	34.9	18.6	4.6	2.3
Nagapattinam	107.5	58.6	38.1	31.7	17.3	13.1	33.2	49.7	53.9	27.3	15.1	9.5
Namakkal		30.5	11.7	9.8		26.3	55.5	75.1		87.8	59.3	62.8
Perambalur		36.4	24.9	3.0		26.0	56.4	25.8		21.0	7.0	0.8
Pudukkottai	64.2	52.1	54.4	86.0	12.0	25.1	18.5	67.4	23.4	26.7	8.3	20.0
Ramanathapuram	35.5	33.2	18.7	0.2	8.2	10.7	18.9	36.4	7.3	8.7	1.3	0.9
Salem	92.5	40.0	33.1	23.5	25.1	57.8	142.2	136.5	151.5	52.3	57.0	38.7
Sivaganga	38.8	39.1	42.2	38.9	3.4	16.2	20.0	21.8	12.1	6.9	3.0	2.0
South Arcot	48.7				43.1				22.1			
Thanjavur	69.4	40.3	52.4	35.9	24.0	29.1	68.7	85.1	27.0	18.4	12.4	8.8
The Nilgiris	6.3	4.6	4.8	1.9	7.3	22.2	18.2	10.7	1.3	1.7	1.1	0.3
Theni		23.2	5.0	5.3		21.0	28.7	47.3		15.0	3.3	1.8
Thiruvallur		40.4	43.4	18.2		38.0	24.2	46.5		72.2	36.3	38.3
Thiruvarur		49.3	41.6	24.5		21.3	52.3	50.7		23.3	5.5	2.5
Thoothukkudi	27.6	26.5	14.2	90.7	9.1	15.2	35.7	195.4	18.1	14.7	6.6	89.6
Tiruchirappalli	111.6	49.5	21.5	23.1	41.1	34.6	76.6	99.1	85.3	26.6	15.4	13.3
Tirunelveli	44.4	39.3	37.9	39.5	32.8	48.6	101.2	107.6	51.0	38.5	25.9	33.1
Tiruvannamalai	109.4	87.6	36.5	35.7	25.5	62.5	79.7	145.9	23.5	18.5	6.1	5.8
Vellore	89.6	79.6	31.1	34.2	52.9	78.7	114.5	136.6	49.8	35.2	9.3	10.2
Viluppuram	133.1	162.6	78.8	84.1	19.9	25.8	92.9	107.2	37.7	43.4	11.8	8.4
Virudhunagar	12.7	17.5	15.9	22.2	15.7	18.6	67.1	59.3	12.2	13.1	11.1	5.4

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.1. Animal Population

TABLE II.1.6: District-wise Milch Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	2,228	1,796	1,341	1,240	724	1,376	2,353	3,072	1,420	1,282	793	806
Ariyalur				37.6				41.6				7.0
Chengalpattu MGR	207.9				16.4				194.7			
Chennai	10.7	3.1	1.2	1.2	2.5	8.1	0.8	0.3	19.2	14.8	1.5	1.2
Coimbatore	79.4	49.9	10.3	7.1	48.6	87.5	159.5	135.1	72.5	46.5	19.8	16.9
Cuddalore		71.8	52.0	31.5		106.2	85.3	87.6		33.6	17.7	7.4
Dharmapuri	169.2	114.8	44.3	59.3	19.1	57.7	88.8	128.7	67.9	72.9	53.3	29.5
Dindigul	30.7	37.4	23.8	16.2	33.8	66.1	79.4	98.0	37.0	55.9	33.6	36.3
Erode	67.6	37.5	52.0	37.5	45.0	87.0	104.6	169.7	130.7	123.3	105.9	91.0
Kancheepuram		92.9	93.4	118.9		42.9	31.3	112.7		78.2	52.6	64.8
Kanniyakumari	15.2	17.3	1.8	2.5	24.7	23.3	48.3	38.6	9.8	6.7	2.6	1.0
Karur		17.1	20.5	14.8		28.8	31.7	41.2		39.5	33.4	27.8
Krishnagiri			62.3				72.8					9.8
Madurai	88.1	40.4	21.8	25.7	49.5	59.6	78.2	133.3	49.0	25.8	6.4	2.8
Nagapattinam	180.4	75.0	64.5	47.2	25.7	18.6	54.1	71.1	80.7	35.9	26.9	13.0
Namakkal		46.4	18.6	12.9		39.6	80.4	107.6		145.1	93.9	90.8
Perambalur		60.7	43.0	4.2		43.0	78.4	36.0		38.3	11.2	1.2
Pudukkottai	101.4	89.9	81.6	125.2	15.8	38.2	25.7	91.0	34.8	40.4	12.4	28.9
Ramanathapuram	51.0	46.9	27.0	0.3	11.6	11.7	25.5	51.3	9.9	12.8	1.8	1.4
Salem	142.0	51.5	57.7	34.9	35.5	76.7	208.3	190.4	220.3	68.5	88.5	56.5
Sivaganga	57.2	58.5	65.0	54.3	4.6	23.5	27.7	28.4	16.6	9.8	4.7	3.1
South Arcot	78.3				72.0				31.1			
Thanjavur	108.8	64.0	74.2	52.5	35.0	45.7	104.5	116.0	44.0	29.0	17.1	12.3
The Nilgiris	8.2	4.9	7.0	2.8	9.7	26.2	23.3	13.2	2.1	2.1	1.6	0.5
Theni		30.2	7.1	8.1		27.8	37.4	58.0		19.8	4.4	2.3
Thiruvallur		46.9	68.0	30.8		46.1	34.6	76.8		85.6	56.4	66.3
Thiruvarur		78.8	60.4	35.6		32.6	72.7	70.2		35.3	8.5	3.7
Thoothukkudi	44.8	38.5	21.0	115.0	14.8	20.9	47.5	247.9	26.4	20.8	9.8	125.6
Tiruchirappalli	186.2	71.6	33.2	34.4	59.9	49.3	114.4	137.4	128.6	41.2	22.2	19.8
Tirunelveli	64.3	53.7	52.1	61.9	45.3	70.8	136.9	162.3	69.6	53.8	37.3	54.3
Tiruvannamalai	145.1	114.0	60.9	55.3	31.2	79.2	108.1	210.2	31.6	22.7	9.5	7.1
Vellore	126.2	106.5	50.8	53.5	68.5	99.7	163.6	182.2	67.7	45.1	14.9	14.2
Viluppuram	247.8	250.9	142.1	127.1	32.3	33.1	136.5	155.2	58.4	59.9	18.9	12.2
Virudhunagar	17.9	24.7	23.6	32.2	22.4	25.8	92.1	79.5	17.6	18.3	16.0	7.3

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.1. Animal Population

TABLE II.1.7: District-wise Male Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	3,351	2,317	1,599	1,348	473	1,060	993	1,400	469	506	268	495
Ariyalur				37.1				15.5				3.2
Chengalpattu MGR	282.1				26.3				59.9			
Chennai	2.3	0.9	0.7	0.4	0.2	1.7	0.7	0.3	2.2	1.8	1.1	1.0
Coimbatore	114.4	59.3	22.0	15.9	42.9	52.1	43.8	59.3	17.7	10.6	4.6	6.6
Cuddalore		87.6	58.1	19.2		80.7	37.4	55.9		15.9	7.6	4.4
Dharmapuri	180.7	137.6	46.5	50.1	7.1	50.3	26.0	32.6	11.6	37.6	11.4	8.5
Dindigul	74.0	48.1	32.3	15.4	28.2	53.8	27.3	16.6	20.5	22.1	8.3	10.4
Erode	81.6	51.4	48.7	49.0	44.2	89.3	59.0	78.4	26.3	53.2	27.3	60.6
Kancheepuram		122.4	116.5	111.1		56.1	19.2	59.2		44.3	23.9	34.8
Kanniyakumari	9.8	5.8	1.8	1.8	6.8	9.8	17.2	9.1	6.8	4.0	2.0	0.7
Karur		18.4	15.4	10.3		20.5	10.8	7.2		15.1	7.6	6.2
Krishnagiri			59.1				13.6				2.4	
Madurai	118.2	51.6	24.7	27.4	16.3	33.4	28.4	19.7	15.9	7.2	2.3	1.0
Nagapattinam	209.6	67.8	43.4	38.5	13.1	11.6	26.5	30.8	31.2	12.7	11.6	6.6
Namakkal		67.3	24.3	11.6		14.0	23.7	44.4		26.5	21.5	42.8
Perambalur		83.0	46.2	9.5		33.9	26.6	36.1		15.0	3.0	2.3
Pudukkottai	192.7	147	115.6	166.5	11.4	42.7	23.3	66.9	14.4	15.1	9.7	26.9
Ramanathapuram	88.3	61.7	24.3	1.2	7.1	6.2	13.8	26.9	5.0	4.8	1.0	1.0
Salem	264.9	61.3	61.0	49.4	16.9	55.4	58.7	65.0	20.0	19.3	19.9	33.0
Sivaganga	124.8	81.8	84.3	52.6	4.2	27.5	19.0	11.6	11.1	7.5	4.0	1.8
South Arcot	118.0				55.6				13.1			
Thanjavur	162.8	74.3	82.4	70.5	17.1	56.4	90.8	49.6	16.1	9.7	5.9	5.9
The Nilgiris	2.8	1.4	2.3	1.5	1.6	7.3	6.2	4.8	1.0	1.2	0.7	0.2
Theni		40.0	9.6	10.5		13.1	11.4	5.5		5.7	3.0	1.3
Thiruvallur		49.1	63.0	43.9		41.0	19.2	97.9		21.8	21.7	85.9
Thiruvarur		61.8	54.9	35.5		14.2	31.1	28.5		14.1	3.9	1.4
Thoothukkudi	55.5	33.7	23.0	59.4	6.3	12.8	22.0	131.5	17.5	13.4	4.7	77.8
Tiruchirappalli	257.0	84.7	33.2	44.5	35.6	36.5	50.2	53.0	50.5	14.3	6.8	8.6
Tirunelveli	84.4	49.7	39.7	41.2	25.9	41.5	54.8	89.8	25.0	22.1	15.9	31.7
Tiruvannamalai	302.6	226.0	123.0	94.1	27.0	90.7	61.5	83.1	11.7	11.8	6.6	5.9
Vellore	181.9	143.0	86.8	76.7	43.9	64.7	49.0	51.8	28.9	25.9	4.5	8.4
Viluppuram	406.5	380.3	232.3	168.7	25.7	35.3	79.9	138.0	58.6	48.2	15.1	9.3
Virudhunagar	35.9	19.5	23.7	35.1	9.7	7.9	41.3	31.2	3.6	5.6	10.2	6.8

Source: 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.2. Sex Ratio in Dairy Animals

TABLE II.2.1: District-wise Male - Female Ratio

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	45	42	40	35	26	30	19	19	15	18	16	25
Ariyalur				35				16				20
Chengalpattu MGR	43				42				16			
Chennai	12	13	32	18	6	10	41	35	7	6	40	36
Coimbatore	44	40	55	54	31	25	14	19	12	11	11	18
Cuddalore		41	38	21		29	20	23		21	20	22
Dharmapuri	36	38	38	29	15	31	15	12	9	21	11	13
Dindigul	53	42	44	34	33	32	16	8	21	19	12	13
Erode	39	43	33	38	36	37	24	19	10	20	12	25
Kancheepuram		43	40	32		43	25	21		26	21	23
Kanniyakumari	26	16	31	28	12	21	18	11	29	27	33	27
Karur		36	31	28		27	16	8		17	12	11
Krishnagiri			36				10				13	
Madurai	43	42	40	34	16	24	17	7	15	13	18	17
Nagapattinam	39	33	27	30	22	26	20	18	18	17	20	21
Namakkal		47	43	33		17	14	18		9	12	19
Perambalur		46	39	52		31	16	33		19	14	45
Pudukkottai	51	47	44	39	27	37	34	26	18	16	30	32
Ramanathapuram	50	45	35	69	22	25	24	21	19	19	25	29
Salem	52	40	37	40	20	29	14	15	4	14	11	23
Sivaganga	54	44	40	33	29	39	27	18	25	29	26	23
South Arcot	46				30				13			
Thanjavur	45	40	40	40	21	42	32	18	18	17	17	21
The Nilgiris	13	18	18	19	8	16	15	16	19	28	22	19
Theni		46	43	42		22	14	5		14	25	24
Thiruvallur		41	34	44		35	25	43		15	19	44
Thiruvarur		33	33	34		21	19	17		20	21	18
Thoothukkudi	40	34	38	20	18	28	22	20	27	29	23	24
Tiruchirappalli	43	40	33	40	24	29	20	17	16	16	14	18
Tirunelveli	42	35	31	29	24	25	19	25	17	20	20	28
Tiruvannamalai	51	48	53	46	30	36	25	16	13	18	28	26
Vellore	42	43	49	42	24	27	15	13	16	25	15	25
Viluppuram	48	44	48	40	31	37	24	31	26	30	31	28
Virudhunagar	51	31	37	36	19	15	21	17	10	15	26	33

Source: Estimated from 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.3. Wet-Dry Ratio of Dairy Animals

TABLE II.3.1: District-wise Wet-Dry Ratio

Districts	Indigenous Cattle (%)				Crossbred Cattle (%)				Buffalo (%)			
	1992	1997	2003	2007	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	64	69	62	68	70	72	71	73	69	71	65	68
Ariyalur				60				71				66
Chengalpattu MGR	68				74				68			
Chennai	89	95	94	88	83	91	91	89	87	94	87	84
Coimbatore	70	70	66	76	71	71	72	75	74	73	69	72
Cuddalore		71	61	70		65	66	71		74	64	64
Dharmapuri	54	54	44	60	66	68	66	72	67	66	58	69
Dindigul	53	67	54	62	67	69	74	74	64	68	67	70
Erode	61	70	68	69	64	68	73	70	67	70	70	68
Kancheepuram		75	58	68		75	69	72		77	62	71
Kanniyakumari	65	85	66	61	79	88	79	79	79	87	75	70
Karur		65	68	73		62	70	74		69	68	72
Krishnagiri			56				74				65	
Madurai	72	68	64	71	73	73	75	83	71	72	73	79
Nagapattinam	60	78	59	67	67	71	61	70	67	76	56	73
Namakkal		66	63	76		67	69	70		61	63	69
Perambalur		60	58	71		60	72	72		55	62	67
Pudukkottai	63	58	67	69	76	66	72	74	67	66	67	69
Ramanathapuram	70	71	69	67	70	91	74	71	74	68	72	64
Salem	65	78	57	67	71	75	68	72	69	76	64	69
Sivaganga	68	67	65	72	74	69	72	77	73	70	64	65
South Arcot	62				60				71			
Thanjavur	64	63	71	69	69	64	66	73	61	64	72	72
The Nilgiris	77	94	68	66	76	85	78	81	63	82	73	71
Theni		77	70	65		75	77	81		76	75	78
Thiruvallur		86	64	59		82	70	61		84	64	58
Thiruvarur		63	69	69		65	72	72		66	66	71
Thoothukkudi	62	69	67	79	61	73	75	79	68	71	68	71
Tiruchirappalli	60	69	65	67	69	70	67	72	66	65	70	67
Tirunelveli	69	73	73	64	72	69	74	66	73	72	69	61
Tiruvannamalai	75	77	60	65	82	79	74	69	74	82	64	82
Vellore	71	75	61	64	77	79	70	75	74	78	62	72
Viluppuram	54	65	55	66	61	78	68	69	65	72	63	69
Virudhunagar	71	71	67	69	70	72	73	75	69	72	70	74

Source: Estimated from 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.4. Livestock Density

TABLE II.4.1: District-wise Density of Total Livestock and Bovine

Districts	Livestock (No. per sq km)				Bovine (No. per sq km)			
	1992	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	194	185	191	236	96	90	83	101
Ariyalur				295				114
Chengalpattu MGR	228				139			
Chennai	406	421	61	95	307	314	39	35
Coimbatore	128	105	123	99	73	61	54	51
Cuddalore		256	195	186		153	104	97
Dharmapuri	143	171	210	104	70	73	88	54
Dindigul	136	140	142	137	51	63	50	53
Erode	161	165	209	235	73	77	77	97
Kancheepuram		230	179	334		132	108	175
Kanniyakumari	112	94	126	128	70	58	64	55
Karur		223	202	224		74	63	61
Krishnagiri			149				62	
Madurai	137	94	186	350	69	45	64	95
Nagapattinam	287	247	308	297	160	120	128	122
Namakkal		319	286	338		154	120	150
Perambalur		206	211	201		100	83	75
Pudukkottai	203	208	150	443	108	112	78	164
Ramanathapuram	144	126	158	195	58	46	32	33
Salem	264	207	316	277	123	91	148	137
Sivaganga	205	158	183	169	70	67	71	56
South Arcot	323				148			
Thanjavur	248	192	267	283	156	111	154	140
The Nilgiris	23	33	41	23	18	23	22	15
Theni		115	79	106		57	35	44
Thiruvallur		182	200	273		112	109	152
Thiruvarur		300	357	284		157	167	132
Thoothukkudi	154	141	158	462	50	41	39	272
Tiruchirappalli	224	227	237	269	96	97	92	108
Tirunelveli	161	139	206	347	67	62	74	92
Tiruvannamalai	237	234	136	220	121	124	80	117
Vellore	236	211	186	188	133	115	90	103
Viluppuram	280	278	220	248	161	155	121	124
Virudhunagar	119	122	224	264	37	36	71	71

Source: Estimated from 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



II.4. Livestock Density

TABLE II.4.2: District-wise Density of Poultry and Small Ruminants

Districts	Poultry (No. per sq km)			Small Ruminants (No. per sq km)			
	1997	2003	2007	1992	1997	2003	2007
TAMIL NADU	280	664	983	93	90	106	132
Ariyalur			304				175
Chengalpattu MGR				84			
Chennai	510	195	414	82	91	21	60
Coimbatore	402	5,626	5,824	52	41	66	47
Cuddalore	157	91	143		93	84	78
Dharmapuri	224	344	357	71	94	121	50
Dindigul	108	325	470	81	75	90	84
Erode	339	646	823	85	86	131	137
Kancheepuram	202	80	278		96	69	157
Kanniyakumari	389	277	779	39	33	61	71
Karur	277	172	256		142	135	162
Krishnagiri		133				86	
Madurai	91	107	305	64	48	122	254
Nagapattinam	173	7,096	246	126	126	170	174
Namakkal	3,683	78	12,593		142	159	182
Perambalur	101	129	159		97	127	122
Pudukkottai	221	71	231	94	95	71	277
Ramanathapuram	61	655	101	85	78	117	159
Salem	238	138	801	124	104	167	137
Sivaganga	134	151	359	134	90	110	112
South Arcot				167			
Thanjavur	215	22	322	92	80	112	142
The Nilgiris	27	203	23	4	10	9	8
Theni	144	202	529		51	42	61
Thiruvallur	335	74	323		67	88	121
Thiruvarur	260	215	149		141	185	151
Thoothukkudi	120	259		99	95	116	183
Tiruchirappalli	205	262	586	119	126	142	159
Tirunelveli	91	139		90	74	130	249
Tiruvannamalai	87	54	79	110	105	55	101
Vellore	162	130	675	100	93	89	84
Viluppuram	143	123	349	104	110	97	119
Virudhunagar	83	305	352	79	83	149	190

Source: Estimated from 15th, 16th, 17th and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.





II.5. Breed-wise Population

TABLE II.5.1: District and Breed-wise Population of Indigenous Cattle in Tamil Nadu - 2007

Districts	Breed-wise Population of Indigenous Cattle ('000)								
	Alambadi	Bargur	Jellicut	Kangayam	Manapari	Umblacherry	Other Graded	Non-Descript	Total
TAMIL NADU	32	21	34	315	102	217	266	2,819	3,806
Ariyalur	0	0	0	3	12	13	2	75	105
Chennai	0	0	0	0	0	0	0	2	2
Coimbatore	1	1	1	13	0	1	3	11	30
Cuddalore	5	1	0	1	1	0	7	76	91
Dharmapuri	1	1	0	5	0	0	20	142	170
Dindigul	0	0	0	33	0	0	3	9	46
Erode	1	5	0	70	0	0	12	42	130
Kancheepuram	2	3	0	26	3	2	19	288	342
Kanniyakumari	0	0	0	0	0	0	1	5	6
Karur	0	0	0	21	0	0	1	13	36
Madurai	0	0	1	3	3	0	6	65	79
Nagapattinam	1	0	0	1	2	77	8	39	129
Namakkal	0	1	0	13	0	0	7	14	35
Perambalur	0	0	1	2	2	1	4	8	18
Pudukkottai	2	1	21	33	33	23	14	295	423
Ramanathapuram	0	0	0	0	0	0	0	2	2
Salem	2	2	2	37	0	1	12	66	124
Sivaganga	1	0	1	2	3	3	2	149	162
Thanjavur	2	1	1	6	7	25	5	128	174
The Nilgiris	0	0	0	0	0	0	0	7	8
Theni	0	1	0	2	0	0	1	21	25
Thiruvallur	0	0	0	0	0	1	11	87	99
Thiruvarur	1	0	0	2	1	62	5	32	103
Thoothukkudi	2	0	0	4	0	2	32	262	302
Tiruchirappalli	1	0	3	15	31	0	8	53	112
Tirunelveli	3	0	0	6	0	0	6	127	143
Tiruvannamalai	1	0	0	1	0	0	4	198	204
Vellore	0	0	0	1	0	1	32	149	182
Viluppuram	4	2	0	7	1	0	35	375	424
Virudhunagar	2	0	1	7	0	2	6	80	99

Source: 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Zero denotes either nil or negligible.



II.5. Breed-wise Population

TABLE II.5.2: District-wise Male, Female and Milch Animals of Alambadi and Bargur Breeds - 2007

Districts	Alambadi			Bargur		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	8,129	22,842	8,111	10,636	10,181	3,613
Ariyalur	0	0	0	0	0	0
Chennai	10	28	3	8	26	8
Coimbatore	303	644	262	99	1,099	459
Cuddalore	426	4,968	1,448	478	598	148
Dharmapuri	388	1,013	303	270	396	104
Dindigul	14	73	11	1	4	2
Erode	228	346	90	3,386	1,260	381
Kancheepuram	313	1,279	627	1,623	1,023	366
Kanniyakumari	0	0	0	0	16	5
Karur	4	30	7	0	39	21
Madurai	53	248	127	54	82	53
Nagapattinam	101	1,279	490	95	217	38
Namakkal	15	53	22	154	473	167
Perambalur	36	58	26	39	66	24
Pudukkottai	767	1,462	464	723	729	260
Ramanathapuram	10	6	0	2	3	1
Salem	558	1,564	661	1,399	1,045	554
Sivaganga	275	248	71	23	43	17
Thanjavur	659	1,104	370	521	590	181
The Nilgiris	18	8	0	2	96	63
Theni	19	93	38	125	435	106
Thiruvallur	24	42	13	26	12	3
Thiruvarur	124	551	217	117	372	171
Thoothukkudi	319	945	544	54	160	33
Tiruchirappalli	194	991	412	90	121	45
Tirunelveli	835	1,391	645	12	34	11
Tiruvannamalai	314	328	126	152	134	63
Vellore	284	184	68	72	100	48
Viluppuram	1,282	2,310	584	966	872	199
Virudhunagar	556	1,596	482	145	136	82

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.3: District-wise Male, Female and Milch Animals of Jellicut and Kangayam Breeds - 2007

Districts	Jellicut			Kangayam		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	21,183	13,005	3,900	138,350	174,652	59,166
Ariyalur	283	131	8	1,780	1,711	495
Chennai	3	14	2	16	19	5
Coimbatore	510	23	9	8,873	3,798	1,400
Cuddalore	23	76	43	626	555	206
Dharmapuri	355	126	43	1,274	3,560	1,057
Dindigul	395	8	4	10,886	22,205	7,271
Erode	244	254	86	24,115	46,046	16,008
Kancheepuram	152	201	78	10,449	15,977	5,692
Kanniyakumari	0	0	0	2	0	0
Karur	69	11	2	6,829	14,431	6,199
Madurai	1,154	156	48	2,006	1,485	516
Nagapattinam	34	162	48	276	662	168
Namakkal	95	93	21	3,717	9,057	3,148
Perambalur	146	391	147	1,925	337	85
Pudukkottai	12,496	8,147	2276	22,751	10,723	3,080
Ramanathapuram	14	0	0	58	0	0
Salem	1,042	479	130	11,713	25,675	7,899
Sivaganga	1,168	273	61	604	1,870	699
Thanjavur	468	328	146	4,229	1,405	444
The Nilgiris	0	6	4	14	107	69
Theni	309	32	19	870	902	285
Thiruvallur	17	25	7	80	40	10
Thiruvarur	57	93	24	1,863	140	43
Thoothukkudi	51	209	91	720	1,793	574
Tiruchirappalli	1,634	1,170	470	10,829	4,433	1,004
Tirunelveli	87	92	34	1,947	3,078	1,431
Tiruvannamalai	60	49	20	289	320	111
Vellore	13	2	0	419	159	62
Viluppuram	23	4	0	3,652	2,973	828
Virudhunagar	281	450	79	5,538	1,191	377

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.4: District-wise Male, Female and Milch Animals of Manapari and Umblacherry Breeds - 2007

Districts	Manapari			Umblacherry		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	52,419	49,547	15,773	78,662	135,810	48,823
Ariyalur	7,345	4,600	1,454	4,761	8,169	2,769
Chennai	0	0	0	0	82	48
Coimbatore	81	90	22	88	480	69
Cuddalore	561	391	125	38	102	29
Dharmapuri	146	145	33	132	103	37
Dindigul	55	206	75	22	62	32
Erode	160	100	44	66	111	79
Kancheepuram	739	1,824	791	600	1,518	669
Kanniyakumari	0	0	0	0	0	0
Karur	168	145	19	1	10	6
Madurai	1,993	1,047	342	37	70	34
Nagapattinam	2,009	337	65	21,142	53,383	19,099
Namakkal	37	51	29	9	42	11
Perambalur	1,604	342	99	414	836	310
Pudukkottai	14,722	18,444	6,480	11,332	11,679	3,921
Ramanathapuram	0	0	0	0	0	0
Salem	203	211	52	1,024	273	47
Sivaganga	1,056	1,873	485	1,194	2,250	1,194
Thanjavur	4,786	2,116	588	12,326	13,039	4,863
The Nilgiris	0	6	4	8	47	32
Theni	67	179	28	303	42	16
Thiruvallur	6	3	1	225	464	179
Thiruvarur	989	152	60	22,397	39,796	14,553
Thoothukkudi	47	207	46	284	862	184
Tiruchirappalli	14,657	16,233	4,666	51	373	116
Tirunelveli	104	199	78	202	333	108
Tiruvannamalai	18	62	11	400	0	0
Vellore	41	4	0	229	271	121
Viluppuram	521	447	129	175	290	91
Virudhunagar	304	133	47	1,202	1,123	206

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.5: District-wise Male, Female and Milch Animals of Other Graded and Non-Descript Indigenous Breeds - 2007

Districts	Other Graded			Non-Descript		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	80,344	171,181	57,277	958,269	1,859,672	640,560
Ariyalur	425	1,495	413	22,511	51,990	17,510
Chennai	32	316	94	313	1,382	865
Coimbatore	964	1,749	637	4,622	6,264	2,573
Cuddalore	1,749	5,174	1,503	15,336	60,166	18,696
Dharmapuri	4,917	15,166	4,624	42,591	99,638	28,830
Dindigul	736	2,055	745	3,271	5,527	1,992
Erode	4,646	7,023	1,758	16,203	25,758	7,434
Kancheepuram	5,347	13,723	4,895	91,839	195,746	67,821
Kanniyakumari	213	832	309	1,591	3,835	1,229
Karur	175	1,275	472	3,016	10,276	3,980
Madurai	303	5,540	2,499	21,756	43,311	14,568
Nagapattinam	1,871	6,164	2,105	12,945	26,361	9,662
Namakkal	1,536	5,360	1,666	6,002	8,422	4,761
Perambalur	1,733	2,253	750	3,605	4,427	1,543
Pudukkottai	2,185	11,405	2,672	101,516	193,492	66,877
Ramanathapuram	6	6	1	1,099	517	205
Salem	3,338	8,710	2,787	30,101	35,309	11,511
Sivaganga	739	1,576	567	47,570	100,968	35,855
Thanjavur	911	3,970	1,312	46,590	81,385	28,034
The Nilgiris	133	360	81	1,307	5,672	1,602
Theni	90	621	303	8,681	12,005	4,522
Thiruvallur	4,925	6,231	2,550	38,634	48,110	15,464
Thiruvarur	724	3,816	1,275	9,250	23,002	8,196
Thoothukkudi	5,272	12,220	6,348	52,637	208,894	77,872
Tiruchirappalli	2,135	5,985	2,086	14,952	38,114	14,254
Tirunelveli	1,674	4,577	2,040	35,948	91,324	35,138
Tiruvannamalai	867	3,463	1,102	92,322	105,731	34,285
Vellore	10,276	21,271	5,844	65,326	83,237	27,990
Viluppuram	20,510	14,863	4,432	141,601	233,778	77,797
Virudhunagar	1,912	3,982	1,407	25,134	55,031	19,494

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.6: District and Breed-wise Population of Exotic and Crossbred Animals in Tamil Nadu - 2007

('000)

Districts	Exotic				Crossbred				Total Exotic and Crossbred
	Jersey	HF	Other	Total	Jersey	HF	Other	Total	
TAMIL NADU	236	46	58	339	5,281	1,498	265	7,044	7,383
Ariyalur	0	0	0	0	79	9	11	99	100
Chennai	0	0	0	0	0	0	0	1	1
Coimbatore	14	7	3	24	165	114	10	289	314
Cuddalore	9	1	1	11	209	16	11	235	246
Dharmapuri	12	6	0	19	133	127	3	263	282
Dindigul	3	1	0	4	170	30	1	201	205
Erode	14	1	1	16	290	104	9	403	420
Kancheepuram	12	2	3	17	190	53	20	263	279
Kanniyakumari	2	1	0	3	39	37	4	80	83
Karur	1	0	0	1	69	14	1	84	85
Madurai	3	0	0	4	188	65	13	266	270
Nagapattinam	3	1	2	5	124	19	24	167	172
Namakkal	7	2	1	10	171	69	1	241	251
Perambalur	2	0	1	2	87	10	9	106	109
Pudukkottai	18	4	9	31	159	53	16	229	260
Ramanathapuram	24	0	0	24	105	0	1	107	130
Salem	14	3	2	19	303	111	8	422	441
Sivaganga	2	0	0	2	57	4	3	64	66
Thanjavur	8	1	2	11	189	52	21	262	272
The Nilgiris	1	1	0	2	11	16	1	27	30
Theni	2	2	1	4	59	48	0	108	112
Thiruvallur	0	0	0	1	166	55	4	224	225
Thiruvarur	4	0	2	6	111	30	18	160	166
Thoothukkudi	13	2	0	15	547	82	14	642	657
Tiruchirappalli	5	0	0	5	254	43	15	312	318
Tirunelveli	37	6	23	67	224	51	19	294	361
Tiruvannamalai	2	0	0	3	439	69	3	510	513
Vellore	12	2	4	17	294	74	7	375	392
Viluppuram	7	0	1	8	329	96	9	434	441
Virudhunagar	4	1	1	6	122	46	8	176	182

Source: 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Zero denotes either nil or negligible.



II.5. Breed-wise Population

TABLE II.5.7: District-wise Male, Female and Milch Animals of Jersey and Holstein Friesian Exotic and Crossbreds - 2007

Districts	Jersey Exotic and Crossbred			Holstein Friesian Exotic and Crossbred		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	1,009,920	4,556,268	1,652,703	287,095	1,216,445	456,429
Ariyalur	10,647	68,663	23,614	1,703	7,351	2,764
Chennai	140	266	110	25	77	45
Coimbatore	35,382	142,766	56,731	19,309	102,258	41,674
Cuddalore	46,406	171,243	53,451	3,338	13,194	4,414
Dharmapuri	18,106	127,457	47,785	13,743	119,788	43,728
Dindigul	12,771	159,959	60,641	3,341	27,635	11,095
Erode	55,849	247,497	88,125	19,225	86,343	29,024
Kancheepuram	41,640	160,603	56,656	11,331	43,760	15,283
Kanniyakumari	4,442	35,521	13,823	3,679	34,602	14,550
Karur	5,401	68,307	25,198	1,159	13,178	5,050
Madurai	10,815	180,655	78,279	6,439	58,518	24,882
Nagapattinam	21,603	105,163	36,529	3,111	16,224	5,736
Namakkal	31,748	146,921	49,064	12,103	58,153	21,534
Perambalur	28,628	59,628	21,447	3,716	6,984	2,351
Pudukkottai	39,857	136,696	48,395	18,284	39,096	13,559
Ramanathapuram	26,366	102,170	35,938	125	272	110
Salem	43,003	273,986	100,351	19,423	94,005	33,447
Sivaganga	10,203	48,700	19,262	600	3,700	1,403
Thanjavur	33,251	163,338	62,100	10,290	43,004	16,147
The Nilgiris	2,438	9,057	3,684	2,162	15,070	6,717
Theni	2,964	58,149	25,887	2,332	47,469	21,052
Thiruvallur	71,749	94,603	33,651	24,585	30,376	12,066
Thiruvarur	16,782	98,307	35,617	6,946	23,592	8,556
Thoothukkudi	113,414	488,641	162,017	15,220	30,848	9,378
Tiruchirappalli	35,768	223,065	82,837	7,706	35,723	12,949
Tirunelveli	61,281	204,331	76,527	13,998	40,587	15,681
Tiruvannamalai	68,105	373,251	122,028	13,612	55,395	18,925
Vellore	39,022	267,232	107,302	9,640	65,402	26,981
Viluppuram	104,520	231,462	82,951	29,472	66,275	22,600
Virudhunagar	17,619	108,631	42,703	10,478	37,566	14,728

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.8: District-wise Male, Female and Milch Animals of Other Exotic and Crossbreds and Total Exotic and Crossbreds - 2007

Districts	Other Exotic and Crossbred			Total Exotic and Crossbred		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	91,802	225,033	89,648	1,388,817	5,997,746	2,198,780
Ariyalur	3,150	8,031	3,013	15,500	84,045	29,391
Chennai	125	199	126	290	542	281
Coimbatore	4,631	9,598	3,154	59,322	254,622	101,559
Cuddalore	2,679	9,565	4,207	52,423	194,002	62,072
Dharmapuri	750	2,346	779	32,599	249,591	92,292
Dindigul	465	708	353	16,577	188,302	72,089
Erode	3,328	7,263	2,127	78,402	341,103	119,276
Kancheepuram	6,266	15,532	5,942	59,237	219,895	77,881
Kanniyakumari	335	3,986	2,052	8,456	74,109	30,425
Karur	143	984	327	6,703	82,469	30,575
Madurai	2,447	10,926	6,863	19,701	250,099	110,024
Nagapattinam	6,118	19,826	7,388	30,832	141,213	49,653
Namakkal	351	1,508	461	44,202	206,582	71,059
Perambalur	3,764	5,976	3,223	36,108	72,588	27,021
Pudukkottai	8,806	16,862	5,455	66,947	192,654	67,409
Ramanathapuram	364	1,050	349	26,855	103,492	36,397
Salem	2,533	7,650	2,699	64,959	375,641	136,497
Sivaganga	824	2,156	1,148	11,627	54,556	21,813
Thanjavur	6,047	16,478	6,898	49,588	222,820	85,145
The Nilgiris	224	668	292	4,824	24,795	10,693
Theni	194	910	312	5,490	106,528	47,251
Thiruvallur	1,567	2,435	803	97,901	127,414	46,520
Thiruvarur	4,747	15,738	6,498	28,475	137,637	50,671
Thoothukkudi	2,842	6,173	3,695	131,476	525,662	175,090
Tiruchirappalli	5,459	9,916	3,334	48,933	268,704	99,120
Tirunelveli	12,460	28,753	11,800	87,739	273,671	104,008
Tiruvannamalai	951	1,825	673	82,668	430,471	141,626
Vellore	3,118	7,265	2,310	51,780	339,899	136,593
Viluppuram	4,057	5,636	1,688	138,049	303,373	107,239
Virudhunagar	3,057	5,070	1,679	31,154	151,267	59,110

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.9: District and Breed-wise Population of Buffalo in Tamil Nadu - 2007

Districts	Buffalo Breed Population ('000)				
	Murrah	Toda	Other Graded	Non-Descript	Total Buffalo
TAMIL NADU	247	50	474	1,238	2,009
Ariyalur	2	0	1	14	16
Chennai	1	0	0	2	3
Coimbatore	13	1	7	16	36
Cuddalore	0	0	0	19	20
Dharmapuri	5	2	5	53	65
Dindigul	15	8	34	24	81
Erode	42	6	79	115	242
Kancheepuram	20	5	23	107	154
Kanniyakumari	0	0	0	2	3
Karur	1	1	22	32	56
Madurai	1	0	2	3	6
Nagapattinam	8	1	1	22	32
Namakkal	22	2	90	105	220
Perambalur	3	0	0	2	5
Pudukkottai	20	1	4	59	84
Ramanathapuram	0	0	0	4	4
Salem	31	4	33	79	147
Sivaganga	1	0	1	7	8
Thanjavur	9	0	4	15	28
The Nilgiris	0	1	0	0	1
Theni	1	0	1	3	5
Thiruvallur	2	0	61	131	195
Thiruvarur	2	0	0	6	8
Thoothukkudi	19	9	63	228	319
Tiruchirappalli	7	1	9	30	47
Tirunelveli	9	2	24	80	115
Tiruvannamalai	1	0	0	21	23
Vellore	6	4	5	19	34
Viluppuram	0	0	0	33	33
Virudhunagar	4	2	4	11	21

Source: 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Zero denotes either nil or negligible.



II.5. Breed-wise Population

TABLE II.5.10: District-wise Male, Female and Milch Animals of Murrah and Toda Buffalo Breeds - 2007

Districts	Murrah			Toda		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	63,183	173,218	63,848	11,693	37,718	10,359
Ariyalur	304	1,654	569	0	0	0
Chennai	434	568	384	491	391	43
Coimbatore	2,243	10,423	4,204	235	1,188	392
Cuddalore	67	333	139	9	31	14
Dharmapuri	844	4,472	1,585	87	1,468	572
Dindigul	2,536	12,721	5,336	246	7,637	992
Erode	13,279	29,018	10,865	1,890	4,561	1,402
Kancheepuram	5,651	13,529	5,735	1,129	3,636	1,275
Kanniyakumari	10	10	4	2	0	0
Karur	93	762	346	137	650	246
Madurai	215	1,273	666	4	70	33
Nagapattinam	2,004	5,726	2,047	99	1,052	399
Namakkal	3,600	18,767	6,716	545	1,858	650
Perambalur	1,459	1,613	408	92	30	4
Pudukkottai	6,773	12,831	4,363	338	547	236
Ramanathapuram	0	0	0	0	0	0
Salem	8,366	22,229	6,920	707	3,640	1,523
Sivaganga	152	505	242	21	61	14
Thanjavur	1,396	7,262	2,896	10	371	135
The Nilgiris	18	97	41	96	470	164
Theni	378	1,063	563	644	1,674	63
Thiruvallur	954	1,290	609	107	266	81
Thiruvarur	359	1,429	677	4	56	40
Thoothukkudi	4,793	4,440	16	2,239	2,540	0
Tiruchirappalli	1,629	5,733	2,126	85	489	192
Tirunelveli	2,595	6,363	2,926	644	1,674	779
Tiruvannamalai	402	1,058	341	25	37	11
Vellore	1,518	4,599	1,812	1,383	2,117	786
Viluppuram	22	119	43	14	35	25
Virudhunagar	1,089	3,331	1,269	410	1,169	288

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



II.5. Breed-wise Population

TABLE II.5.11: District-wise Male, Female and Milch Animals of Other Graded and Non-Descript Buffalo Breeds - 2007

Districts	Other Graded Buffalo			Non-Descript Buffalo		
	Male	Female	Milch	Male	Female	Milch
TAMIL NADU	112,945	321,470	112,112	308,412	935,194	340,165
Ariyalur	177	442	140	2,706	10,824	3,957
Chennai	17	61	38	583	1,147	577
Coimbatore	1,016	5,609	2,161	3,104	18,432	5,259
Cuddalore	134	365	146	4,201	14,644	4,408
Dharmapuri	460	4,233	1,612	7,097	46,070	16,647
Dindigul	4,222	29,752	10,806	3,402	20,215	8,306
Erode	16,069	63,022	21,967	29,352	85,273	27,207
Kancheepuram	4,833	18,361	7,089	23,158	83,597	32,173
Kanniyakumari	102	242	75	573	1,572	598
Karur	1,960	19,702	7,818	4,000	28,277	11,548
Madurai	183	1,479	589	643	2,338	964
Nagapattinam	206	826	309	4,314	17,614	6,719
Namakkal	18,474	71,245	24,226	20,170	85,223	31,232
Perambalur	66	176	30	670	1,116	299
Pudukkottai	1,206	2,944	1,215	18,536	40,780	14,156
Ramanathapuram	0	0	0	1,030	2,519	878
Salem	6,936	25,710	9,224	16,981	61,671	21,078
Sivaganga	205	375	114	1,461	5,055	1,623
Thanjavur	1,327	3,149	1,343	3,159	11,446	4,404
The Nilgiris	0	0	0	109	368	148
Theni	126	634	253	750	2,192	907
Thiruvallur	29,234	32,177	10,334	55,618	74,919	27,323
Thiruvarur	26	181	70	1,029	4,581	1,804
Thoothukkudi	15,376	8,354	702	55,432	172,716	64,040
Tiruchirappalli	830	8,615	2,600	6,027	23,563	8,432
Tirunelveli	6,897	16,833	6,517	21,604	58,261	22,880
Tiruvannamalai	72	266	104	5,378	15,473	5,353
Vellore	915	4,498	1,963	4,565	14,437	5,658
Viluppuram	109	226	100	9,188	23,343	8,274
Virudhunagar	1,767	1,993	567	3,572	7,528	3,313

Source: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



PART III : CATTLE AND BUFFALO BREEDS

Tamil Nadu has many indigenous draught cattle breeds like Kangayam, Bargur and Umblacherry. These animals are able to sustain scarcity of feed and water. They have low metabolic rate, low disease susceptibility, high nutrient conversion efficiency and low maintenance cost. With decline in the usage of bullock power in rural areas, the genetic superiority of these animals is yet to be fully explored. In absence of high quality indigenous milch cattle breeds, the state depends on crossbred cattle for milk production.

In case of buffaloes, Toda buffalo is the only indigenous and localised buffalo breed in Tamil Nadu. It has been named after an ancient tribe "Toda" of Nilgiris Hills. The body of this breed is long and deep, whereas legs are short and strong, and hence, suitable for the hilly region.





III.1. Distribution of Native Breeds of Tamil Nadu

TABLE III.1.1: Distribution of Cattle Breeds of Tamil Nadu

Breeds	Breeding Tract	Utility	Distribution
Kangayam	Erode district	Draught Breed	Erode District, parts of Coimbatore, Dindigul, Karur, Kancheepuram, Pudukkottai, Salem, Tiruchirappalli and Namakkal districts of Tamil Nadu
Bargur	Bhavani Taluka of Erode district	Draught Breed	Erode and Kancheepuram districts
Umblacherry	Thanjavur and Nagapattinam districts	Draught Breed	Nagapattinam, Thanjavur, Thiruvarur and Pudukkottai districts

SOURCE: AE Nivsarkar et al., (2000), *Animal Genetic Resources of India, Cattle and Buffalo*, ICAR publication.

Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.





Distribution of Indigenous Cattle Breeds



Kangayam



Bargur



Distribution of Indigenous Cattle Breeds



Umblacherry





Distribution of Holstein Friesian and Jersey Crossbred



■ Holstein Friesian Crossbred



■ Jersey Crossbred



III.1. Distribution of Native Breeds of Tamil Nadu

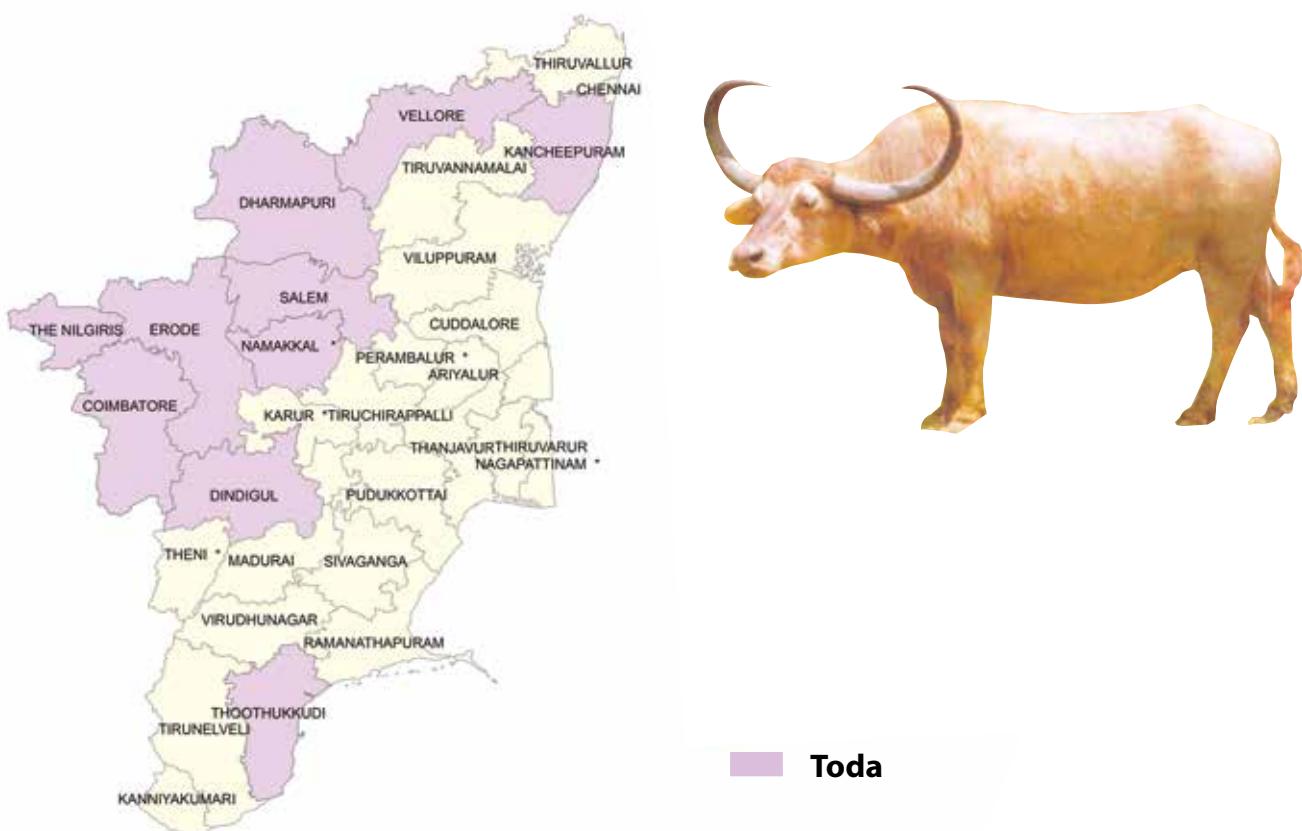
TABLE III.1.2: Distribution of Buffalo Breed of Tamil Nadu

Breeds	Breeding Tract	Utility	Distribution
Toda	The Nilgiri hills	Draught	Dindigul, Erode, Thoothukkudi, Kancheepuram, Salem, Vellore, Namakkal, Theni and Tirunelveli districts

SOURCE: AE Nivsarkar et al., (2000), *Animal Genetic Resources of India, Cattle and Buffalo*, ICAR publication.

Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Distribution of Buffalo Breed





III.2. Performance of Breeds

TABLE III.2.1: Performance of Cattle and Buffalo Breeds

Parameters	Indigenous Cattle		
	Kangayam	Bargur	Umblacherry
Breed Population ('000)	315	21	217
Adult Body Weight	Male: 540 Female: 380	Male: 340 Female: 295	Male: 385 Female: 325
Lactation Yield (kg)	600 to 800	350	300-500
Lactation Length (days)	270	270-310	250-270
Calving Interval (days)	365-670	480-540	446±4
Age at First Calving (days)	1,100-1,500	1,230	1,593±12

Parameters	Crossbred Cattle		Buffalo
	Jersey Crossbred	HF Crossbred	Toda
Breed Population ('000)	5,281	1,498	50
Adult Body Weight	Male: 300-450 Female: 300-325	Male: 300-450 Female: 300-350	Male: 380 Female: 380
Lactation Yield (kg)	1,123-2,135	1,940-2,700	500
Lactation Length (days)	258-305	286-305	200
Calving Interval (days)	360-480	360-480	480
Age at First Calving (days)	720-900	720-900	1,200-1,400

SOURCE: AE Nivsarkar et al., (2000), *Animal Genetic Resources of India, Cattle and Buffalo*, ICAR publication.
Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.





PART IV : MILK PRODUCTION

The total milk production in Tamil Nadu has increased at an average annual growth rate of 4.2 per cent during last decade and touched 7 million tonnes in 2013-14, accounting for 5.3 per cent of the country's milk production. Cow milk accounted for 90 per cent of milk production and balance was buffalo milk. Within the cow milk basket, the share of crossbred milk to total milk production has increased from 23 per cent in 1992-93 to 80 per cent in 2012-13. Tiruvannamalai district has the highest crossbred cattle milk production followed by Salem and Vellore districts. Higher production of milk has improved the per capita availability of milk in the state from 169 grams/day in 1993-94 to 262 grams/day in 2012-13.

In order to support milk production, the government is implementing free cattle distribution scheme since 2011 and often managing fodder depots. On behalf of Tamil Nadu Coop. Milk Producers' Federation Ltd, the government determines producers price and consumers price of milk.

While there is little improvement in productivity of buffaloes during last two decades, the productivity of crossbred animals has gone up considerably from 4.87 kgs per day to 6.81 kgs per day.





IV.1. Production Performance

**TABLE IV.1.1: Year-wise In-milk Bovine Population,
Milk Yield and Milk Production**

Year	In-milk Bovine ('000)	Milk Yield (kg per day)	Bovine Milk Production ('000 MT per annum)
1987-88	2,771	3.074	3,109.1
1988-89	2,940	3.017	3,237.8
1989-90	3,077	3.036	3,410.0
1990-91	3,118	2.965	3,374.7
1991-92	3,109	2.958	3,356.8
1992-93	3,093	3.071	3,468.2
1993-94	3,083	3.132	3,524.3
1994-95	3,075	3.291	3,693.8
1995-96	3,039	3.417	3,790.8
1996-97	3,103	3.511	3,976.5
1997-98	3,098	3.591	4,060.6
1998-99	3,152	3.714	4,272.8
1999-00	3,252	3.853	4,573.8
2000-01	3,351	4.013	4,907.0
2001-02	3,344	4.089	4,988.0
2002-03	3,179	3.983	4,622.3
2003-04	3,163	4.116	4,752.0
2004-05	3,139	4.175	4,783.8
2005-06	3,021	4.964	5,473.6
2006-07	3,338	5.151	6,276.0
2007-08	3,464	5.173	6,540.0
2008-09	3,477	5.241	6,651.0
2009-10	3,508	5.301	6,787.0
2010-11	3,642	5.139	6,831.3
2011-12	3,652	5.227	6,967.9
2012-13	3,409	5.630	7,004.7

SOURCE: Integrated Sample Survey Reports (1987-88 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.



IV.1. Production Performance: Animal Population

TABLE IV.1.2: Year and District-wise In-milk Bovine Population

Districts	In-milk Bovine Population ('000)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	3,083	3,098	3,163	3,052	3,060	3,084	3,642	3,652	3,409
Ariyalur									57
Chengalpattu MGR	293	284							
Chennai	29	29	18	3	3	3	4	6	
Coimbatore	139	144	137	140	141	142	142	81	84
Cuddalore			140	106	104	104	115	104	92
Dharmapuri	127	124	164	111	110	112	126	96	106
Dindigul		110	113	92	93	96	101	129	131
Erode	183	196	179	183	183	186	238	174	156
Kancheepuram			166	109	107	106	146	176	186
Kanniyakumari	46	55	41	45	47	48	53	34	24
Karur			61	58	58	62	68	63	52
Krishnagiri				95	100	99	104	96	85
Madurai	265	177	100	84	84	88	107	110	90
Nagapattinam		166	99	87	87	89	103	107	99
Namakkal			157	131	135	137	157	149	130
Perambalur			89	89	89	88	96	95	36
Pudukkottai	131	125	103	85	84	88	127	171	174
Ramanathapuram	175	61	55	44	43	44	48	33	35
Salem	295	296	158	233	232	236	261	242	229
Sivaganga		57	69	64	64	65	75	81	63
South Arcot	305	114							
Thanjavur	315	153	91	130	132	129	137	129	132
The Nilgiris	18	22	29	26	27	27	30	27	17
Theni			65	41	41	42	47	64	57
Thiruvallur			147	101	102	102	146	123	112
Thiruvarur			80	100	99	96	101	80	57
Thoothukkudi		59	58	57	56	58	83	117	66
Tiruchirappalli	270	249	115	116	116	117	123	130	143
Tirunelveli	176	122	111	159	161	157	187	178	177
Tiruppur								119	91
Tiruvannamalai		145	163	128	128	129	217	212	229
Vellore	318	181	189	159	157	156	179	203	194
Viluppuram		180	220	186	186	184	217	222	218
Virudhunagar		52	51	94	96	94	105	101	89

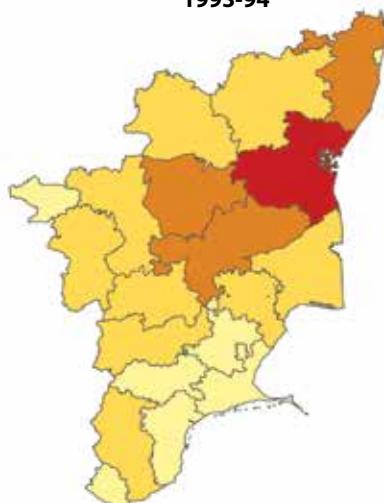
SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

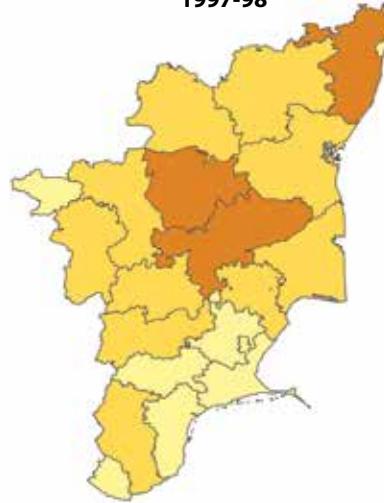


District-wise In-milk Bovine Population

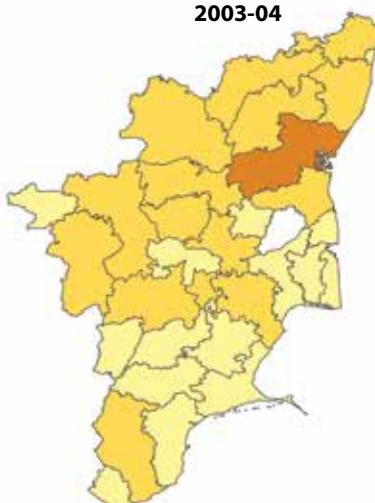
1993-94



1997-98



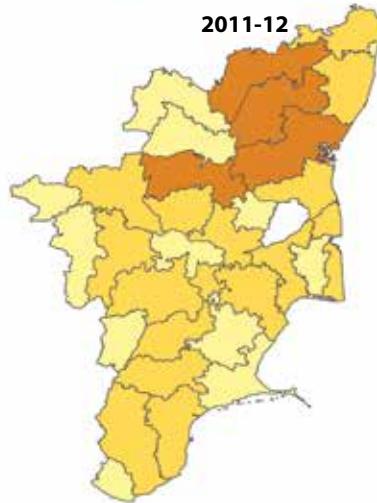
2003-04



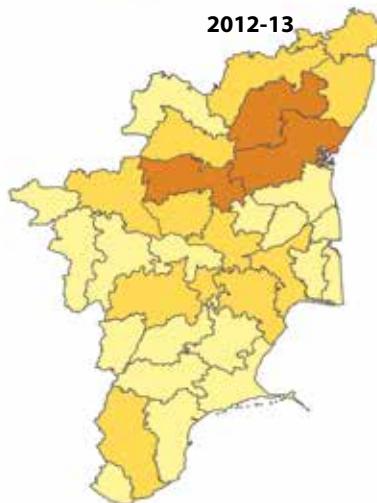
2007-08



2011-12



2012-13

**Number of Animals ('000)**

< 100	100 - 200	200 - 300	> 300
-------	-----------	-----------	-------

Data not available for years 2003-04 to 2011-12 for Ariyalur District



IV.1. Production Performance: Animal Population

TABLE IV.1.3: Year and District-wise In-milk Indigenous Cattle Population

Districts	In-milk Indigenous Cattle Population ('000)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,490	1,241	1,312	793	782	779	842	823	725
Ariyalur									20
Chengalpattu MGR	137	119							
Chennai	8	10	5	1	1	1	1	1	
Coimbatore	58	49	34	7	8	7	5	5	6
Cuddalore			63	32	31	30	32	26	19
Dharmapuri	78	67	78	19	18	19	23	16	10
Dindigul		28	32	12	12	12	13	24	15
Erode	47	40	45	32	31	31	36	24	23
Kancheepuram			81	53	52	51	59	66	77
Kanniyakumari	12	12	9	1	1	1	1	2	1
Karur			19	13	13	14	14	12	9
Krishnagiri				33	33	30	34	29	23
Madurai	89	49	36	11	12	14	15	18	15
Nagapattinam		81	56	36	37	37	37	33	27
Namakkal			28	10	11	11	12	14	12
Perambalur			35	24	24	22	23	20	3
Pudukkottai	79	66	55	54	52	54	55	87	79
Ramanathapuram	94	27	30	19	18	19	15	1	2
Salem	99	89	48	31	30	32	38	30	26
Sivaganga		33	44	39	38	38	41	42	34
South Arcot	189	59							
Thanjavur	190	73	40	47	49	48	49	39	36
The Nilgiris	7	7	6	4	3	4	2	1	2
Theni			24	5	5	5	5	5	4
Thiruvallur			55	41	41	40	43	35	15
Thiruvarur			42	40	38	37	39	23	18
Thoothukkudi		23	24	13	12	13	13	17	11
Tiruchirappalli	131	92	55	21	20	20	19	22	20
Tirunelveli	79	43	38	35	35	32	37	39	35
Tiruppur								8	7
Tiruvannamalai		82	86	38	37	38	40	35	36
Vellore	193	76	74	32	31	29	38	34	27
Viluppuram		102	153	79	78	77	87	94	95
Virudhunagar		16	18	13	14	12	14	21	19

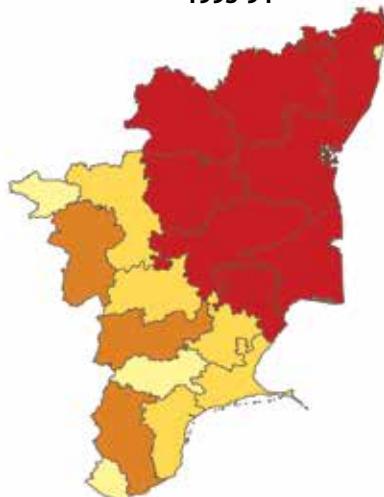
SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

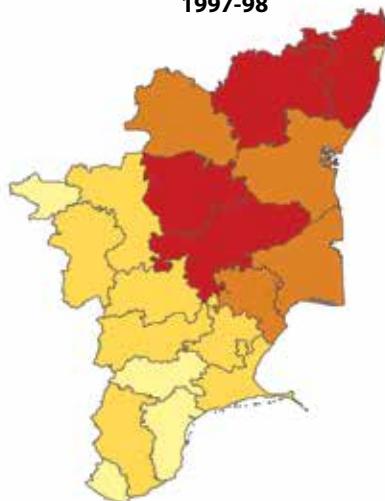


District-wise In-milk Indigenous Cattle Population

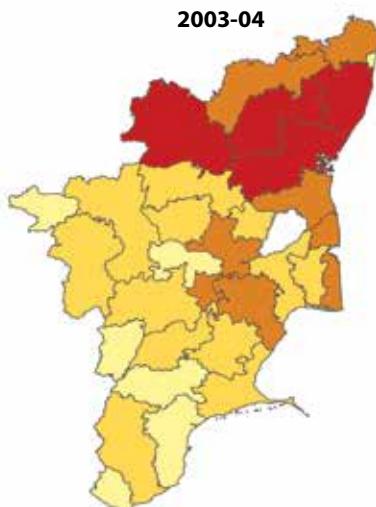
1993-94



1997-98



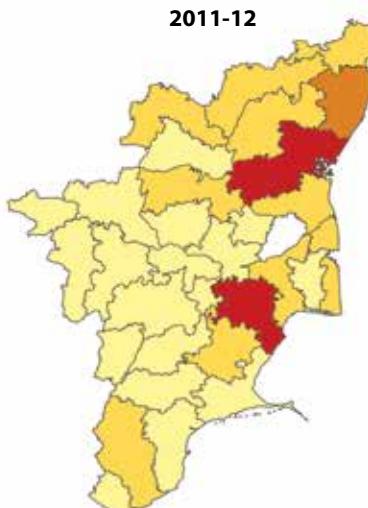
2003-04



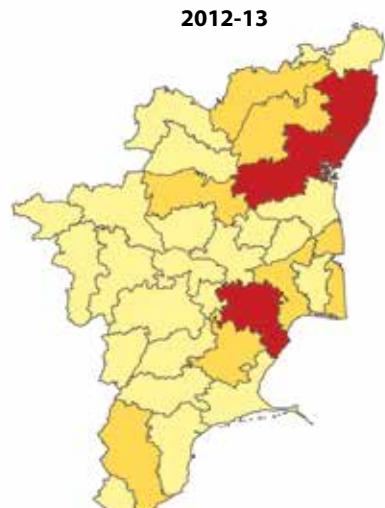
2007-08



2011-12



2012-13

**Number of Animals ('000)**

Data for years 2003-04 to 2011-12 are not available for Ariyalur district



IV.1. Production Performance: Animal Population

TABLE IV.1.4: Year and District-wise In-milk Crossbred Cattle Population

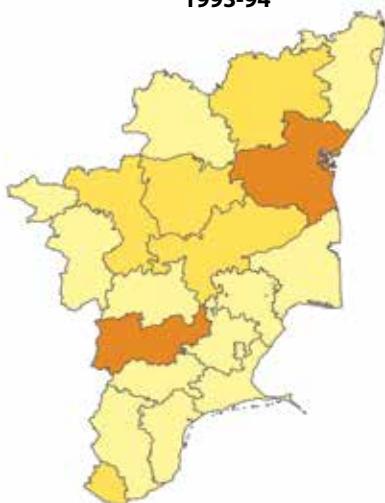
Districts	In-milk Crossbred Cattle Population ('000)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	461	644	904	1,759	1,784	1,814	2,251	2,309	2,245
Ariyalur									33
Chengalpattu MGR	14	25							
Chennai	2	2	4	1	1	1	1	3	
Coimbatore	24	33	72	121	121	123	126	72	74
Cuddalore			51	62	62	64	68	67	68
Dharmapuri	9	13	36	62	62	63	71	59	71
Dindigul		27	43	61	62	64	65	80	88
Erode	40	56	43	80	82	83	127	92	92
Kancheepuram			23	24	25	26	47	66	62
Kanniyakumari	26	33	28	42	43	45	50	30	23
Karur			13	24	25	25	32	32	26
Krishnagiri				55	59	60	63	59	58
Madurai	76	70	39	65	65	66	85	86	72
Nagapattinam		25	14	37	38	39	53	62	63
Namakkal			34	62	63	64	84	75	66
Perambalur			28	59	59	60	65	69	32
Pudukkottai	11	15	21	23	23	25	62	66	79
Ramanathapuram	32	23	15	22	22	23	31	31	31
Salem	36	40	52	146	146	148	158	167	168
Sivaganga		8	14	22	23	24	31	37	27
South Arcot	54	31							
Thanjavur	33	24	31	71	71	71	77	82	87
The Nilgiris	7	11	21	21	23	22	27	25	14
Theni			25	31	32	33	38	57	51
Thiruvallur			22	27	28	29	63	46	61
Thiruvarur			17	54	56	54	57	53	37
Thoothukkudi		11	20	37	38	39	51	87	47
Tiruchirappalli	34	46	27	82	82	83	89	93	111
Tirunelveli	19	18	37	102	105	106	129	108	113
Tiruppur								92	65
Tiruvannamalai		34	53	83	84	85	169	169	188
Vellore	45	46	78	116	116	118	131	156	158
Viluppuram		40	26	98	98	99	120	119	116
Virudhunagar		13	20	72	72	72	83	69	65

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise In-milk Crossbred Cattle Population**

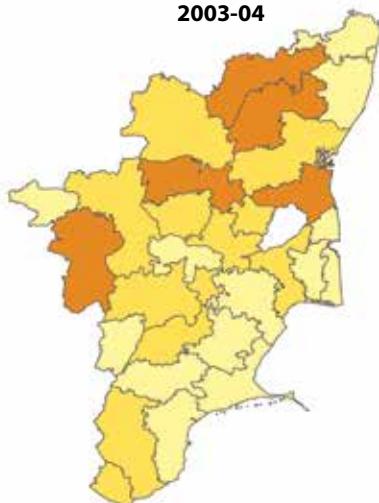
1993-94



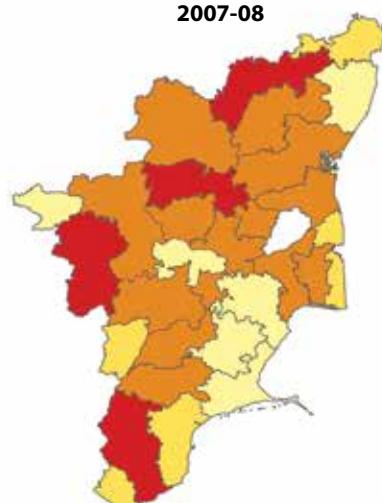
1997-98



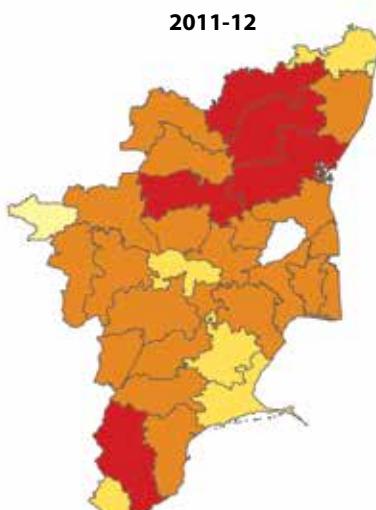
2003-04



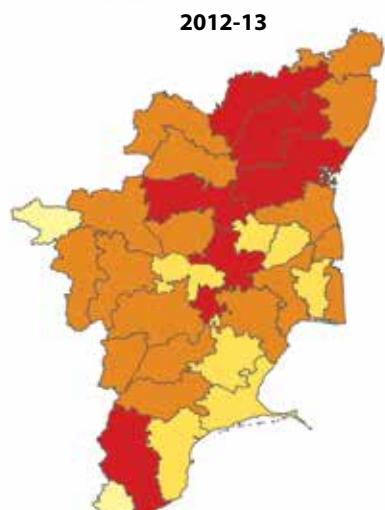
2007-08



2011-12



2012-13

**Number of Animals ('000)**

< 25

25 - 50

50 - 100

> 100

data for years 2003-04 to 2011-12 not available for Ariyalur district



IV.1. Production Performance: Animal Population

TABLE IV.1.5: Year and District-wise In-milk Buffalo Population

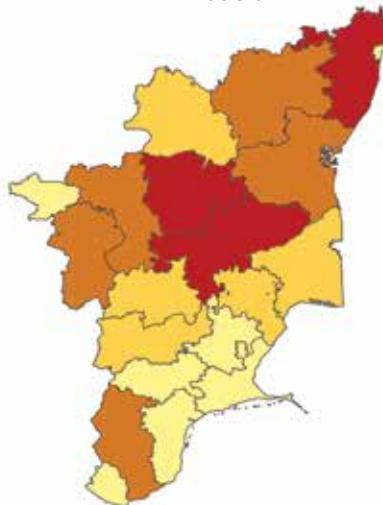
Districts	In-milk Buffalo Population ('000)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,132	1,213	947	500	494	491	549	520	439
Ariyalur									4
Chengalpattu MGR	142	140							
Chennai	19	17	9	1	1	1	2	2	
Coimbatore	57	62	31	12	12	12	11	4	4
Cuddalore			26	12	11	10	15	11	5
Dharmapuri	40	44	50	30	30	30	32	21	25
Dindigul		55	38	19	19	20	23	25	28
Erode	96	100	91	71	70	72	75	58	41
Kancheepuram			62	32	30	29	40	44	47
Kanniyakumari	8	10	4	2	3	2	2	2	0
Karur			29	21	20	23	22	19	17
Krishnagiri				7	8	9	7	8	4
Madurai	100	58	25	8	7	8	7	6	3
Nagapattinam		60	29	14	12	13	13	12	9
Namakkal			95	59	61	62	61	60	52
Perambalur			26	6	6	6	8	6	1
Pudukkottai	41	44	27	8	9	9	10	18	16
Ramanathapuram	49	11	10	3	3	2	2	1	2
Salem	160	167	58	56	56	56	65	45	35
Sivaganga		16	11	3	3	3	3	2	2
South Arcot	62	24							
Thanjavur	92	56	20	12	12	10	11	8	9
The Nilgiris	4	4	2	1	1	1	1	1	1
Theni			16	5	4	4	4	2	2
Thiruvallur			70	33	33	33	40	42	36
Thiruvarur			21	6	5	5	5	4	2
Thoothukkudi		25	14	7	6	6	19	13	8
Tiruchirappalli	105	111	33	13	14	14	15	15	12
Tirunelveli	78	61	36	22	21	19	21	31	29
Tiruppur								19	19
Tiruvannamalai		29	24	7	7	6	8	8	5
Vellore	80	59	37	11	10	9	10	13	9
Viluppuram		38	41	9	10	8	10	9	7
Virudhunagar		23	13	9	10	10	8	11	5

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

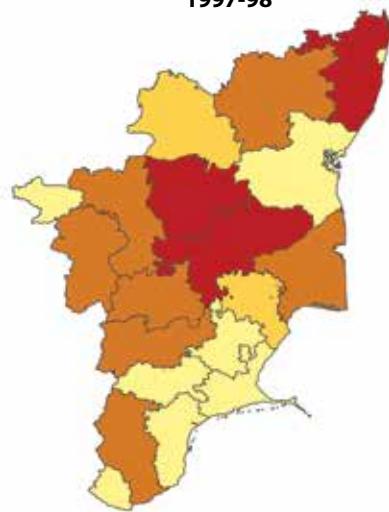
NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise In-milk Buffalo Population**

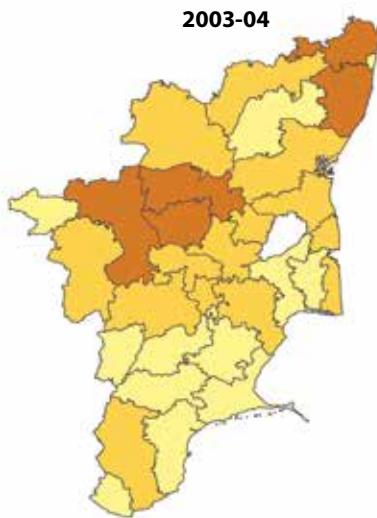
1993-94



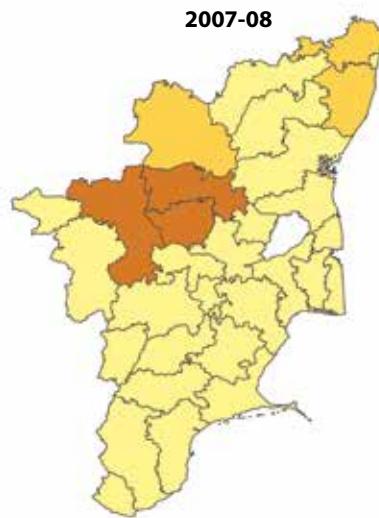
1997-98



2003-04



2007-08



2011-12



2012-13

**Number of Animals ('000)**

< 25	25 - 50	50 - 100	> 100
------	---------	----------	-------

Data not available for year 2003-04 to 2011-12 for Ariyalur district



IV.2. Production Performance: Milk Yield

TABLE IV.2.1: Year and District-wise Bovine Milk Yield

Districts	Bovine Milk Yield (kg/day)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	3.13	3.59	4.12	5.01	5.08	5.13	5.14	5.23	5.63
Ariyalur									5.05
Chengalpattu MGR	3.27	3.16							
Chennai	4.75	5.63	5.24	3.56	4.11	4.47	5.41	4.02	
Coimbatore	3.92	4.28	5.12	6.52	5.89	6.42	6.58	6.48	7.03
Cuddalore			4.77	4.93	4.65	5.29	5.04	5.00	5.84
Dharmapuri	2.64	2.66	3.77	5.16	5.31	5.08	5.26	5.12	6.33
Dindigul		4.33	5.25	4.42	5.19	4.45	5.26	5.00	5.54
Erode	3.08	3.96	3.78	4.71	5.03	5.29	5.17	5.66	5.76
Kancheepuram			3.57	3.92	3.89	3.87	3.81	4.29	4.20
Kanniyakumari	4.05	5.22	5.31	7.68	8.09	8.16	7.98	8.20	8.06
Karur			4.13	5.20	5.01	4.83	4.85	5.29	5.10
Krishnagiri				4.96	5.55	5.37	5.28	5.70	6.31
Madurai	3.72	4.60	4.60	5.53	5.48	5.49	5.49	5.27	5.26
Nagapattinam		3.09	3.71	4.74	4.36	4.77	4.69	5.41	5.26
Namakkal			3.41	4.97	4.84	4.69	5.31	5.27	6.21
Perambalur			4.21	5.02	4.90	5.49	5.61	5.54	6.13
Pudukkottai	1.72	2.84	3.22	3.67	3.88	4.17	4.20	4.12	4.74
Ramanathapuram	2.81	4.17	3.69	4.17	4.04	4.32	4.48	4.99	5.14
Salem	3.06	2.95	4.41	5.30	5.06	5.36	5.04	5.47	6.46
Sivaganga		2.59	3.56	3.12	3.56	4.28	4.14	4.31	4.63
South Arcot	3.19	3.82							
Thanjavur	2.17	2.81	3.90	4.15	4.56	4.90	4.73	5.08	5.43
The Nilgiris	3.52	6.28	5.70	9.45	10.67	10.42	11.41	9.09	7.88
Theni			4.97	4.74	5.72	5.36	5.99	5.72	6.08
Thiruvallur			4.17	4.20	4.25	4.16	4.36	4.21	5.37
Thiruvarur			3.21	4.40	4.47	4.45	4.59	5.01	4.79
Thoothukkudi		4.23	4.29	5.09	5.68	5.01	4.78	5.18	5.54
Tiruchirappalli	3.38	3.99	4.11	5.30	5.38	5.30	5.71	5.21	5.76
Tirunelveli	3.11	2.77	3.79	5.11	5.05	4.95	4.83	4.86	5.38
Tiruppur								6.01	6.09
Tiruvannamalai		3.59	4.35	5.48	5.58	5.64	5.36	5.48	6.51
Vellore	3.60	3.41	4.44	5.38	5.24	5.00	5.34	5.70	5.83
Viluppuram		3.88	3.33	4.92	4.80	4.91	4.68	4.81	4.81
Virudhunagar		3.32	5.02	5.68	5.99	5.54	5.44	5.31	5.29

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

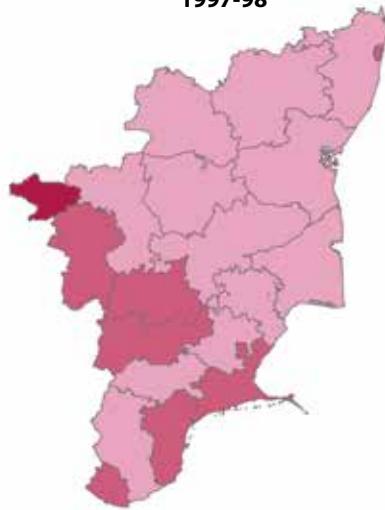
NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise In-milk Bovine Milk Yield**

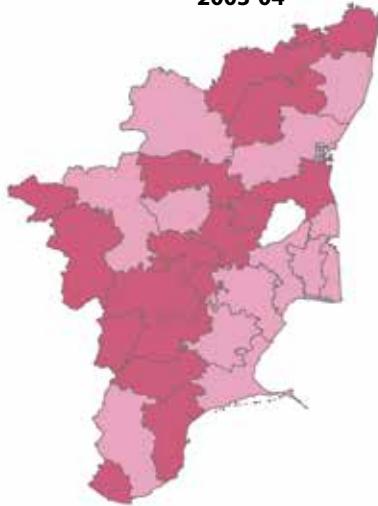
1993-94



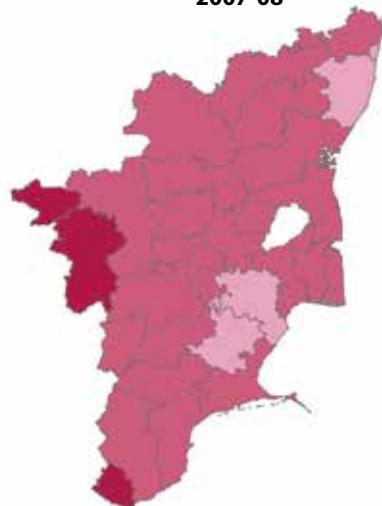
1997-98



2003-04



2007-08



2011-12



2012-13

**Milk Yield (kg/day)**

< 2	2 - 4	4 - 6	> 6
-----	-------	-------	-----

Data not available : Ariyalur (2003-04 to 2011-12)



IV.2. Production Performance: Milk Yield

TABLE IV. 2.2: Year and District-wise Indigenous Cattle Milk Yield

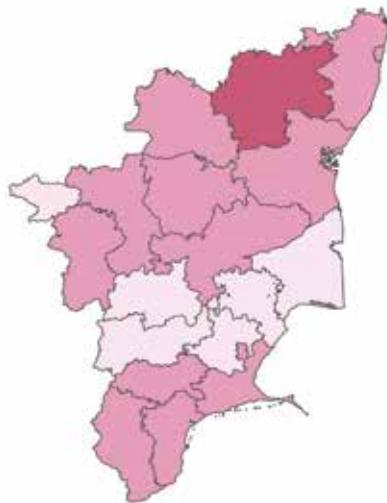
Districts	Indigenous Cattle Milk Yield (kg/day)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	2.36	2.40	2.66	2.76	2.77	2.78	2.52	2.58	2.72
Ariyalur									2.36
Chengalpattu MGR	3.01	2.23							
Chennai	2.76	2.53	2.51	2.21	3.11	2.69	2.34	2.68	
Coimbatore	2.73	1.99	3.02	2.95	2.38	3.02	2.86	2.56	2.98
Cuddalore			2.78	2.49	2.82	2.65	2.64	2.49	3.51
Dharmapuri	2.50	2.46	2.65	3.08	3.37	2.77	2.48	2.18	2.33
Dindigul		2.69	2.23	2.39	2.56	2.47	2.65	2.65	2.57
Erode	2.22	2.45	2.56	3.20	2.94	2.63	2.60	2.55	3.34
Kancheepuram			2.88	2.91	2.99	2.95	2.55	2.78	2.85
Kanniyakumari	2.42	1.97	2.48	3.18	3.22	3.67	2.61	3.00	2.57
Karur			3.05	3.00	2.63	2.83	2.75	2.81	2.29
Krishnagiri				2.68	2.94	2.38	2.55	2.35	2.33
Madurai	1.69	2.57	3.11	2.74	2.85	2.75	2.62	2.54	2.58
Nagapattinam		2.19	3.20	3.02	2.69	2.80	2.59	2.66	2.63
Namakkal			2.14	2.75	2.77	2.70	2.50	2.58	3.95
Perambalur			2.58	2.29	2.40	2.50	2.52	2.21	2.38
Pudukkottai	1.43	2.42	2.69	3.04	2.87	2.99	2.56	2.80	2.68
Ramanathapuram	2.17	2.54	2.72	2.97	2.98	2.91	2.56	2.77	2.57
Salem	2.63	2.59	2.56	3.38	3.01	2.96	2.57	2.24	1.96
Sivaganga		2.20	2.98	2.00	2.37	2.80	2.60	2.57	2.75
South Arcot	2.55	2.50							
Thanjavur	1.42	1.92	2.14	2.45	2.25	2.56	2.65	2.67	2.79
The Nilgiris	1.74	2.79	2.63	3.35	3.77	2.96	2.55	2.34	2.76
Theni			3.14	2.90	3.01	3.20	2.71	2.53	2.66
Thiruvallur			2.49	2.73	2.86	2.87	2.38	2.58	2.78
Thiruvarur			2.56	2.82	2.14	2.60	2.62	2.70	2.28
Thoothukkudi		2.31	1.85	1.97	3.25	2.43	2.45	2.17	1.91
Tiruchirappalli	2.27	2.45	2.63	2.54	2.52	2.80	2.36	2.49	2.41
Tirunelveli	2.24	2.29	2.46	2.78	2.73	2.79	2.52	2.59	2.72
Tiruppur								2.59	2.72
Tiruvannamalai		2.45	3.33	2.92	2.66	2.58	2.35	2.30	4.76
Vellore	3.26	2.64	2.32	2.92	2.43	2.99	2.47	2.68	2.32
Viluppuram		2.71	2.40	2.74	3.31	2.97	2.43	2.63	2.44
Virudhunagar		2.22	2.58	2.27	2.72	2.65	2.38	2.51	1.80

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Indigenous Cattle Milk Yield**

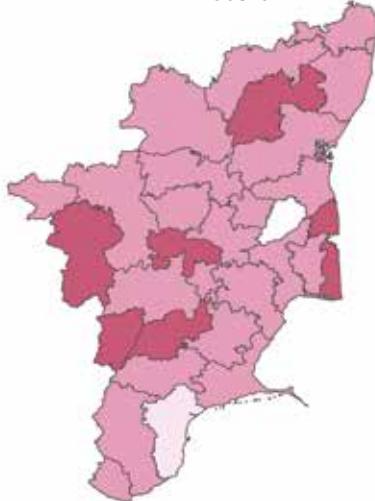
1993-94



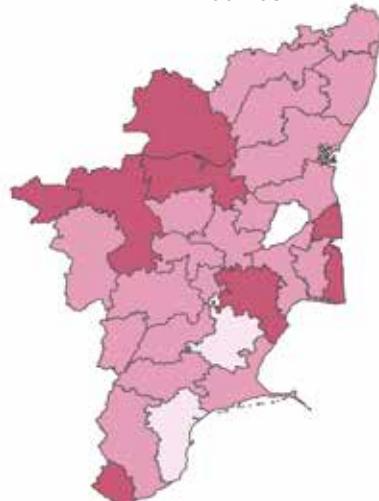
1997-98



2003-04



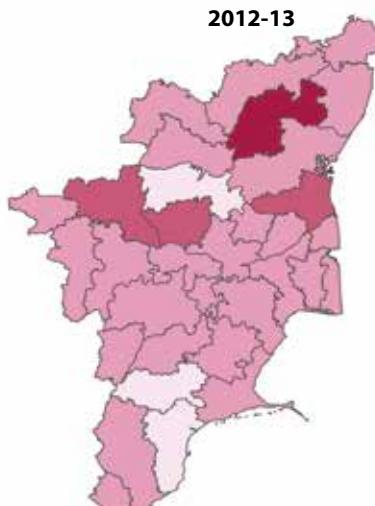
2007-08



2011-12



2012-13

**Milk Yield (kg/day)**

< 2	2 - 3	3 - 4	> 4
-----	-------	-------	-----

Data not available for year 2003-04 to 2011-12 for Ariyalur District



IV.2. Production Performance: Milk Yield

TABLE IV.2.3: Year and District-wise Crossbred Cattle Milk Yield

Districts	Crossbred Cattle Milk Yield (kg/day)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11*	2011-12	2012-13
TAMIL NADU	4.87	5.72	6.18	6.25	6.33	6.39	6.39	6.41	6.81
Ariyalur									6.84
Chengalpattu MGR	4.92	5.69							
Chennai	5.82	8.88	7.63	6.10	6.14	6.06	9.15	5.17	
Coimbatore	5.43	5.45	6.33	7.02	6.36	6.85	6.94	6.82	7.56
Cuddalore			6.77	6.30	5.71	6.66	6.60	6.17	6.59
Dharmapuri	5.60	4.84	6.69	6.28	6.29	6.06	6.73	6.37	7.98
Dindigul		5.58	7.34	5.10	6.01	5.06	6.25	6.11	6.53
Erode	4.85	5.48	4.72	6.00	6.42	6.49	6.43	6.84	7.03
Kancheepuram			5.66	6.18	5.64	5.69	5.58	6.06	5.65
Kanniyakumari	4.71	7.04	6.59	7.76	8.38	8.55	8.24	9.00	8.21
Karur			5.07	7.44	6.95	6.44	6.22	6.81	7.13
Krishnagiri				6.47	7.21	7.09	6.86	7.55	7.91
Madurai	5.23	6.12	6.01	6.11	6.14	6.35	6.16	5.92	5.88
Nagapattinam		5.25	5.15	6.82	6.17	6.69	6.43	7.02	6.52
Namakkal			4.86	5.42	5.79	5.45	6.23	6.45	7.66
Perambalur			6.25	6.18	6.08	6.78	6.83	6.63	6.62
Pudukkottai	3.48	5.17	4.81	5.03	6.20	6.61	5.67	5.96	6.71
Ramanathapuram	4.45	6.10	5.15	5.46	5.01	5.49	5.46	5.17	5.48
Salem	4.35	7.05	6.84	6.10	5.72	6.23	6.09	6.33	7.60
Sivaganga		4.95	6.18	4.93	5.72	6.72	6.09	6.26	6.95
South Arcot	4.69	4.57							
Thanjavur	4.34	4.83	5.10	5.33	6.13	6.55	6.21	6.23	6.53
The Nilgiris	6.41	9.54	6.74	10.99	11.98	11.97	12.29	9.40	8.74
Theni			7.19	5.22	6.33	5.95	6.67	6.10	6.55
Thiruvallur			6.74	5.85	5.83	6.20	6.02	5.74	6.45
Thiruvarur			4.93	5.55	6.08	5.80	6.12	6.11	5.92
Thoothukkudi		6.45	8.06	6.49	6.48	5.89	5.68	5.91	6.66
Tiruchirappalli	4.35	5.41	6.32	6.22	6.33	6.10	6.63	6.00	6.48
Tirunelveli	4.47	4.18	5.49	6.23	5.96	5.83	5.60	6.04	6.47
Tiruppur								6.78	6.92
Tiruvannamalai		5.55	5.85	6.72	7.11	7.13	6.07	6.24	6.90
Vellore	5.82	4.80	6.37	6.10	6.12	5.56	6.32	6.49	6.51
Viluppuram		6.52	6.02	6.72	6.09	6.55	6.47	6.61	6.77
Virudhunagar		4.30	7.79	6.59	6.89	6.29	6.11	6.47	6.38

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

* Estimated

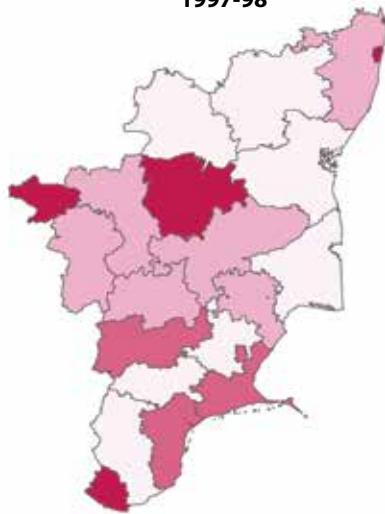
NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Crossbred Cattle Milk Yield**

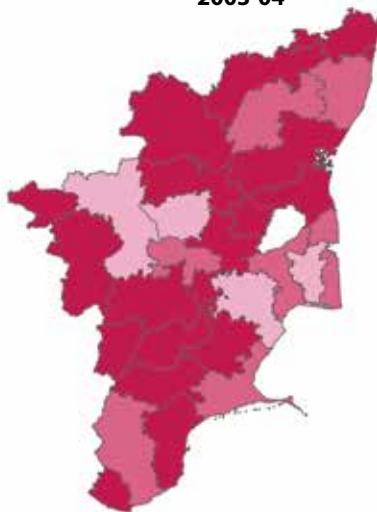
1993-94



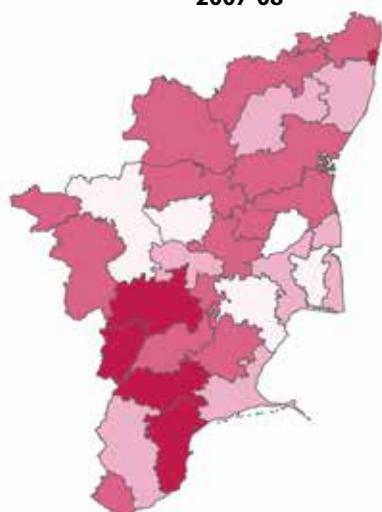
1997-98



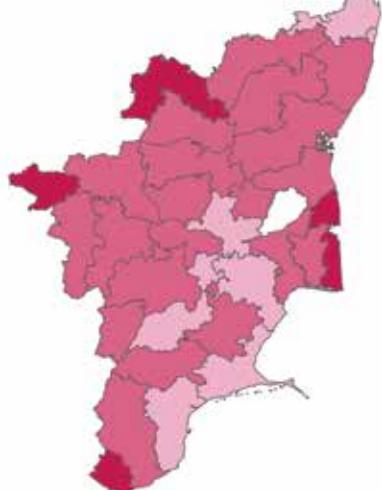
2003-04



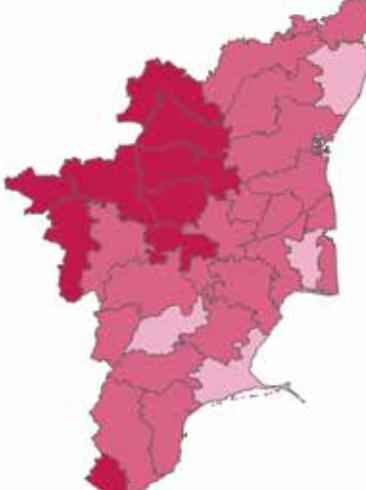
2007-08



2011-12



2012-13

**Milk Yield (kg/day)**

< 5	5 - 6	6 - 7	> 7
-----	-------	-------	-----

Data not available: Ariyalur (2003-04 to 2011-12)



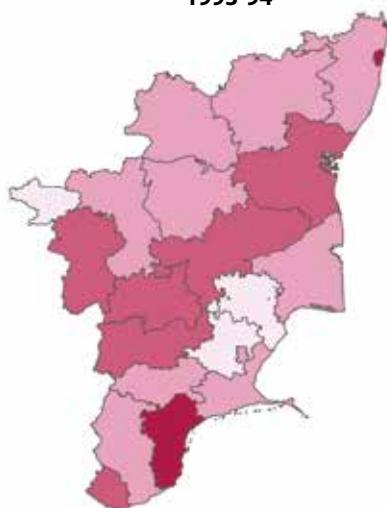
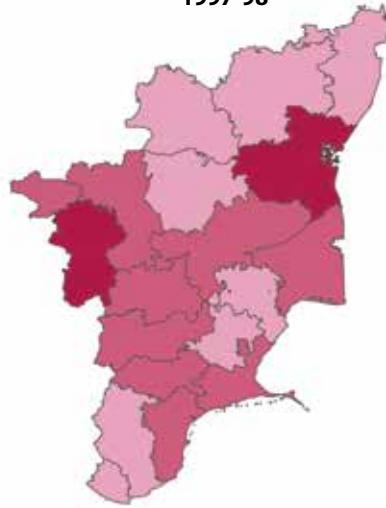
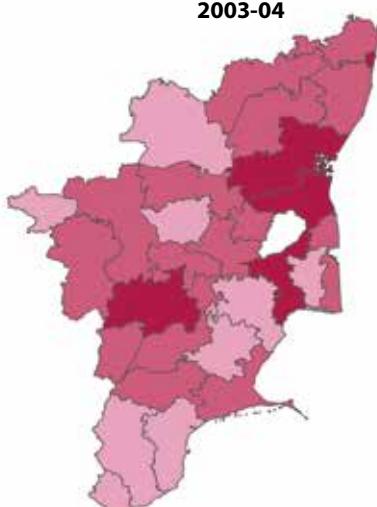
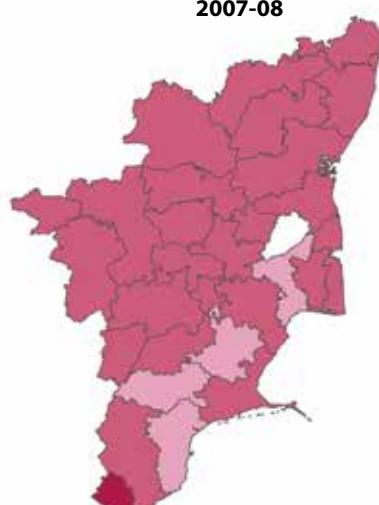
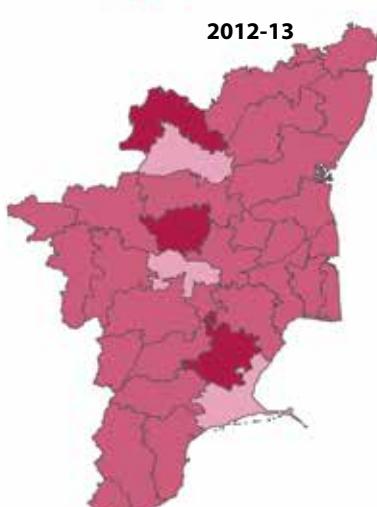
IV.2. Production Performance: Milk Yield

TABLE IV.2.4: Year and District-wise Buffalo Milk Yield

Districts	Buffalo Milk Yield (kg/day)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	3.44	3.68	4.13	4.15	4.22	4.25	4.04	4.09	4.40
Ariyalur									3.88
Chengalpattu MGR	3.35	3.49							
Chennai	5.33	7.17	5.62	4.54	4.31	4.28	4.54	4.06	
Coimbatore	4.56	5.50	4.61	3.64	3.61	4.18	4.22	4.07	4.31
Cuddalore			5.60	4.24	3.99	3.98	3.45	3.66	4.31
Dharmapuri	2.34	2.29	3.42	4.23	4.48	4.59	3.84	3.79	3.37
Dindigul		4.54	5.47	3.54	4.21	3.65	3.94	3.69	4.02
Erode	2.72	3.68	3.92	3.95	4.33	5.10	4.32	5.04	4.29
Kancheepuram			3.67	3.92	4.09	3.93	3.47	3.96	4.44
Kanniyakumari	4.58	3.41	3.21	5.65	5.40	3.42	3.86	3.93	3.76
Karur			4.40	4.19	4.23	4.42	4.45	4.42	3.48
Krishnagiri				3.15	3.95	3.84	3.94	3.78	5.27
Madurai	4.43	4.43	4.61	4.12	3.19	3.62	3.62	3.87	4.49
Nagapattinam		3.43	4.00	3.74	3.75	4.57	3.98	4.42	4.81
Namakkal			3.25	4.82	4.27	4.31	4.63	4.40	5.11
Perambalur			4.06	4.42	3.21	3.65	4.58	3.75	4.24
Pudukkottai	1.82	2.71	3.12	4.49	4.01	3.93	3.83	3.81	4.99
Ramanathapuram	2.99	4.36	4.44	3.79	3.63	3.55	3.68	3.48	3.17
Salem	3.04	2.17	3.72	4.26	4.38	4.44	3.93	4.44	4.48
Sivaganga		2.20	3.03	3.39	2.87	3.97	4.00	4.15	5.41
South Arcot	3.89	6.04							
Thanjavur	2.94	3.53	5.52	3.47	4.68	4.14	3.78	4.31	4.55
The Nilgiris	1.75	4.81	3.06	4.52	5.56	4.32	7.02	3.89	4.26
Theni			4.39	3.70	3.88	3.74	3.59	3.70	4.33
Thiruvallur			4.73	4.68	4.69	3.93	3.89	3.77	4.56
Thiruvarur			3.00	4.86	4.92	3.79	3.96	3.60	4.46
Thoothukkudi		4.92	2.99	3.20	4.85	4.16	4.00	3.88	4.07
Tiruchirappalli	4.46	4.66	4.76	4.08	3.85	4.36	4.25	4.13	4.55
Tirunelveli	3.61	2.67	3.41	3.55	4.35	3.60	4.26	3.56	4.32
Tiruppur								3.64	4.49
Tiruvannamalai		4.41	4.68	4.86	3.54	3.64	4.04	3.65	3.97
Vellore	3.15	3.36	4.54	4.80	4.11	3.73	3.54	3.99	4.23
Viluppuram		4.28	5.01	5.00	3.93	3.34	3.40	3.65	4.39
Virudhunagar		3.53	3.80	2.87	4.23	3.62	3.76	3.53	4.89

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Buffalo Milk Yield****1993-94****1997-98****2003-04****2007-08****2011-12****2012-13****Milk Yield (kg/day)**

< 2	2 - 3.5	3.5 - 5	> 5
-----	---------	---------	-----

Data for 2003-04 to 2011-12 not available for Ariyalur District



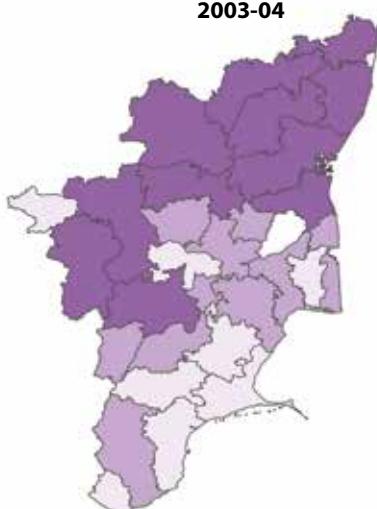
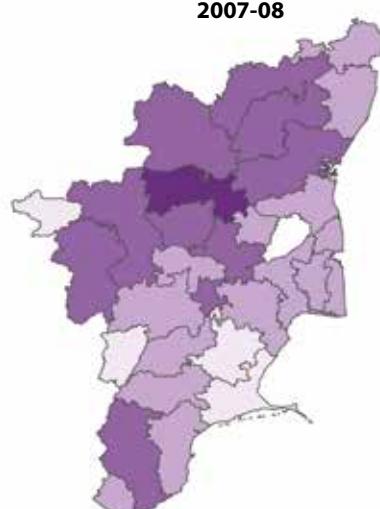
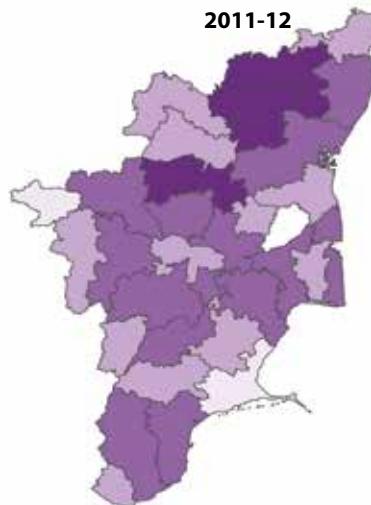
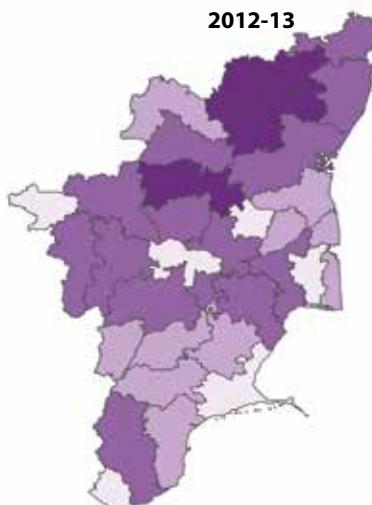
IV.3. Production Performance: Milk Production

TABLE IV.3.1: Year and District-wise Bovine Milk Production

Districts	Bovine Milk Production ('000 MT)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	3,524.4	4,060.6	4,752	5,586.1	5,673.8	5,778.1	6,831.3	6,967.9	7,004.8
Ariyalur									105
Chengalpattu MGR	349.6	327.8							
Chennai	50.3	59.6	34.4	3.9	4.5	4.9	7.9	8.8	
Coimbatore	199.1	224.9	255.8	333.3	302.9	332.9	340.8	191.7	215.6
Cuddalore			243.7	190.6	176.7	200.7	211.6	189.7	196.2
Dharmapuri	122.6	120.3	225.7	208.9	213	207.5	242	179.3	245.1
Dindigul		173.7	216.4	148.3	176.1	156	194	235.4	264.7
Erode	205.5	283	246.8	314.7	335.7	358.9	449.1	359.5	327.7
Kancheepuram			216.2	156	151.8	149.7	202.9	275.8	284.8
Kanniyakumari	68	104.8	79.5	126.1	138.8	143	154.4	101.8	70.6
Karur			91.9	110.1	106.1	109.3	120.4	121.7	96.8
Krishnagiri				172	202.7	194.1	200.3	199.9	195.9
Madurai	359.8	297.1	167.8	169.4	167.9	176.4	214.6	211.5	172.8
Nagapattinam		187.2	134.1	150.4	138.6	154.9	176.5	211.3	189.9
Namakkal			195.4	237.7	238.4	234.7	304.4	286.6	294.9
Perambalur			136.9	163.2	159.2	176.3	196.7	192	80.5
Pudukkottai	82.1	129.7	121.2	114	119	134	194.7	256.9	300.9
Ramanathapuram	179.6	92.8	74.1	67	63.4	69.4	78.5	60.1	65.6
Salem	329.3	319	254.6	450.6	428.5	461.3	480.5	483.6	540.2
Sivaganga		53.8	89.6	72.8	83.2	101.5	113.4	127.5	106.48
South Arcot	355	159							
Thanjavur	249.6	157	129.7	196.8	219.5	230.6	236.3	239.3	261.6
The Nilgiris	23.1	50.4	60.3	89.7	105.2	102.7	124.9	89.6	48.9
Theni			117.8	70.9	85.6	82.1	102.8	133.6	126.5
Thiruvallur			223.6	154.9	158.3	155	232.1	188.8	219.5
Thiruvarur			93.7	160.5	161.5	156.1	169.2	146.4	99.7
Thoothukkudi		91.2	90.9	105.9	116	106.1	144.9	221	133.4
Tiruchirappalli	333.2	363	172.5	224.5	227.9	226.4	256.2	247.2	300.4
Tirunelveli	199.6	123.2	153.4	296.3	296.9	283.5	330	316	347.8
Tiruppur								261.1	202.3
Tiruvannamalai		189.8	259	256.2	260.6	265.4	424.5	424.1	544.3
Vellore	417.5	225.5	306.4	312.3	300.1	284.7	348.9	422.5	412.5
Viluppuram		254.9	267.7	334.2	326	329.9	370.7	389.7	382.6
Virudhunagar		63.1	93.5	194.8	210	190.1	208.4	195.8	171.8

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Bovine Milk Production****1993-94****1997-98****2003-04****2007-08****2011-12****2012-13****Milk Production ('000 MT)**

< 100	100 - 200	200 - 400	> 400
-------	-----------	-----------	-------

Data not available for year 2003-04 to 2011-12 for Ariyalur District



IV.3. Production Performance: Milk Production

TABLE IV.3.2: Year and District-wise Indigenous Cattle Milk Production

Districts	Indigenous Cattle Milk Production ('000 MT)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,283.5	1,086.7	1,278.0	799.9	791.8	789.2	774.3	776.5	719.3
Ariyalur									17.5
Chengalpattu MGR	150.8	96.5							
Chennai	7.8	8.9	4.3	0.6	1.0	1.0	1.4	1.1	
Coimbatore	58.0	35.7	37.6	7.8	6.5	8.0	5.2	4.6	6.6
Cuddalore			64.2	28.9	31.9	28.9	28.9	23.6	23.8
Dharmapuri	70.6	60.1	75.5	20.8	22.4	19.3	22.3	13.0	8.9
Dindigul		27.6	26.2	10.1	10.7	10.8	12.6	23.1	14.0
Erode	38.2	36.1	42.3	37.3	33.5	29.4	33.0	22.4	27.5
Kancheepuram			85.4	55.9	56.5	54.3	56.4	67.3	80.3
Kanniyakumari	10.4	8.3	8.2	1.4	1.2	1.3	1.2	2.0	0.9
Karur			21.3	14.5	12.4	14.1	12.8	11.9	7.6
Krishnagiri				32.3	35.7	26.2	33.0	25.4	19.5
Madurai	54.1	46.3	41.4	11.3	12.7	13.6	14.0	16.4	13.7
Nagapattinam		65.1	65.4	39.8	35.9	37.7	33.5	32.2	26.0
Namakkal			21.6	10.3	10.6	11.0	10.9	12.9	16.3
Perambalur			33.1	20.3	20.6	20.6	21.9	16.8	2.1
Pudukkottai	41.1	58.0	53.7	59.4	54.9	58.8	51.5	89.2	77.4
Ramanathapuram	74.7	24.5	30.0	20.2	19.8	20.3	13.9	0.4	2.2
Salem	94.9	83.6	44.6	38.8	33.2	34.5	35.8	24.8	18.4
Sivaganga		26.4	47.6	28.6	32.6	39.0	40.4	39.6	34.5
South Arcot	175.3	53.7							
Thanjavur	98.3	41.2	31.4	41.9	40.2	45.2	45.7	38.6	38.0
The Nilgiris	4.4	6.7	6.2	5.1	4.0	4.3	1.6	1.1	1.6
Theni			27.0	5.1	5.5	5.8	4.8	4.4	3.6
Thiruvallur			50.1	40.9	42.2	42.0	36.9	32.8	15.4
Thiruvarur			39.4	40.7	29.8	35.6	35.3	22.6	14.7
Thoothukkudi		19.0	16.3	9.4	14.2	11.5	11.4	13.9	7.6
Tiruchirappalli	108.3	82.2	52.7	19.2	17.9	20.7	17.4	19.8	17.9
Tirunelveli	66.3	36.1	34.1	35.9	35.0	32.2	33.3	37.2	34.7
Tiruppur								7.5	6.4
Tiruvannamalai		73.2	104.4	40.3	35.5	35.4	38.0	29.6	62.2
Vellore	230.3	73.5	63.0	33.5	27.1	32.0	33.8	33.2	22.9
Viluppuram		101.1	134.3	78.5	94.0	84.0	75.6	90.4	84.6
Virudhunagar		13.1	17.5	10.8	14.2	11.6	12.3	18.7	12.6

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Indigenous Cattle Milk Production**

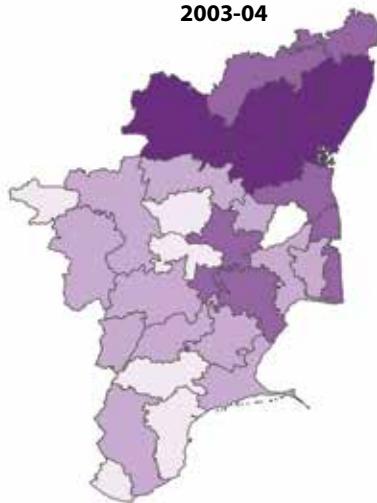
1993-94



1997-98



2003-04



2007-08



2011-12



2012-13

**Milk Production ('000 MT)**

< 25	25 - 50	50 - 75	> 75
------	---------	---------	------

Data not available for year 2003-04 to 20011-12 for Ariyalur district



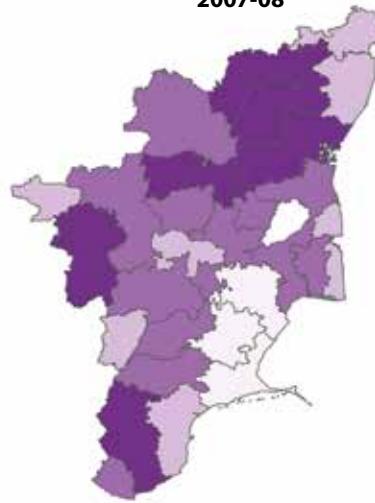
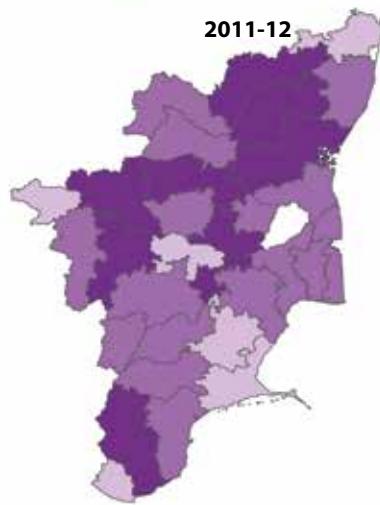
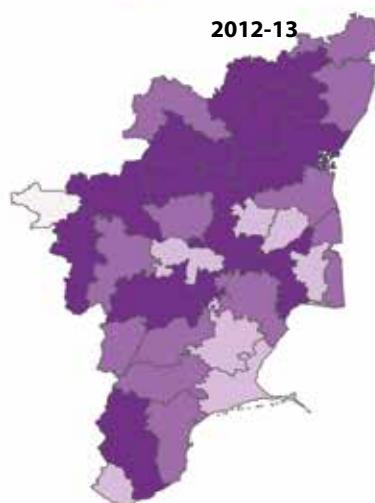
IV.3. Production Performance: Milk Production

TABLE IV.3.3: Year and District-wise Crossbred Cattle Milk Production

Districts	Crossbred Cattle Milk Production ('000 MT)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	818.8	1,345.1	2,045.0	4,026.9	4,121.7	4,227.4	5,246.9	5,412.4	5,580.3
Ariyalur									81.7
Chengalpattu MGR	25.2	52.6							
Chennai	4.8	6.8	11.2	1.5	1.6	2.2	3.3	5.2	
Coimbatore	46.6	65.4	165.5	310.1	280.2	306.5	319.1	180.5	202.8
Cuddalore			126.6	142.8	128.8	156.7	163.8	151.0	163.7
Dharmapuri	17.6	23.5	88.1	141.6	142.3	138.2	174.4	137.3	205.5
Dindigul		54.8	114.8	113.4	136.9	118.4	148.3	179.0	210.3
Erode	71.6	112.6	74.2	175.1	191.3	195.9	298.0	230.1	235.8
Kancheepuram			47.3	54.4	51.3	54.5	95.8	145.7	129.2
Kanniyakumari	45.0	84.5	66.5	119.6	132.7	139.0	150.4	97.4	69.2
Karur			24.1	63.8	62.2	58.2	72.7	78.8	67.4
Krishnagiri				131.3	155.9	155.1	157.7	163.7	167.9
Madurai	144.5	156.4	84.7	145.5	146.6	152.4	191.2	186.6	154.5
Nagapattinam		47.5	26.1	91.9	86.0	96.0	124.3	160.3	149.2
Namakkal			61.1	123.2	132.6	126.2	191.0	177.2	182.4
Perambalur			63.9	133.0	131.1	147.1	162.1	166.7	77.1
Pudukkottai	13.7	27.8	37.0	41.3	50.9	61.9	128.4	143.5	194.5
Ramanathapuram	51.7	50.7	27.4	43.3	40.3	46.0	61.7	58.2	61.8
Salem	57.2	103.7	130.9	323.9	305.6	336.8	351.4	385.9	465.1
Sivaganga		14.9	30.4	40.0	47.0	58.6	69.0	85.0	68.7
South Arcot	91.8	52.2							
Thanjavur	52.8	44.1	57.4	139.2	158.5	169.5	174.6	187.3	208.2
The Nilgiris	16.0	37.3	52.2	83.0	99.2	97.3	121.1	87.4	46.2
Theni			65.6	59.7	74.0	71.3	92.6	126.8	120.3
Thiruvallur			53.0	57.4	60.0	65.8	138.5	97.3	143.4
Thiruvarur			31.4	109.7	124.7	114.2	127.3	118.0	81.1
Thoothukkudi		25.7	58.9	88.7	90.8	85.3	105.7	188.4	114.1
Tiruchirappalli	53.2	92.8	62.2	185.6	190.0	184.4	215.4	204.6	262.7
Tirunelveli	31.5	28.1	74.1	232.2	228.3	226.6	263.7	238.0	266.7
Tiruppur								228.2	164.9
Tiruvannamalai		69.9	113.1	203.6	216.6	221.6	374.5	384.5	474.0
Vellore	95.5	79.9	181.1	259.0	258.4	240.3	302.3	370.0	375.6
Viluppuram		94.1	58.0	239.3	217.6	235.6	283.4	286.7	286.1
Virudhunagar		19.8	57.3	174.1	180.5	165.9	185.2	163.2	150.2

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Crossbred Cattle Milk Production****1993-94****1997-98****2003-04****2007-08****2011-12****2012-13****Milk Production ('000 MT)**

< 50	50 - 100	100 - 200	> 200
------	----------	-----------	-------

Data for years 2003-04 to 2011-12 not available for Ariyalur district



IV.3. Production Performance: Milk Production

TABLE IV.3.4: Year and District-wise Buffalo Milk Production

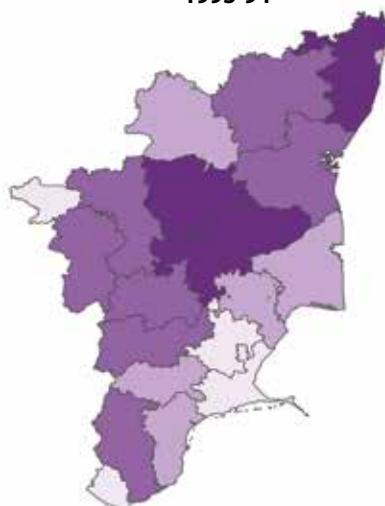
Districts	Buffalo Milk Production ('000 MT)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,422.1	1,628.8	1,429.0	759.3	760.3	761.5	810.1	779.0	705.2
Ariyalur									5.8
Chengalpattu MGR	173.6	178.7							
Chennai	37.7	43.9	18.9	1.8	1.9	1.7	3.2	2.5	
Coimbatore	94.5	123.8	52.7	15.4	16.2	18.4	16.5	6.6	6.2
Cuddalore			52.9	18.9	16.0	15.1	18.9	15.1	8.7
Dharmapuri	34.4	36.7	62.1	46.5	48.3	50.0	45.3	29.0	30.7
Dindigul		91.3	75.4	24.8	28.5	26.8	33.1	33.3	40.4
Erode	95.7	134.3	130.3	102.3	110.9	133.6	118.1	107.0	64.4
Kancheepuram			83.5	45.7	44.0	40.9	50.7	62.8	75.3
Kanniyakumari	12.6	12.0	4.8	5.1	4.9	2.7	2.8	2.4	0.5
Karur			46.5	31.8	31.5	37.0	34.9	31.0	21.8
Krishnagiri				8.4	11.1	12.8	9.6	10.8	8.5
Madurai	161.2	94.4	41.7	12.6	8.6	10.4	9.4	8.5	4.6
Nagapattinam		74.6	42.6	18.7	16.7	21.2	18.7	18.8	14.7
Namakkal			112.7	104.2	95.2	97.5	102.5	96.5	96.2
Perambalur			39.9	9.9	7.5	8.6	12.7	8.5	1.3
Pudukkottai	27.3	43.9	30.5	13.3	13.2	13.3	14.8	24.2	29.0
Ramanathapuram	53.2	17.6	16.7	3.5	3.3	3.1	2.9	1.5	1.6
Salem	177.2	131.7	79.1	87.9	89.7	90.0	93.3	72.9	56.7
Sivaganga		12.5	11.6	4.2	3.6	3.9	4.0	2.9	3.28
South Arcot	87.9	53.1							
Thanjavur	98.5	71.7	40.9	15.7	20.8	15.9	16.0	13.4	15.4
The Nilgiris	2.7	6.4	1.9	1.6	2.0	1.1	2.2	1.1	1.1
Theni			25.2	6.1	6.1	5.0	5.4	2.4	2.6
Thiruvallur			120.5	56.6	56.1	47.2	56.7	58.7	60.7
Thiruvarur			22.9	10.1	7.0	6.3	6.6	5.8	3.9
Thoothukkudi		46.5	15.7	7.8	11.0	9.3	27.8	18.7	11.7
Tiruchirappalli	171.7	188.0	57.6	19.7	20.0	21.3	23.4	22.8	19.8
Tirunelveli	101.8	59.0	45.2	28.2	33.6	24.7	33.0	40.8	46.4
Tiruppur								25.4	31.0
Tiruvannamalai		46.7	41.5	12.3	8.5	8.4	12.0	10.0	8.1
Vellore	91.7	72.1	62.3	19.8	14.6	12.4	12.8	19.3	14.0
Viluppuram		59.7	75.4	16.4	14.4	10.3	11.7	12.6	11.9
Virudhunagar		30.2	18.7	9.9	15.3	12.6	10.9	13.9	9.0

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

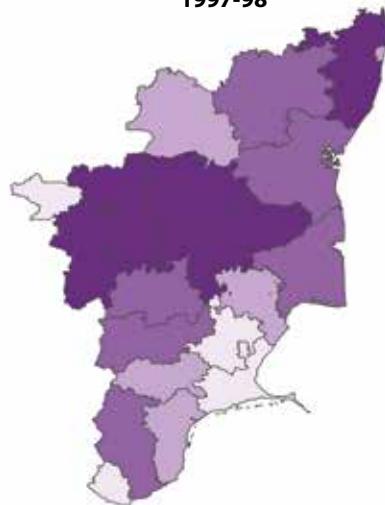
NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Buffalo Milk Production**

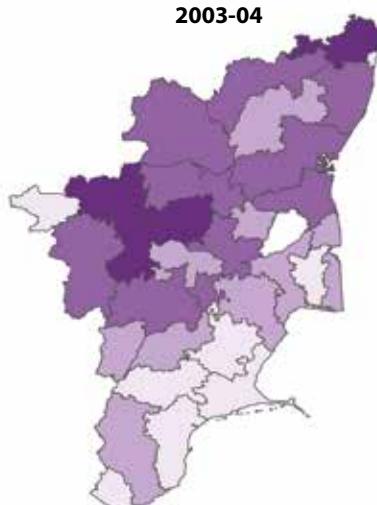
1993-94



1997-98



2003-04



2007-08



2011-12



2012-13

**Milk Production ('000 MT)**

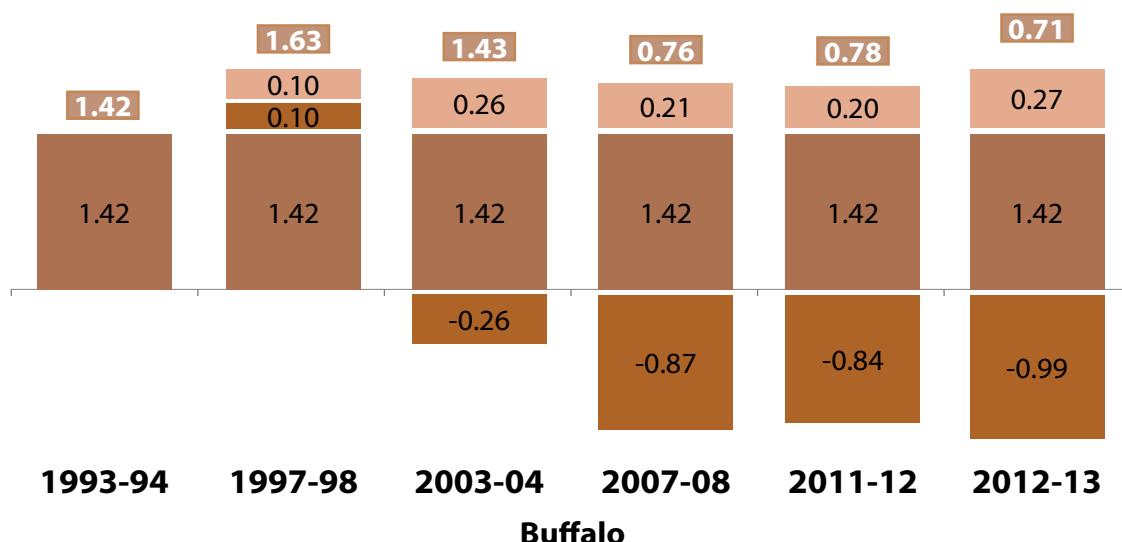
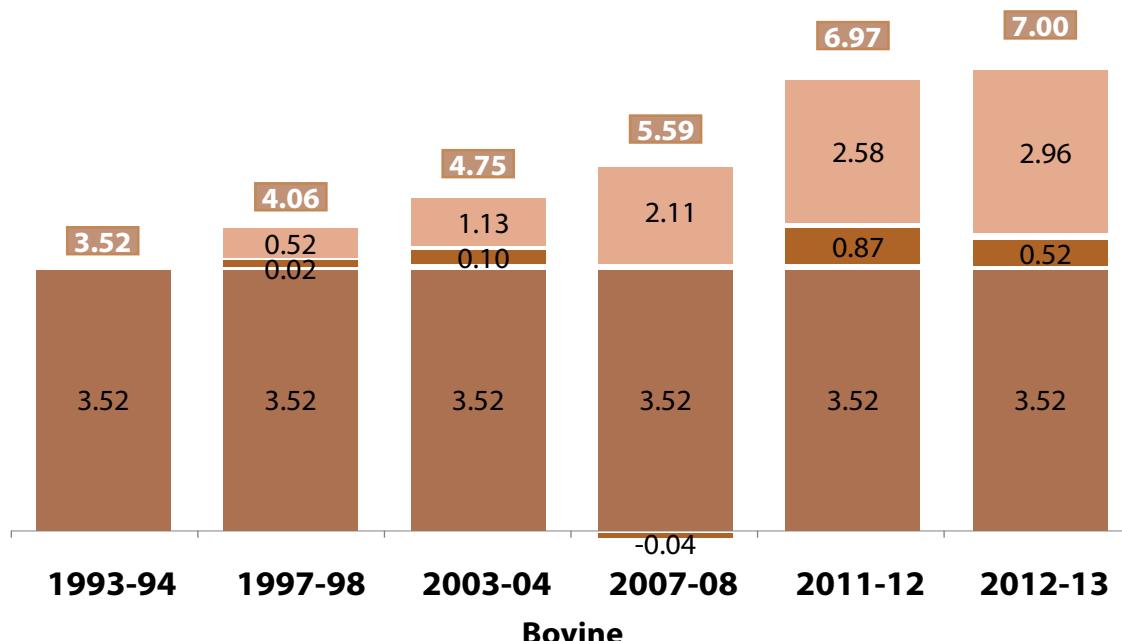
< 25	25 - 50	50 - 100	> 100
------	---------	----------	-------

Data for years 2003-04 to 2011-12 not available for Ariyalur district



Tamil Nadu's Milk Production (MMT)

(Change due to no. of in-milk animals & average yield)



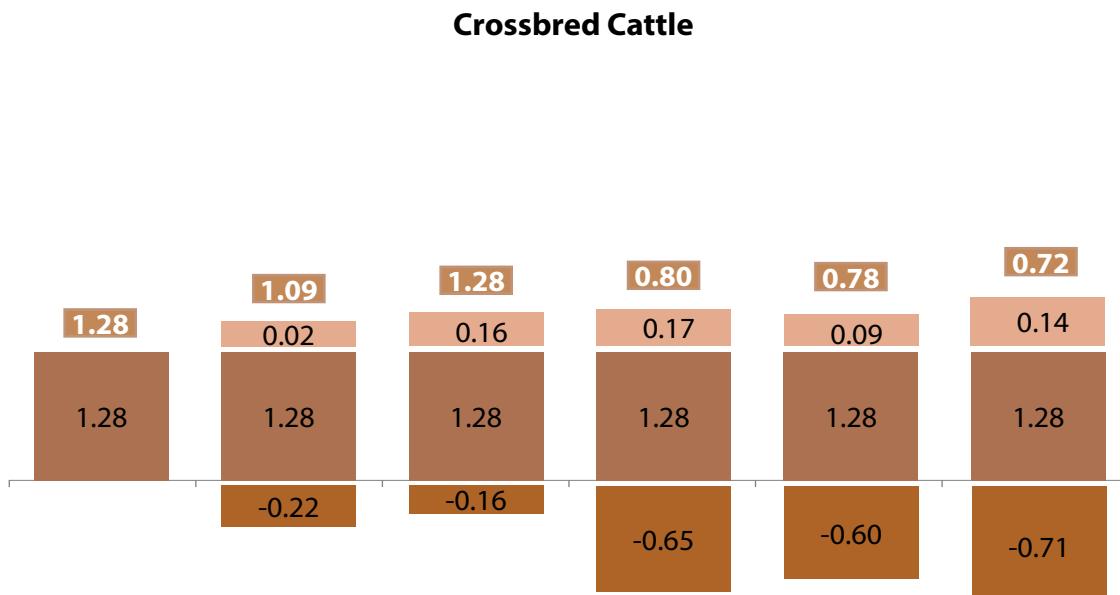
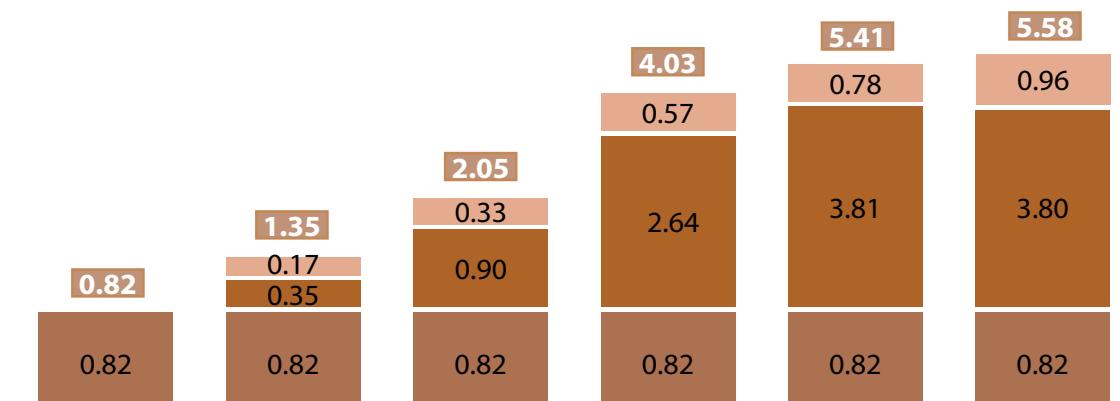
- Milk production in base year - 1993-1994 - MMT.
- Total milk production - MMT.
- Increase in total production due to change in numbers of in-milk animals - MMT.
- Increase in total milk production due to change in average yield - MMT.





Tamil Nadu's Milk Production (MMT)

(Change due to no. of in-milk animals & average yield)



- Milk production in base year - 1993-1994 - MMT.
- Total milk production - MMT.
- Increase in total production due to change in numbers of in-milk animals - MMT.
- Increase in total milk production due to change in average yield - MMT.





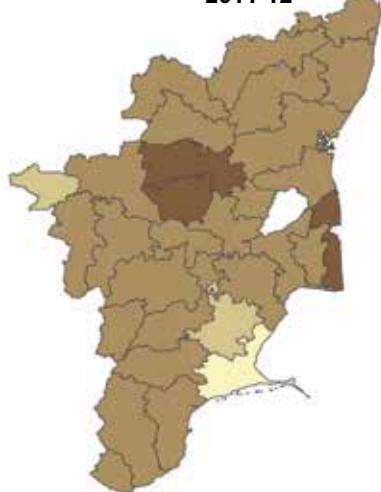
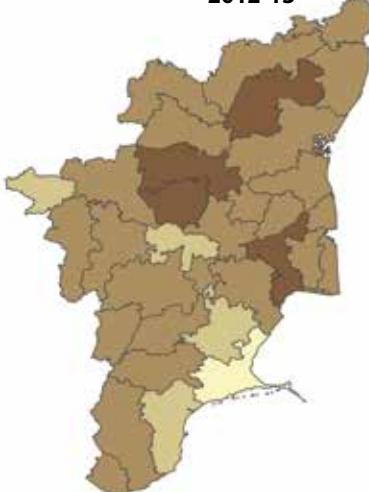
IV.3. Production Performance: Milk Production

TABLE IV.3.5: Year and District-wise Milk Production Density

Districts	Milk Production Density (kg/day/sq km)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	74	85	100	117	119	121	144	146	147
Ariyalur									149
Chengalpattu MGR	122	114							
Chennai	806	955	551	62	72	79	127	141	
Coimbatore	73	82	94	122	111	122	125	111	125
Cuddalore			182	142	132	150	158	141	146
Dharmapuri	35	34	64	127	130	126	147	109	149
Dindigul		76	95	65	77	68	85	103	116
Erode	69	95	83	106	113	120	151	172	157
Kancheepuram			134	96	94	93	125	170	176
Kanniyakumari	111	172	130	207	227	234	253	167	116
Karur			87	104	100	103	114	115	92
Krishnagiri				92	108	103	107	106	104
Madurai	74	117	123	124	123	129	157	155	127
Nagapattinam		107	135	152	140	156	178	213	192
Namakkal			159	193	194	191	248	233	240
Perambalur			102	121	118	131	146	143	126
Pudukkottai	48	76	71	67	70	79	114	151	177
Ramanathapuram	39	62	50	45	42	46	53	40	44
Salem	105	102	134	237	226	243	253	255	284
Sivaganga		35	59	48	54	66	74	83	70
South Arcot	89	118							
Thanjavur	83	127	105	159	177	186	191	193	211
The Nilgiris	25	54	65	97	113	111	135	96	53
Theni			100	60	72	69	87	113	107
Thiruvallur			179	124	127	124	186	151	176
Thiruvarur			122	210	211	204	221	191	130
Thoothukkudi		53	53	62	68	62	84	129	78
Tiruchirappalli	83	91	107	140	142	141	159	154	187
Tirunelveli	48	50	62	120	120	115	134	128	141
Tiruppur								138	107
Tiruvannamalai		82	112	111	113	115	184	184	236
Vellore	94	104	142	145	139	132	161	196	191
Viluppuram		97	102	127	124	125	141	148	145
Virudhunagar		41	60	126	136	123	135	126	111

SOURCE: Estimated from Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

**District-wise Milk Production Density****1993-94****1997-98****2003-04****2007-08****2011-12****2012-13****Milk Production Density (kg/day/sq km)**

< 50	50 - 100	100 - 200	> 200
------	----------	-----------	-------

Data not available for years 2003-04 to 2011-12 for Ariyalur District



IV.4. Production Performance: Milk Availability

TABLE IV.4.1: Year and District-wise Per Capita Milk Availability

Districts	Per Capita Availability of Milk (grams/day)								
	1993-94	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	169	186	203	225	225	226	263	265	262
Ariyalur									378
Chengalpattu MGR	198	172							
Chennai	35	39	21	2	3	3	5	5	
Coimbatore	149	156	158	192	171	185	186	152	168
Cuddalore			285	211	193	217	225	199	204
Dharmapuri	134	123	209	406	407	390	447	326	438
Dindigul		256	301	197	231	203	249	299	332
Erode	238	313	253	301	315	331	407	437	392
Kancheepuram			193	122	115	110	144	189	189
Kanniyakumari	115	175	127	193	210	214	229	149	102
Karur			262	298	284	289	314	313	246
Krishnagiri				269	311	293	297	291	281
Madurai	187	227	173	163	159	164	197	191	153
Nagapattinam		217	243	263	241	267	302	358	319
Namakkal			348	400	395	383	490	455	461
Perambalur			309	353	341	374	413	398	385
Pudukkottai	166	253	223	201	208	232	333	435	504
Ramanathapuram	128	217	167	143	133	144	161	122	131
Salem	225	205	225	375	352	374	384	381	419
Sivaganga		131	206	158	178	214	235	261	215
South Arcot	196	171							
Thanjavur	149	182	158	232	256	267	271	273	295
The Nilgiris	88	186	218	329	388	380	464	334	183
Theni			287	164	196	185	229	294	275
Thiruvallur			209	128	127	121	176	139	156
Thiruvarur			216	359	358	344	370	317	214
Thoothukkudi		164	155	173	188	170	229	346	207
Tiruchirappalli	217	227	191	237	238	233	261	249	299
Tirunelveli	136	128	151	277	274	259	297	281	306
Tiruppur								289	220
Tiruvannamalai		244	317	299	300	302	478	471	598
Vellore	221	188	235	228	217	203	246	294	284
Viluppuram		274	240	282	271	270	298	309	298
Virudhunagar		103	143	286	306	274	297	276	240

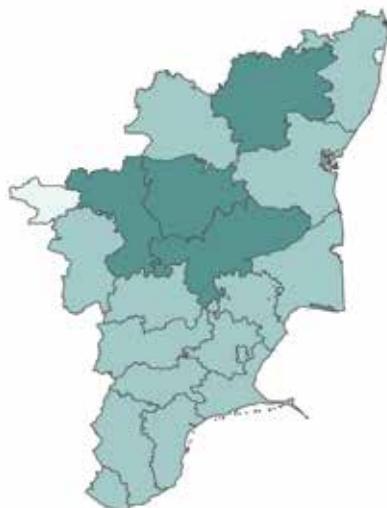
SOURCE: Estimated from Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

NOTE: For the year 1993-94, data for Thanjavur district also includes Nagapattinam district; Madurai includes Dindigul; Ramanathapuram includes Sivaganga and Virudhunagar; Tirunelveli includes Thoothukkudi; Vellore includes Tiruvannamalai.

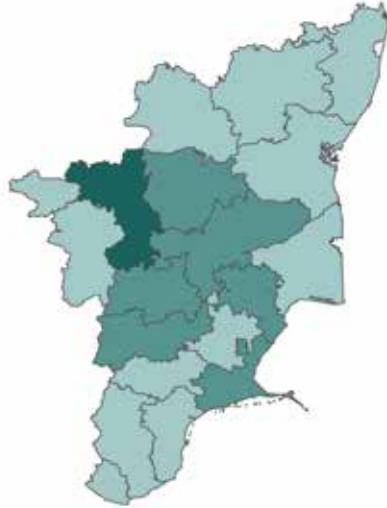


District-wise Per Capita Milk Availability

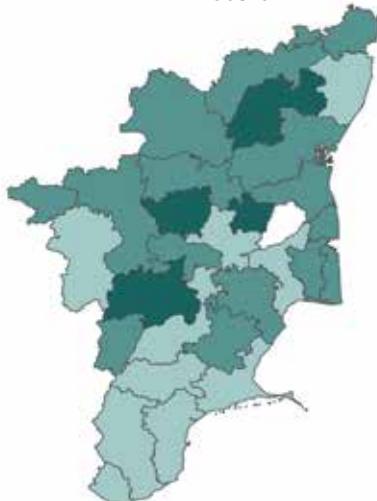
1993-94



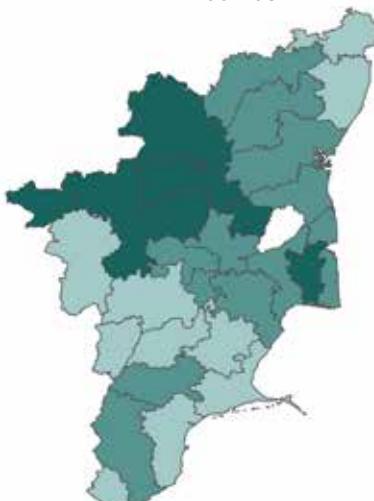
1997-98



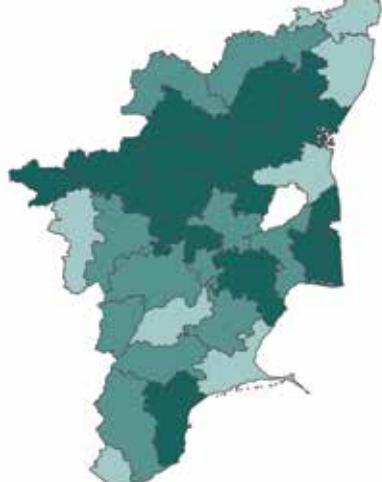
2003-04



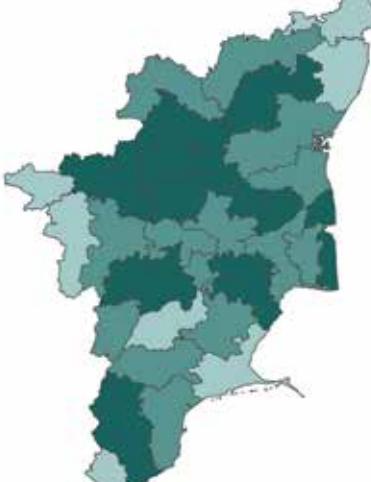
2007-08



2011-12



2012-13

**Per-capita Milk availability (grams/day)**

< 100	100 - 200	200 - 300	> 300
-------	-----------	-----------	-------

Data not available for years 2003-04 to 2011-12 for Ariyalur district



IV.5. Production Performance: Milk Utilisation

TABLE IV.5.1: Milk Utilisation Pattern in Households (1993-94 to 2012-13)

(In Percent)

Items	1993-94		1997-98		2003-04		2007-08		2011-12		2012-13	
	Cow	Buffalo										
Milk Sold as Fluid	78	86	84	82	86	85	86	89	87	88	88	88
Milk Consumed as Fluid	16	10	12	14	9	10	9	7	6	7	7	6
Milk Converted to Products	6	4	4	4	5	5	5	4	7	5	5	6

SOURCE: Integrated Sample Survey Reports (1993-94 to 2012-13), Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.





PART V : VETERINARY INFRASTRUCTURE AND SERVICE DELIVERY SYSTEM

In Tamil Nadu, veterinary healthcare is being strengthened with focus on early diagnosis. To this end, the government is setting up new operation theatres in veterinary dispensaries, installed ultrasound scanners and modern outpatient buildings are to be constructed. The number of veterinary institutes in Tamil Nadu has almost doubled from 1,392 in 1997-98 to 2,579 in 2013-14.

The number of AI centres managed by the state government has increased to 3,429. The veterinarians carry out over 45 lakhs artificial inseminations annually. In addition to the state government, the dairy cooperatives also conduct about 17 lakhs AI per year.

In the area of disease prevention, the state government has increased the number of vaccination from a mere 3 lakhs in 1992-93 to 200 lakhs in 2013-14 after recent FMD outbreak. A total of 13 million bovine were treated in 2013-14, increased from 9 million in 2003-04.





V.1. Veterinary Infrastructure

TABLE V.1.1: Year and District-wise Veterinary Institutes

Districts	Number of Veterinary Institutes									
	1997-98	2001-02	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	1,392	1,452	1,526	1,429	1,429	1,873	1,873	2,459	2,479	2,579
Ariyalur						24	31	40	40	41
Chennai	3	3	3	3	3	3	3	3	3	3
Coimbatore	76	77	85	86	86	68	68	92	92	101
Cuddalore	46	47	50	48	48	66	66	79	80	85
Dharmapuri	71	73	36	37	37	48	48	63	64	68
Dindigul	48	50	51	50	50	64	64	89	89	92
Erode	82	86	91	85	85	79	79	104	105	105
Kancheepuram	44	44	46	46	46	68	68	91	92	93
Kanniyakumari	32	36	39	35	35	41	41	53	53	53
Karur	25	27	28	26	26	36	36	52	52	56
Krishnagiri			40	40	40	49	49	61	62	70
Madurai	44	46	49	45	45	55	55	73	74	78
Nagapattinam	38	40	43	40	40	55	55	70	71	73
Namakkal	57	63	66	59	59	74	74	96	96	99
Perambalur	37	39	41	37	37	27	20	30	31	35
Pudukkottai	50	51	54	50	50	63	63	79	80	84
Ramanathapuram	32	32	34	31	31	39	39	55	56	56
Salem	71	75	77	81	81	106	106	137	138	144
Sivaganga	34	38	37	34	34	50	50	70	70	71
Thanjavur	67	71	73	66	66	82	82	104	105	108
The Nilgiris	18	18	19	18	18	22	22	26	26	29
Theni	33	34	9	0	0	36	36	47	47	49
Thiruvallur	42	44	50	43	43	62	62	81	82	85
Thiruvarur	44	45	46	40	40	53	53	69	69	69
Thoothukkudi	38	39	43	39	39	48	48	65	66	66
Tiruchirappalli	50	55	58	57	57	71	71	96	98	104
Tirunelveli	64	66	71	68	68	87	87	106	107	108
Tiruppur			27	30	30	66	66	91	91	96
Tiruvannamalai	63	63	65	56	56	80	80	105	106	112
Vellore	68	69	71	66	66	89	89	117	118	121
Viluppuram	78	81	83	77	77	112	112	146	147	153
Virudhunagar	37	40	41	36	36	50	50	69	69	72

(Veterinary Institutes includes Polyclinics, Clinician Centres, Veterinary Hospitals, Veterinary Dispensaries/Rural Veterinary Dispensaries/Mobile Veterinary Dispensaries/ Upgraded Veterinary Subcentres and Mobile Veterinary Units)

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.1. Veterinary Infrastructure

TABLE V.1.2: District-wise AI Centres – Government Agencies

Districts	Number of AI Centres									
	1997-98	2001-02	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	3,518	3,575	3,569	3,258	3,258	3,258	3,358	3,359	3,429	3,429
Ariyalur						30	42	42	43	43
Chennai	12	12	12	3	3	3	3	3	7	7
Coimbatore	199	201	202	183	183	118	120	121	123	123
Cuddalore	150	148	148	137	137	137	141	141	144	144
Dharmapuri	139	142	63	63	63	62	68	68	71	71
Dindigul	176	178	178	164	164	164	168	168	170	170
Erode	189	194	194	178	178	122	125	124	126	126
Kancheepuram	138	137	137	128	128	129	132	132	132	132
Kanniyakumari	72	76	74	65	65	66	69	69	69	69
Karur	78	80	80	72	72	72	75	75	77	77
Krishnagiri			79	72	72	71	74	74	77	77
Madurai	155	157	157	144	144	144	145	145	149	149
Nagapattinam	90	92	91	84	84	84	87	87	89	89
Namakkal	105	111	110	98	98	98	101	101	103	103
Perambalur	78	75	75	68	68	38	34	34	36	36
Pudukkottai	123	124	124	111	111	111	115	115	117	117
Ramanathapuram	76	75	75	65	65	65	67	67	70	70
Salem	138	143	143	135	135	135	141	141	145	145
Sivaganga	123	128	127	117	117	117	118	118	120	120
Thanjavur	140	144	143	131	131	131	134	134	136	136
The Nilgiris	45	45	45	41	41	41	42	42	42	42
Theni	105	106	78	98	98	98	100	100	101	101
Thiruvallur	119	121	121	108	108	108	110	110	112	112
Thiruvarur	110	111	111	103	103	103	106	106	106	106
Thoothukkudi	111	112	112	101	101	101	101	104	105	105
Tiruchirappalli	129	134	134	124	124	124	127	127	131	131
Tirunelveli	141	143	143	132	132	132	139	136	139	139
Tiruppur			27	0	0	121	129	129	131	131
Tiruvannamalai	144	144	144	130	130	130	134	134	137	137
Vellore	147	149	149	137	137	137	142	143	148	148
Viluppuram	180	183	183	167	167	167	168	168	171	171
Virudhunagar	106	110	110	99	99	99	101	101	102	102

(AI Centres includes Polyclinics, Clinician Centres, Veterinary Hospitals, Veterinary Dispensaries/Rural Veterinary Dispensaries/Mobile Veterinary Dispensaries/Upgraded Veterinary Subcentres, Mobile Veterinary Units and Subcentres)

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.1. Veterinary Infrastructure

TABLE V.1.3: District-wise AI Centres – Cooperatives

Districts	Number of AI Centres					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	2,380	2,539	2,600	2,644	2,658	2,667
Ariyalur		11	8	8	8	11
Chennai	0	0	0	0	0	0
Coimbatore	185	191	196	206	210	210
Cuddalore	54	54	58	58	63	64
Dharmapuri	110	120	120	124	124	137
Dindigul	52	52	50	50	50	50
Erode	320	330	333	337	339	337
Kancheepuram	39	39	43	45	45	45
Kanniyakumari	18	18	18	18	18	18
Karur	55	60	59	63	63	65
Krishnagiri	49	49	49	55	55	54
Madurai	77	81	80	83	83	87
Nagapattinam	0	1	1	0	0	1
Namakkal	235	249	249	252	252	252
Perambalur	50	59	62	68	68	59
Pudukkottai	4	4	5	10	10	10
Ramanathapuram	12	15	15	12	12	12
Salem	360	372	372	372	372	372
Sivaganga	69	69	86	81	81	66
Thanjavur	25	25	25	18	22	23
The Nilgiris	48	48	49	43	43	37
Theni	48	48	53	57	57	53
Thiruvallur	5	5	5	4	4	4
Thiruvarur	11	11	11	4	6	23
Thoothukkudi	14	14	13	16	16	20
Tiruchirappalli	77	85	96	96	96	96
Tirunelveli	58	58	53	60	62	65
Tiruppur				0	0	0
Tiruvannamalai	170	184	195	196	196	181
Vellore	115	121	118	122	120	126
Viluppuram	120	158	170	170	165	166
Virudhunagar	0	8	8	16	18	23

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.1. Veterinary Infrastructure

TABLE V.1.4: District-wise AI Centres - Private AI Workers of TNLDA

Districts	Number of AI Centres					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	554	658	757	788	844	934
Ariyalur		0	0	0	0	0
Chennai	0	0	0	0	0	0
Coimbatore	12	13	19	20	23	23
Cuddalore	10	10	10	23	25	33
Dharmapuri	32	35	48	45	45	53
Dindigul	25	29	32	31	46	62
Erode	42	44	50	50	52	78
Kancheepuram	2	2	5	5	5	5
Kanniyakumari	14	16	19	24	27	27
Karur	13	24	24	25	25	25
Krishnagiri	10	12	12	16	17	17
Madurai	32	33	35	38	38	55
Nagapattinam	59	66	68	70	72	72
Namakkal	13	12	14	15	15	15
Perambalur	4	8	8	10	10	10
Pudukkottai	26	26	29	23	23	24
Ramanathapuram	10	10	13	13	13	13
Salem	40	38	47	38	38	42
Sivaganga	7	7	7	7	7	7
Thanjavur	31	32	32	33	33	36
The Nilgiris	2	2	3	3	3	3
Theni	13	14	13	9	11	11
Thiruvallur	12	12	14	16	16	16
Thiruvarur	15	17	20	22	26	26
Thoothukkudi	4	5	5	5	5	5
Tiruchirappalli	29	52	52	71	72	72
Tirunelveli	7	11	13	12	12	12
Tiruppur			0	0	0	0
Tiruvannamalai	11	16	38	39	55	58
Vellore	11	20	35	33	38	39
Viluppuram	60	82	82	82	82	85
Virudhunagar	8	10	10	10	10	10

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.

NOTE: Details of AI centres of BAIF, JK Trust and others not available.





V.2. Service Delivery System - Artificial Insemination

TABLE V.2.1: District-wise AI Performed by Government Agencies – Cattle

Districts	Number of AI Performed ('000)									
	1992-93	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	1,973.9	2,292.8	2,788.6	3,218.9	3,334.6	3,552.1	4,107.2	4,154.8	4,407.1	4,480.0
Ariyalur					67.5	69	72.8	71.6	72.6	78.1
Chennai	4.4	3.4	2.8	1.4	0.9	1.4	1.3	1.7	2.1	1.8
Coimbatore	195	223.6	256.3	251	250	161.7	191.9	229.7	245.3	226.3
Cuddalore	211.4	134.7	131.8	135.2	143	145.6	184.5	214.3	211.9	173.7
Dharmapuri	56.3	82.4	149.5	114	141.1	153.7	171.2	170.9	185.9	190.8
Dindigul	92.2	81.2	106.3	131.3	135.9	149.5	192.2	210.1	213.7	192.5
Erode	90.8	100.8	118	154.5	172.1	138.7	163.2	181.8	193.1	200.5
Kancheepuram	61.9	48.8	59.5	76.2	75.8	91.5	105.1	119.9	121.1	124.9
Kanniyakumari	57.1	59.1	79.3	75.7	78.8	80.4	89.6	95.1	97.7	99.3
Karur		37.7	34.4	52.5	57.8	71.4	94.2	94.4	91.2	91.2
Krishnagiri				102	121.7	130	142.7	145.5	148.3	161.2
Madurai	177.5	94.3	84.5	102.8	107.7	116.7	132.1	142	146.4	161
Nagapattinam	106	73.9	81	75.5	83.7	92.1	109.2	102.2	102.1	96.5
Namakkal		37.2	53.7	78.5	86.9	83.4	102	110.7	114.5	122.2
Perambalur		81.8	95.8	114.4	49.1	53	62.3	56.7	65.9	64
Pudukkottai	42.6	58.9	70.8	80	75	81.8	123.6	102.5	116.5	128
Ramanathapuram	14.9	14	16.5	16.2	16.9	19.6	24.8	24.8	29.3	32.4
Salem	113.4	96.6	154.9	156.3	148.4	143.1	177.9	215.1	267.6	237.4
Sivaganga	14.7	21.1	27.1	33.5	33.7	42.6	45.6	49.4	47.4	62.7
Thanjavur	117.7	148.2	170.8	200.9	214.2	210.3	239.4	205.6	205.5	200.7
The Nilgiris	8.3	9.1	11.1	17.7	18.1	23.6	24	23.4	24.2	24
Theni		59.1	67.6	67.8	72.5	68.1	74.2	58.3	65.7	73.1
Thiruvallur		44.7	52.9	54.2	58.8	64.9	76.9	84.9	84	90.7
Thiruvarur		83.1	89.2	100.8	97.1	109.1	114.7	100.6	125.8	116.8
Thoothukkudi	34.9	44.7	50.6	54.6	58.1	58.9	71.8	71	75	70.7
Tiruchirappalli	217.9	141.9	133.2	170.2	174.9	178	190.1	161.6	159.2	181.2
Tirunelveli	90.3	98.5	142.9	160.5	162.9	177.6	217.8	211.1	227.8	223.8
Tiruppur						141.7	156.7	168.2	195.1	184.8
Tiruvannamalai	90.2	87.6	138.9	153.2	162	183.8	201.3	180.7	189.9	222.4
Vellore	108.1	131.2	176.6	214.4	212.6	229.1	239.6	238.7	233.6	274.1
Viluppuram		116.2	141.3	179	164.4	190.6	219.1	215.7	244.9	264.2
Virudhunagar	68.3	79.1	91.3	94.6	93.1	91.2	95.4	96.4	104.3	109.1

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.

NOTE: AI done by private AI workers included.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.2: District-wise AI Performed by Government Agencies – Buffaloes

Districts	Number of AI Performed ('000)									
	1992-93	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	537.5	388.9	313.4	260.3	245.4	252.9	296.8	289.4	287.5	281.8
Ariyalur					2.3	2.4	2.6	2.2	2	1.7
Chennai	2.1	1.8	0.6	0.1	0.1	0.2	0.1	0.2	0.2	0.1
Coimbatore	40.3	25.4	22.1	9.6	9.1	5.8	20.2	3	4.5	2.4
Cuddalore	18.5	7.9	4.9	3.1	2.8	2.9	2.8	2.7	2.6	2
Dharmapuri	15.8	20.5	19.9	18.9	18.9	21.7	24.4	25.6	33.9	30
Dindigul	48.7	22.1	23.2	15.6	14.7	14.2	18.3	17.7	19.3	15.8
Erode	79.2	58.4	53.2	47.8	49.4	38	46.5	53.2	54.3	57
Kancheepuram	38.6	15.3	14.3	13.3	13	14.2	14.3	14.8	15.5	14.7
Kanniyakumari	2.7	1.9	1.2	0.7	0.6	0.6	0.5	0.6	0.4	0.6
Karur		18.3	21.5	12.6	11	14.7	20.4	19.1	17.7	22.6
Krishnagiri				3.6	3.6	4.5	6.5	5	3.8	3.7
Madurai	28.8	6.3	3.1	3.2	1.7	2.7	2.3	2.1	1.8	1.6
Nagapattinam	29	10.9	6.4	4.3	3.4	3	3.4	2.4	2	2
Namakkal		31.8	32.2	31.8	30.2	29.9	35.7	41.1	40	39.2
Perambalur		6.6	3.8	3.9	0.4	0.5	0.9	0.4	0.4	0.4
Pudukkottai	5.6	14.1	5.7	4.5	4.9	4.9	5.9	3.3	3.8	3.6
Ramanathapuram	0.8	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
Salem	79.9	43.3	30.1	23.5	21.9	21.9	21.6	23.8	25.8	23.1
Sivaganga	1.6	1.1	0.7	0.4	0.3	0.5	0.8	0.5	0.3	0.3
Thanjavur	32.9	25.4	14.2	9.3	9.1	8.6	8.6	8.3	5.3	4.4
The Nilgiris	0	0	0	0	0	0	0	0	0	0
Theni		3.1	2	1	0.7	0.7	0.7	0.8	0.5	0.9
Thiruvallur		9.9	7.8	7.4	6.5	6.5	8.3	8.4	6.8	7.4
Thiruvarur		9.5	3.4	4.1	2.2	2.2	3.9	5.1	1.9	1.2
Thoothukkudi	8.1	4.3	2.2	1.7	1.6	1.3	1.4	1.2	1.2	0.9
Tiruchirappalli	53.4	11.6	10.4	9.2	9.1	8.6	8	7.9	7.8	6.7
Tirunelveli	21.4	14.3	6.9	4.8	4.4	4.1	4.6	3.1	2.3	2.3
Tiruppur						16	18.8	20.8	21.4	22.5
Tiruvannamalai	7.8	3.7	2.7	2.7	2.9	2.9	3.6	3.1	3.3	4
Vellore	14.1	9	3.7	5.4	4.7	5.4	5.9	5.6	5.6	7.9
Viluppuram		8.4	15.7	16.7	15.3	13.3	5.2	6.8	2.7	2.3
Virudhunagar	8.2	3.5	1.2	0.7	0.6	0.5	0.6	0.5	0.3	0.3

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.

NOTE: AI done by private AI workers included.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.3: District-wise AI Performed by Government Agencies – Bovine

Districts	Number of AI Performed ('000)									
	1992-93	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	2,511.4	2,681.7	3,102	3,479.2	3,580	3,805	4,404	4,444.2	4,694.6	4,761.8
Ariyalur					69.8	71.4	75.4	73.8	74.6	79.8
Chennai	6.5	5.2	3.4	1.5	1	1.6	1.4	1.9	2.3	1.9
Coimbatore	235.3	249	278.4	260.6	259.1	167.5	212.1	232.7	249.8	228.7
Cuddalore	229.9	142.6	136.7	138.3	145.8	148.5	187.3	217	214.5	175.7
Dharmapuri	72.1	102.9	169.4	132.9	160	175.4	195.6	196.5	219.8	220.8
Dindigul	140.9	103.3	129.5	146.9	150.6	163.7	210.5	227.8	233	208.3
Erode	170	159.2	171.2	202.3	221.5	176.7	209.7	235	247.4	257.5
Kancheepuram	100.5	64.1	73.8	89.5	88.8	105.7	119.4	134.7	136.6	139.6
Kanniyakumari	59.8	61	80.5	76.4	79.4	81	90.1	95.7	98.1	99.9
Karur		56	55.9	65.1	68.8	86.1	114.6	113.5	108.9	113.8
Krishnagiri				105.6	125.3	134.5	149.2	150.5	152.1	164.9
Madurai	206.3	100.6	87.6	106	109.4	119.4	134.4	144.1	148.2	162.6
Nagapattinam	135	84.8	87.4	79.8	87.1	95.1	112.6	104.6	104.1	98.5
Namakkal		69	85.9	110.3	117.1	113.3	137.7	151.8	154.5	161.4
Perambalur		88.4	99.6	118.3	49.5	53.5	63.2	57.1	66.3	64.4
Pudukkottai	48.2	73	76.5	84.5	79.9	86.7	129.5	105.8	120.3	131.6
Ramanathapuram	15.7	14.5	16.9	16.5	17.1	19.8	24.9	24.9	29.4	32.5
Salem	193.3	139.9	185	179.8	170.3	165	199.5	238.9	293.4	260.5
Sivaganga	16.3	22.2	27.8	33.9	34	43.1	46.4	49.9	47.7	63
Thanjavur	150.6	173.6	185	210.2	223.3	218.9	248	213.9	210.8	205.1
The Nilgiris	8.3	9.1	11.1	17.7	18.1	23.6	24	23.4	24.2	24
Theni		62.2	69.6	68.8	73.2	68.8	74.9	59.1	66.2	74
Thiruvallur		54.6	60.7	61.6	65.3	71.4	85.2	93.3	90.8	98.1
Thiruvarur		92.6	92.6	104.9	99.3	111.3	118.6	105.7	127.7	118
Thoothukkudi	43	49	52.8	56.3	59.7	60.2	73.2	72.2	76.2	71.6
Tiruchirappalli	271.3	153.5	143.6	179.4	184	186.6	198.1	169.5	167	187.9
Tirunelveli	111.7	112.8	149.8	165.3	167.3	181.7	222.4	214.2	230.1	226.1
Tiruppur						157.7	175.5	189	216.5	207.3
Tiruvannamalai	98	91.3	141.6	155.9	164.9	186.7	204.9	183.8	193.2	226.4
Vellore	122.2	140.2	180.3	219.8	217.3	234.5	245.5	244.3	239.2	282
Viluppuram		124.6	157	195.7	179.7	203.9	224.3	222.5	247.6	266.5
Virudhunagar	76.5	82.6	92.5	95.3	93.7	91.7	96	96.9	104.6	109.4

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.

NOTE: AI done by private AI workers included.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.4: District-wise AI Performed by Cooperatives - Cattle

Districts	Number of AI Performed ('000)					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,252.1	1,291.8	1,377.7	1,468.4	1,503.3	1,650.7
Ariyalur		4.5	6.2	7	9.3	7.6
Chennai		0	0	0	0	0
Coimbatore	78.3	82.4	89.2	110.2	119.4	124.3
Cuddalore	26	25.4	30.5	40.8	40.4	51.8
Dharmapuri	59.5	71.3	72.4	75.4	74.6	88.9
Dindigul	30.7	25.3	26.6	26.9	27.3	30
Erode	185.5	183.3	190.9	209.9	221.8	246
Kancheepuram	6.6	11.1	18	22	17.2	26.5
Kanniyakumari	5.3	6	6.4	6.3	5.3	5.6
Karur	19.6	20.9	23.5	25.3	26.1	22.5
Krishnagiri	31.7	35.3	33.1	32.9	28.8	41.8
Madurai	45.1	59.4	61.7	58.8	57.6	66.6
Nagapattinam	0	0.6	1.3	0	0	0.3
Namakkal	99.3	97.8	104.5	107.9	102.6	101.4
Perambalur	29.4	20.3	17.4	22	23.2	33.4
Pudukkottai	0	1.1	0.7	2.2	3.3	3.5
Ramanathapuram	2.9	2.9	3.3	4.4	5.1	7.1
Salem	199.1	194.5	174.5	168	175.1	177.8
Sivaganga	9.2	8.5	10.5	12.7	11.9	22.4
Thanjavur	12.8	6.2	9.3	11.7	18.3	23.2
The Nilgiris	10.2	8.4	7.9	7.2	7	8
Theni	34.6	42.9	48.2	52.8	47.1	44.7
Thiruvallur	0.6	1.3	1.6	1.6	1	3.3
Thiruvarur	8.5	7.4	12.1	4.1	4.4	7.7
Thoothukkudi	1.5	2.4	2.9	5.5	5.5	5.6
Tiruchirappalli	34.3	33.1	37	38.8	45.8	45.5
Tirunelveli	22.6	25	30	38	39.3	48.5
Tiruppur			0	0	0	0
Tiruvannamalai	136.1	139.5	152.1	149.7	155.2	144.9
Vellore	95.5	99.2	106.7	102.5	105.5	122.3
Viluppuram	67.1	74.3	96.1	117.8	117.9	131.9
Virudhunagar	0	1.6	3	6.2	6.9	7.6

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.5: District-wise AI Performed by Cooperatives - Buffaloes

Districts	Number of AI Performed ('000)					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	118.0	103.0	102.0	93.0	87.9	97.0
Ariyalur	0	0	0	0	0	0
Chennai	0	0	0	0	0	0
Coimbatore	0.7	0.3	0.5	0.4	0.4	0.2
Cuddalore	0.4	0.5	0.7	0.6	0.5	0.9
Dharmapuri	4.5	3.3	3.1	2.3	1.9	3.5
Dindigul	3.1	3.6	4.1	3.6	3.9	4.3
Erode	64.2	53.8	55.3	50.6	47.7	55.3
Kancheepuram	0.9	1.2	2.2	1.7	1.9	0.9
Kanniyakumari	0	0	0	0	0	0
Karur	1.7	1.4	1.8	1.7	1.8	1.4
Krishnagiri	1.5	1.5	0.9	1	0.5	1
Madurai	0	0	0	0	0*	0*
Nagapattinam	0	0	0	0	0	0
Namakkal	24.6	23.7	21.8	21.4	19.1	19.5
Perambalur	0.1	0*	0*	0*	0*	0
Pudukkottai	0	0	0	0.1	0	0
Ramanathapuram	0	0	0	0	0	0
Salem	13.3	11.6	9	6.9	7.9	7.8
Sivaganga	0	0	0	0	0	0
Thanjavur	0	0	0	0.1	0.3	0.2
The Nilgiris	0	0	0	0	0	0
Theni	0	0	0	0	0	0
Thiruvallur	0.1	0.2	0.3	0.1	0.2	0.3
Thiruvarur	0	0	0	0	0	0
Thoothukkudi	0*	0*	0.1	0*	0*	0
Tiruchirappalli	0.7	0.4	0.3	0.7	0.7	0.3
Tirunelveli	0.1	0.1	0.2	0.1	0.1	0*
Tiruppur	0	0	0	0	0	0
Tiruvannamalai	0.2	0.2	0.2	0.1	0	0
Vellore	0.3	0.4	0.3	0.6	0.1	0*
Viluppuram	1.7	0.8	1.4	1	0.9	1.3
Virudhunagar	0	0	0	0*	0*	0

* Negligible.

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.





V.2. Service Delivery System - Artificial Insemination

TABLE V.2.6: District-wise AI Performed by Cooperatives - Bovine

Districts	Number of AI Performed ('000)					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
TAMIL NADU	1,370.1	1,394.8	1,479.8	1,561.4	1,591.2	1,747.7
Ariyalur		4.5	6.2	7	9.3	7.6
Chennai		0	0	0	0	0
Coimbatore	78.9	82.6	89.7	110.6	119.8	124.5
Cuddalore	26.4	25.9	31.2	41.4	40.9	52.7
Dharmapuri	64	74.6	75.5	77.7	76.5	92.3
Dindigul	33.8	28.8	30.7	30.5	31.3	34.3
Erode	249.7	237.1	246.2	260.5	269.5	301.3
Kancheepuram	7.5	12.3	20.2	23.7	19.1	27.4
Kanniyakumari	5.3	6	6.4	6.3	5.3	5.6
Karur	21.3	22.3	25.3	26.9	27.9	23.9
Krishnagiri	33.2	36.7	34	33.9	29.3	42.8
Madurai	45.1	59.4	61.7	58.8	57.6	66.6
Nagapattinam	0	0.6	1.3	0	0	0.3
Namakkal	123.9	121.4	126.3	129.3	121.7	120.9
Perambalur	29.5	20.3	17.4	22.1	23.2	33.4
Pudukkottai	0	1.1	0.7	2.2	3.3	3.5
Ramanathapuram	2.9	2.9	3.3	4.4	5.1	7.1
Salem	212.4	206.1	183.5	174.8	183	185.6
Sivaganga	9.2	8.5	10.5	12.7	11.9	22.4
Thanjavur	12.8	6.2	9.3	11.8	18.6	23.5
The Nilgiris	10.2	8.4	7.9	7.2	7	8
Theni	34.6	42.9	48.2	52.8	47.1	44.7
Thiruvallur	0.7	1.5	1.9	1.7	1.2	3.5
Thiruvarur	8.5	7.4	12.1	4.1	4.4	7.7
Thoothukkudi	1.5	2.4	2.9	5.6	5.5	5.6
Tiruchirappalli	35	33.5	37.3	39.5	46.5	45.8
Tirunelveli	22.6	25.1	30.2	38	39.4	48.5
Tiruppur			0	0	0	0
Tiruvannamalai	136.3	139.7	152.3	149.7	155.2	144.9
Vellore	95.9	99.6	106.9	103.1	105.7	122.3
Viluppuram	68.9	75.1	97.5	118.8	118.8	133.3
Virudhunagar	0	1.6	3	6.2	6.9	7.6

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

TABLE V.3.1: District-wise Vaccination Performed for Foot-and-Mouth Disease by Government of Tamil Nadu

Districts	Foot-and-Mouth Disease Vaccination ('000)									
	1992-93	2001-02^	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	321.9	354.3	2,128.1	7,541.2	13,390.2	9,525.9	8,832.2	13,194.3	10,266.1	20,080.9
Ariyalur		7.4			169.3	82	61.3	108.4	190.5	323.8
Chennai	0.2		7.1	0.3	1.2	2	1.7	1	6.7	23.5
Chengalpattu MGR	10.8									
Coimbatore	11.8	21.0	97	328.6	527.9	542.1	265.8	267.4	327.8	615.2
Cuddalore		19.9	98.1	293.5	553.2	292.7	261.2	504.1	254.6	723
Dharmapuri	5.5	9.9	142.8	380.3	531.4	422	321.2	487.7	517.3	503.7
Dindigul	17.3	15.9	82.9	270.8	237.7	186.7	216.1	317.3	320.4	463.9
Erode	9.2	14.7	148.7	369.3	523.1	625.6	528.5	687.8	412.1	1,059.3
Kancheepuram		9.5	77.1	438.6	640.1	274.8	353.5	713.5	567.7	1,091.3
Kanniyakumari	6.2		45.9	41	0	0	0	0	0	0
Karur		6.6	44.2	35.7	400.9	146.1	279	301.6	141	261.6
Krishnagiri				269.9	601.7	299.5	23.6	573.1	484.1	1,067.9
Madurai	40.7	70.1	71.4	142.6	409.5	208.9	237.1	292.9	192	491.6
Nagapattinam	2.6	8.1	35.9	242.7	525.3	260.9	42.6	414.3	370	793.2
Namakkal		11.9	99.1	337.6	702.2	350.5	772.9	510.8	403.3	1,007.2
Perambalur			47.8	82.6	120.8	68	44.4	122.2	121.7	338.1
Pudukkottai	1.3		40.9	227.1	279.2	355.8	343	442.1	430.5	692
Ramanathapuram	13.3	1.8	22.6	51	139.0	111.4	73.6	179.9	126.6	193.3
Salem	16.5	19.2	86.2	480.2	1,179.9	540.5	1,089.6	970.9	721.6	968
Sivaganga	5.1	5.6	49.6	148.1	286.8	314.9	238.8	259.5	122.6	250.4
South Arcot	13.7									
Thanjavur	10.7	17.6	91.4	396.7	662.7	314.9	341.8	465.9	415.7	687.8
The Nilgiris			33.2	47.2	16.9	50.9	9.8	6	58.7	74.8
Theni		0.3	40.9	95.8	179.7	541	70.7	96.1	100.9	161
Thiruvallur		7.9	120	366.1	290.2	332.4	208.4	381.1	234.6	664.3
Thiruvarur		17.7	9.5	458.1	558.4	270	270	287.8	288	639.4
Thoothukkudi	9.8	8.3	25.7	91	88.9	110.3	157.2	160.9	104.6	300.4
Tiruchirappalli	27.8	14.4	61.1	306.9	326.6	299.8	333.6	539.7	495.8	666.7
Tirunelveli	85.8	15.0	104.2	292.4	475.3	421.8	375.1	688.9	372.4	729.5
Tiruppur						338.9	406.1	490.2	414.6	424.4
Tiruvannamalai	9.9	13.7	127.5	430.1	826.9	330.9	454.2	770.7	712.8	1,429.7
Vellore	3.9	22.9	194.1	428.4	951.2	453.5	456	830	631.1	1,393.2
Viluppuram		8.1	86.7	336.2	749.7	695.3	412.2	979.3	497.3	1,541.7
Virudhunagar	18.9	6.8	36.7	152.3	433.9	282	183.5	343.6	228.8	501

NOTE: 2003-04 to 2013-14 FMD vaccination done for cattle only.

^ Vaccination done by Veterinary Dispensaries and Mobile Veterinary Dispensaries.

SOURCE: Annual Administrative Reports, Animal Husbandry Department, Tamil Nadu and Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

TABLE V.3.2: District-wise Vaccination Performed for Haemorrhagic Septicaemia by Government of Tamil Nadu

Districts	Haemorrhagic Septicaemia Vaccination ('000)									
	1992-93	2001-02 [^]	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	1,226.1	1,169.7	1,084.1	2,543.3	2,046.0	581.4	371.3	708.1	460.7	508.9
Ariyalur		35.0			15.4	13	10.1	2.1	2.2	6.7
Chengalpattu MGR	190.9									
Chennai	0.1		1.3	1.2	0.7	1.1	0*	0	0.4	0
Coimbatore	61.9	81.9	110.3	80.1	38.2	20.5	5.4	1.8	0	0.1
Cuddalore		79.7	48.9	125.9	77.8	6.8	3.6	1.5	0	0
Dharmapuri	96.9	39.9	38.9	10.8	1.4	3.5	6.1	0	0*	48.4
Dindigul	15.0	19.2	18.1	5.1	11.7	0*	0	0	0.3	0
Erode	25.5	54.3	51.8	4.7	16.9	23.2	4.5	14.8	0	7
Kancheepuram		52.9	97.8	428.3	410.8	82.3	47.4	589.2	353.3	76.2
Kanniyakumari	6.5		1.4	0.2	0.1	0.1	0	0.1	0	0
Karur		153.6	14.8	4.9	0.3	1.4	4.7	0	0	0.4
Krishnagiri			0	5.7	1.0	0.6	0	0	0	0
Madurai	19.0	10.2	20.6	28.4	18.8	10.7	13.8	7	4.9	10.5
Nagapattinam	112.9	27.3	12.7	9.9	48.7	6.2	11.6	9.5	26.8	100
Namakkal		48.5	25.4	4.3	1.8	0.7	4.6	1.5	0.8	15
Perambalur			22.1	27.8	7.4	8.6	6.2	3.7	0	0
Pudukkottai	44.4		28.8	47.4	0.5	11.9	4.9	0*	0.8	0.4
Ramanathapuram	15.7	10.8	8.2	3.3	0.5	2.1	3.1	0	0	0
Salem	96.3	88.2	97.4	11.3	0.9	0.3	0.6	1.4	12.2	0
Sivaganga	11.0	11.3	20.3	5.3	1.8	1.9	2.3	1.9	3.1	0.4
South Arcot	179.6									
Thanjavur	66.5	78.3	25.8	5.5	7.7	6.2	18.9	4	1.9	0.3
The Nilgiris	4.8		0.3	1	0	0.4	1.1	0	0	0
Theni		0.3	8	41.9	15.2	5.5	3.7	0.3	0	2.8
Thiruvallur		26.6	69.9	322.8	36.6	50.8	53.5	42.3	33.1	0
Thiruvarur		28.1	13.9	12.7	15.0	4.2	3.1	0.3	0	100.6
Thoothukkudi	26.3	37.1	21.1	8.4	1.8	0.5	1.3	0	0	44.9
Tiruchirappalli	43.3	28.0	7.9	13.1	0.4	7.4	5	1.5	0.2	0
Tirunelveli	80.9	65.4	57.2	47.1	422.2	91.3	7.1	7.7	3.9	0.9
Tiruppur						1.7	0.4	0.5	0	0
Tiruvannamalai	56.9	40.7	49.8	36	12.0	7.4	24	8	5	1.3
Vellore	50.5	138.9	132.3	481.7	104.4	156.3	122.9	8.6	10.4	44.3
Viluppuram		5.1	59.5	759.4	771.0	53.3	0	0.2	0.8	48.8
Virudhunagar	20.6	8.4	19.6	8.8	4.8	1.5	1.6	0.2	0.5	0

* Negligible.

[^] Vaccination done by Veterinary Dispensaries and Mobile Veterinary Dispensaries.

SOURCE: Annual Administrative Reports, Animal Husbandry Department, Tamil Nadu and Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

**TABLE V.3.3: District-wise Vaccination Performed for Black Quarter
by Government of Tamil Nadu**

Districts	Black Quarter Vaccination ('000)									
	1992-93	2001-02^	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	1,238	987.4	892.4	2,261.9	2,110.8	878.6	577.4	442.5	336.8	380.1
Ariyalur		20.3			13.3	13	7.7	5.2	3.7	2.8
Chennai	0	0	0.4	1.3	0	0	0.2	0	0	0
Chengalpattu MGR	59.2									
Coimbatore	19.5	49.3	88.3	79.1	36.7	22.3	10.7	0.9	0	0.2
Cuddalore		88.4	33.5	202.5	266.2	64.4	40.4	33.8	57.2	54.1
Dharmapuri	109.7	47.1	32.6	23.1	1.6	2.5	1.1	0.8	0	0.7
Dindigul	15.5	19.1	17.5	18.1	225.6	68.5	4.5	12.1	0.3	0
Erode	34.4	53.1	43.2	24.6	376.6	89.5	63.3	16.9	22.4	18.4
Kancheepuram		29.5	21	388	20.6	93.8	67.3	94.8	102.3	137.2
Kanniyakumari	0.7		0.3	1.3	0.2	0.1	0*	0	0	0
Karur		12.4	14	5.1	177.1	72.4	36.7	23.2	6.1	0.9
Krishnagiri			0	10.6	2.1	1.1	0	0	0	0
Madurai	58.4	19.5	19.7	27.5	11.7	5.4	1.4	2	0.2	1.5
Nagapattinam	129.1	19.1	14	4.2	21.7	5.6	10.5	9.4	16.1	3.5
Namakkal		29.5	21.5	5.3	1.9	110	15.5	1.9	0.4	0
Perambalur			16.8	29.3	7.3	4.1	5.4	1.1	0	0
Pudukkottai	54.7		23.9	108.6	245.5	55.2	31.3	71	2	0.3
Ramanathapuram	41.8	7.9	4.3	2.4	0.1	0.3	0	0	0	0
Salem	98.6	88.1	82.6	12.1	2.3	4.4	91.1	3.5	0	13
Sivaganga	40.7	35.2	32.2	208.5	11.0	13.8	19	10.2	3.7	5.1
South Arcot	181.1									
Thanjavur	82.4	93.6	35.4	134.3	42.7	38.9	25.7	30.6	6.3	5.9
The Nilgiris	6.2		0.8	3.2	60.0	0.6	16.8	0	0	0
Theni		0.2	6.5	23	13.9	3.2	1.1	0	0	0.5
Thiruvallur		17.1	54.5	34.5	16.5	10.6	18.2	12.2	38.1	0
Thiruvarur		26.5	13.4	9.6	32.4	8.8	4.6	0.4	0	0
Thoothukkudi	21.4	29.3	15.7	6.6	1.1	67.3	0	0	0	0
Tiruchirappalli	58.5	24.3	8.2	13.9	0.2	1.7	1	0.4	0	0
Tirunelveli	48.7	44.2	41.4	20.3	6.1	1.2	0.5	1.6	5	0
Tiruppur						13.8	1.7	0.2	0	0
Tiruvannamalai	106.4	61.6	48.6	42.9	21.3	14.7	16	4.2	3.1	25.5
Vellore	54.1	98.7	99.5	48.1	470.7	88	72.5	97.6	51	90.1
Viluppuram		64.6	82.4	764.1	20.8	2.5	11.7	8.2	19	20.6
Virudhunagar	16.7	8.8	20.5	9.8	2.8	0.9	1.6	0.2	0	0

* Negligible.

^ Vaccination done by Veterinary Dispensaries and Mobile Veterinary Dispensaries.

SOURCE: Annual Administrative Reports, Animal Husbandry Department, Tamil Nadu and Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

TABLE V.3.4: District-wise Bovine Vaccination

Districts	Bovine Vaccination ('000)									
	1992-93	2001-02^	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	2,786	2,511	4,104	12,346	17,547	10,985	9,780	14,344	11,063	20,969
Ariyalur		62.7			198	108	79.1	115.7	196.4	333.3
Chengalpattu MGR	260.9									
Chennai	0.3	0	8.8	2.8	1.9	3.1	1.7	1	7.1	23.5
Coimbatore	93.2	152.2	295.6	487.8	602.8	584.9	281.9	270.1	327.8	615.5
Cuddalore		188	180.5	621.9	897.2	363.9	305.2	539.4	311.8	777.1
Dharmapuri	212.1	96.9	214.3	414.2	534.4	428	328.4	488.5	517.3	552.8
Dindigul	47.8	54.2	118.5	294	475	255.2	220.6	329.4	320.7	463.9
Erode	69.1	122.1	243.7	398.6	916.6	738.3	596.3	719.5	434.5	1,084.7
Kancheepuram		91.9	195.9	1,254.9	1,071.5	450.9	468.2	1,397.5	1,023.3	1,304.7
Kanniyakumari	13.4		47.3	42.5	0.1	0.1	0	0.1	0	0
Karur		172.6	73	45.7	578.3	219.9	320.4	324.8	147.1	262.9
Krishnagiri				286.2	604.8	301.2	23.6	573.1	484.1	1,067.9
Madurai	118.1	99.8	111.7	198.5	440	225	252.3	301.9	197.1	503.6
Nagapattinam	244.6	54.5	62.6	256.8	595.7	272.7	64.7	433.2	412.9	896.7
Namakkal		89.9	146	347.2	705.9	461.2	793	514.2	404.5	1,022.2
Perambalur			86.7	139.7	135.5	80.7	56	127	121.7	338.1
Pudukkottai	100.4		93.6	383.1	525.2	422.9	379.2	513.1	433.3	692.4
Ramanathapuram	70.8	20.5	35.1	56.7	139.5	113.5	76.7	179.9	126.6	193.3
Salem	211.4	195.5	266.2	503.6	1,183.1	545.2	1,181.3	975.8	733.8	981
Sivaganga	56.8	52.1	102.1	361.9	299.6	330.6	260.1	271.6	129.4	255.9
South Arcot	374.4									
Thanjavur	159.6	189.5	152.6	536.5	713.1	360	386.4	500.5	423.9	694
The Nilgiris	11		34.3	51.4	76.9	51.9	27.7	6	58.7	74.8
Theni		0.8	55.4	160.7	208.8	549.7	75.5	96.4	100.9	164.3
Thiruvallur		51.6	244.4	723.4	343.3	393.8	280.1	435.6	305.8	664.3
Thiruvarur		72.3	36.8	480.4	605.8	283	277.7	288.5	288	740
Thoothukkudi	57.5	74.7	62.5	106	91.8	178.1	158.5	160.9	104.6	345.3
Tiruchirappalli	129.6	66.7	77.2	333.9	327.2	308.9	339.6	541.6	496	666.7
Tirunelveli	215.4	124.6	202.8	359.8	903.6	514.3	382.7	698.2	381.3	730.4
Tiruppur						354.4	408.2	490.9	414.6	424.4
Tiruvannamalai	173.2	116	225.9	509	860.2	353	494.2	782.9	720.9	1,456.5
Vellore	108.5	260.5	425.9	958.2	1,526.3	697.8	651.4	936.2	692.5	1,527.6
Viluppuram		77.8	228.6	1,859.7	1,541.5	751.1	423.9	987.7	517.1	1,611.1
Virudhunagar	56.2	24	76.8	170.9	441.5	284.4	186.7	344	229.3	501

[^] Vaccination done by Veterinary Dispensaries and Mobile Veterinary Dispensaries.

Bovine Vaccination includes BQ, HS and FMD.

SOURCE: Annual Administrative Reports, Animal Husbandry Department, Tamil Nadu and Directorate of Animal Husbandry and Veterinary Services Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

TABLE V.3.5: District-wise Bovine Treated

Districts	Bovine Treated ('000)							
	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	9,472.1	10,353.2	10,093.9	10,102.0	10,676.9	10,381.4	11,451.8	13,295.8
Ariyalur			176.2	149.5	170.7	180.3	186.0	231.3
Chennai	10.9	11.3	10.7	7.6	11.1	13.5	5.5	5.3
Coimbatore	289.5	286.1	321.5	254.1	214.7	338.7	443.0	583.7
Cuddalore	420.0	336.9	388.5	395.9	399.4	440.6	411.7	452.6
Dharmapuri	455.8	235.1	239.5	271.6	290.5	294.7	357.8	463.6
Dindigul	353.5	401.3	357.6	382.9	456.2	405.9	463.0	513.4
Erode	473.6	576.3	556.8	359.9	435.3	418.9	429.7	517.0
Kancheepuram	404.3	385.4	380.7	398.0	400.8	340.0	367.5	407.9
Kanniyakumari	200.0	201.2	185.2	174.9	176.1	150.1	163.9	174.1
Karur	153.1	191.5	190.9	202.5	223.7	218.7	282.3	327.3
Krishnagiri		259.3	255.2	262.0	271.1	283.8	296.5	410.9
Madurai	297.9	369.1	352.4	377.6	414.0	378.0	411.4	435.5
Nagapattinam	208.0	173.4	180.2	189.4	195.2	171.2	292.4	279.0
Namakkal	354.5	446.5	465.5	454.8	491.7	485.0	585.5	583.7
Perambalur	285.9	326.3	130.1	125.1	165.1	173.3	220.9	259.0
Pudukkottai	165.9	274.6	257.5	266.1	315.6	283.5	258.0	406.8
Ramanathapuram	124.9	110.8	102.5	107.7	114.4	125.0	132.8	154.8
Salem	503.3	586.4	579.3	526.8	476.3	562.9	640.0	747.5
Sivaganga	175.3	187.3	169.6	169.6	177.5	162.2	152.4	178.5
Thanjavur	465.8	467.1	527.5	504.3	520.6	487.0	444.3	496.4
The Nilgiris	98.2	108.4	112.7	113.6	82.0	75.0	89.4	126.7
Theni	327.5	317.7	348.9	295.2	314.0	261.8	308.5	319.8
Thiruvallur	396.9	386.5	351.9	351.0	364.2	336.2	320.0	609.4
Thiruvarur	163.0	201.8	188.6	244.5	314.6	314.5	343.7	466.4
Thoothukkudi	176.0	163.4	143.2	132.0	147.6	140.3	144.4	164.8
Tiruchirappalli	433.6	600.5	540.6	472.3	469.4	439.5	446.1	551.1
Tirunelveli	334.5	377.3	365.6	372.3	438.2	424.2	416.3	453.5
Tiruppur				304.4	398.2	387.8	445.6	488.9
Tiruvannamalai	732.4	607.2	552.2	551.9	614.5	578.1	614.1	702.7
Vellore	564.5	698.3	679.5	667.7	683.3	602.8	782.2	832.3
Viluppuram	697.6	854.9	785.0	830.2	737.0	706.7	771.5	683.9
Virudhunagar	205.6	211.3	198.3	186.5	193.8	201.1	225.5	267.8

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



V.3. Service Delivery System - Animal Health

TABLE V.3.6: District-wise Bovine Castration

Districts	Bovine Castration ('000)							
	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TAMIL NADU	207.4	208.3	208.4	224.2	206.0	201.1	159.3	165.1
Ariyalur			8.8	7.7	6.9	6.3	4.6	4.2
Chennai	0*	0.1	0*	0.1	0.1	0*	0*	0*
Coimbatore	4.2	9.3	11.0	5.6	6.3	3.8	4.4	4.8
Cuddalore	8.5	8.7	8.8	8.9	7.7	7.9	5.2	2.4
Dharmapuri	12.1	2.2	2.2	2.3	1.9	1.9	2.4	2.5
Dindigul	6.8	7.6	7.8	8.3	6.3	7.0	6.0	5.7
Erode	9.4	7.0	5.6	4.6	5.3	5.6	6.1	5.4
Kancheepuram	11.3	9.1	8.4	8.5	8.7	14.5	6.5	6.5
Kanniyakumari	1.0	1.0	1.0	0.9	1.0	0.9	0.7	0.6
Karur	4.6	3.3	6.3	2.2	3.1	2.8	2.3	1.9
Krishnagiri		7.9	8.5	7.9	8.6	7.8	6.6	6.9
Madurai	6.5	5.9	4.4	6.4	6.5	6.3	7.7	11.5
Nagapattinam	5.5	4.0	3.5	3.4	2.6	1.8	1.7	1.5
Namakkal	4.1	2.2	3.0	2.5	1.9	1.5	2.3	2.8
Perambalur	11.8	9.7	2.0	2.5	4.7	2.9	3.4	3.2
Pudukkottai	7.7	11.3	9.5	11.1	17.8	13.5	11.0	13.2
Ramanathapuram	2.8	4.9	2.8	3.1	2.5	2.8	2.4	2.9
Salem	13.4	9.5	12.0	9.8	6.1	8.3	7.0	5.9
Sivaganga	5.9	7.0	6.6	7.0	6.7	6.0	6.4	6.5
Thanjavur	13.8	18.6	20.1	20.2	16.1	15.3	10.0	7.1
The Nilgiris	0.7	1.6	0.9	1.0	0.6	0.1	0.1	0.2
Theni	3.8	3.5	3.3	3.7	3.5	5.1	3.6	5.1
Thiruvallur	7.8	6.9	6.5	7.0	4.9	7.1	4.6	1.7
Thiruvarur	11.1	12.8	14.8	17.6	18.5	19.8	8.0	8.5
Thoothukkudi	3.3	2.6	2.5	2.8	2.1	1.4	1.2	0.9
Tiruchirappalli	8.1	13.2	12.6	8.6	7.5	7.1	5.5	6.2
Tirunelveli	8.3	8.4	7.7	8.0	8.2	5.9	6.6	8.0
Tiruppur				5.6	9.4	5.0	4.9	4.1
Tiruvannamalai	16.9	13.2	12.6	13.7	12.3	11.1	10.4	8.8
Vellore	11.6	9.7	8.9	26.7	8.0	7.7	7.1	8.3
Viluppuram	5.6	5.9	5.2	5.4	9.0	12.9	9.5	15.9
Virudhunagar	0.8	1.1	1.0	1.3	1.4	1.0	1.3	2.1

*Negligible.

SOURCE: Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu, Chennai.



PART VI : FEED RESOURCES

Tamil Nadu has a full-fledged institute, first of its kind in India, called "Institute of Animal Nutrition (IAN)" which is functioning at Post Graduate Research Institute in Animal Sciences campus, Kattupakkam (45 km from Chennai) since 1982. In addition, it has set-up an Animal Feed Analytical & Quality Laboratory at Namakkal in 1994. Considering the thrust on improving animal nutrition and feed resources, the deficiency of feed and fodder is likely to improve in Tamil Nadu.

Presently, the state needs around 50 million tonnes of dry matter as against availability of around 20 million tonnes. In a bid to overcome fodder shortages, the AH department is promoting cultivation of jowar green fodder. To this end, department is providing seed, fertiliser and offering 50 per cent subsidy on the production cost to progressive farmers. The area under the fodder crops has increased from 0.18 million hectare in 2000-01 to 0.24 million hectare in 2011-12.

Jowar, Cholam in Tamil is major fodder crop grown in the state. It is grown under the rain-fed as well as irrigated conditions in the districts of Coimbatore, Dindigul, Trichirapalli, Namakkal, Karur, Salem, Theni, Dharmapuri, Madurai and Vellore.





VI.1. Feed Resources - Fodder

TABLE VI.1.1: Area under Fodder Crops and Gross Sown Area

Districts	Area Under Fodder Crops ('000 ha)						Gross Sown Area ('000 ha)					
	2000-01	2003-04	2007-08	2008-09	2009-10	2011-12	2000-01	2003-04	2007-08	2008-09	2009-10	2011-12
TAMIL NADU	188	224	172	173	173	240	6,338	5,316	5,815	5,824	5,572	5,890
Ariyalur				0.1	0.2	0.1				116	111	105
Chennai												
Coimbatore	1.4	1.9	1.6	2.5	0.9	7.8	337	330	322	191	189	169
Cuddalore	0*	0*	0.1	0.1	0*	0.2	297	274	290	285	285	300
Dharmapuri	4.1	3.1	0.4	0.6	1.4	16.3	486	161	180	173	178	245
Dindugul	0.1	0.5	2.8	4.2	2.4	4.3	246	242	245	235	223	228
Erode	55.1	86.0	66.7	37.5	37.3	36.6	346	244	308	239	225	223
Kanchipuram	0*	0*	0*	0*	0*	-	183	161	137	132	127	127
Kanyakumari	-	-	-	-	-	-	98	88	91	89	88	88
Karur	0.4	1.4	6.1	7.2	7.6	8.5	105	90	100	99	97	95
Krishnagiri		0.7	2.3	1.7	1.8	4.9		200	187	182	182	222
Madurai	2.7	3.8	5.1	2.7	2.0	1.8	163	108	151	151	127	141
Nagapattinam	0*	-	0.1	0*	0*	-	257	198	282	299	269	288
Namakkal	50.7	58.7	39.2	33.7	39.4	38.9	271	207	184	183	175	182
Perambalur	0.4	0.6	1.1	0.7	1.6	1.5	233	220	222	101	96	108
Pudukkottai	0*	-	0*	0*	0*	0.1	161	137	153	154	152	159
Ramanathapuram	0.6	0.5	0.2	0.1	0.1	0.1	184	190	187	189	191	191
Salem	38.0	30.6	20.7	25.0	24.6	59.9	398	216	218	259	249	323
Sivaganga	0.1	0.2	0.1	0.1	0.1	0.1	117	112	112	113	110	122
Thanjavur	0.2	0.2	0.2	0.2	0.2	0.2	272	194	280	273	255	285
The Nilgiris	-	-	-	-	-	-	77	78	78	78	77	76
Theni	0.5	1.0	1.1	0.8	0.9	0.8	123	115	120	126	124	144
Thiruppur				29.0	29.2	34.9				202	195	198
Thiruvallur	0*	0*	0*	0*	0*	0*	157	135	132	131	127	133
Tiruchirapalli	0.7	2.3	4.1	5.2	4.0	2.9	196	158	192	194	181	164
Tirunelveli	3.4	5.8	3.8	2.7	3.3	1.9	177	148	192	194	183	179
Tiruvannamalai	0*	-	0.1	0.1	0.1	0.7	270	260	275	268	236	257
Tiruvarur	0*	0*	-	-	0.0	0.0	257	162	263	263	258	280
Toothukkudi	15.4	16.2	8.1	8.6	8.7	8.4	165	166	181	185	183	183
Vellore	0.3	0.4	0.6	0.6	0.6	1.7	254	222	222	212	193	191
Villupuram	0.4	0.0	0.5	0.5	0.7	0.5	372	356	374	371	363	361
Virudhunagar	13.4	10.3	7.4	9.2	5.8	6.8	138	142	135	140	122	124

* Negligible.

SOURCE: Directorate of Economics and Statistics, Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India.

- Means not reported/not available or reported zero.



VI.1. Feed Resources - Fodder

TABLE VI.1.2: District-wise Irrigated and Unirrigated Area under Jowar Fodder Crop

Districts	Jowar (Cholam) (ha)					
	2007-08			2012-13		
	Irrigated	Unirrigated	Total	Irrigated	Unirrigated	Total
TAMIL NADU	10,980	150,403	161,383	34,667	132,012	166,679
Ariyalur				1	177	178
Chennai	0	0	0			
Coimbatore	158	497	655	192	2,474	2,666
Cuddalore	1	3	4	3	95	98
Dharmapuri	176	85	261	1,699	2,329	4,028
Dindigul	85	2,630	2,715	2,633	3,460	6,093
Erode	6,669	52,920	59,589	11,745	27,837	39,582
Kancheepuram	0	0	0	0	0	0
Kanniyakumari	0	0	0	0	0	0
Karur	59	5,920	5,979	766	7,268	8,034
Krishnagiri	53	2,138	2,191	549	1,854	2,403
Madurai	101	4,768	4,869	95	1,022	1,117
Nagapattinam	0	0	0	0	0	0
Namakkal	1,126	37,620	38,746	952	4,149	5,101
Perambalur	86	993	1,079	253	1,491	1,744
Pudukkottai	15	0	15	164	16	180
Ramanathapuram	0	133	133	0	2	2
Salem	1,253	19,200	20,453	11,553	33,600	45,153
Sivaganga	4	15	19	10	2	12
Thanjavur	0	0	0	35	0	35
The Nilgiris	0	0	0	0	0	0
Theni	141	665	806	316	483	799
Tiruppur				1,635	32,253	33,888
Thiruvallur	1	0	1	1	0	1
Tiruvannamalai	37	3	40	175	12	187
Thiruvarur	0	0	0	0	0	0
Thoothukkudi	65	8,003	8,068	31	6,500	6,531
Tiruchirappalli	90	3,923	4,013	145	1,578	1,723
Tirunelveli	368	3,268	3,636	332	1,057	1,389
Vellore	394	178	572	1,146	146	1,292
Villuppuram	55	335	390	168	288	456
Virudhunagar	43	7,106	7,149	68	3,919	3,987

SOURCE: Season and Crop Report Tamil Nadu, Department of Economic and Statistics, Govt. of Tamil Nadu.





VI.2. Feed Resources - Availability vs. Requirement

TABLE VI.2.1: District-wise Dry Matter (DM) Availability, Requirement and Balance

Districts	Available/ Required/ Balance	Dry Matter Availability, Requirement and Balance ('000 MT)					
		2003	2007	2008	2009	2010	2011
Ariyalur	Available			223.94	369.3	369.32	398.94
	Required			629.86	630.35	630.86	631.39
	Balance			-405.92	-261.05	-261.54	-232.45
Coimbatore	Available	394.37	823.49	749.33	749.33	331.82	384.11
	Required	1,554.58	2,181.58	2,221.29	2,268.65		
	Balance	-1,160.21	-1,358.09	-1,471.96	-1,519.32		
Cuddalore	Available	979.94	1,182.11	839.45	839.45	954.39	876.64
	Required	1,074.15	1,027.06	1,025.1	1,029.03	1,038.4	1,052.92
	Balance	-94.21	155.05	-185.65	-189.58	-84.01	-176.28
Dharmapuri	Available	616.7	618.94	584.54	584.54	519.9	767.2
	Required	1,249.67	1,540.56	1,631.35	1,739.05	1,865.53	2,013.08
	Balance	-632.97	-921.62	-1,046.81	-1,154.51	-1,345.63	-1,245.88
Dindigul	Available	627.59	973.93	1,335.03	1,335.03	1,119.77	1,236.325
	Required	1,059.83	1,118.71	1,150.2	1,186.92	1,228.97	1,276.59
	Balance	-432.24	-144.78	184.83	148.11	-109.2	-40.265
Erode	Available		1,192.05	1,375.17	1,375.17	982.48	954.289
	Required		2,563.26	2,687.42	2,836.91	3,014.9	3,225.28
	Balance		-1,371.21	-1,312.25	-1,461.74	-2,032.42	-2,270.99
Kancheepuram	Available	650.02	865.87	735.46	735.46	719.94	801.287
	Required		2,221.77	2,390.52	2,591.71	2,832.62	3,122.41
	Balance		-1,355.9	-1,655.06	-1,856.25	-2,112.68	-2,321.12
Kanniyakumari	Available	266.78	285.4	171.4	171.4	162.07	188.636
	Required	367.71	309.73	302.51	296.53	291.74	288.09
	Balance	-100.93	-24.33	-131.11	-125.13	-129.67	-99.454
Karur	Available	216.43	271.32	299.65	299.65	300.38	361.75
	Required	618.49	626.7	642.52	663.72	690.91	724.96
	Balance	-402.06	-355.38	-342.87	-364.07	-390.53	-363.21
Madurai	Available	356.61	577.52	591.58	591.58	487.44	647.288
	Required	794.79	1,257.4	1,396.8	1,557.64	1,743.01	1,956.55
	Balance	-438.18	-679.88	-805.22	-966.06	-1,255.57	-1,309.26
Nagapattinam	Available	386.56	1,080.89	484.36	484.36	760.5	954.208
	Required	1,283.23	967.67	980.49	998.87	1,022.89	1,052.68
	Balance	-896.67	113.22	-496.13	-514.51	-262.39	-98.472
Namakkal	Available	478.84	709.45	649.89	649.89	556.66	5,66.502
	Required		3,251.57	3,425.62	3,613.67	3,816.64	4,035.6
	Balance		-2,542.12	-2,775.73	-2,963.78	-3,259.98	-3,469.1
Nilgiris	Available	110.86	107.95	106.69	106.69	105.1	102.82
	Required		202.77	166.71	145.74	134.21	128.79
	Balance		-94.82	-60.01	-39.04	-29.11	-25.98
Perambalur	Available		792.39	561.69	561.69	398.56	448.77
	Required		361.54	320.52	289.29	265.51	247.62
	Balance		430.85	241.17	272.4	133.05	201.15
Pudukkottai	Available		720.84	517.54	517.54	549.49	8,02.139
	Required		1,904.15	2,162.96	2,480.77	2,872.48	3,357.08
	Balance		-1,183.31	-1,645.42	-1,963.23	-2,322.99	-2,554.94



Districts	Available/ Required/ Balance	Dry Matter Availability, Requirement and Balance ('000 MT)					
		2003	2007	2008	2009	2010	2011
Ramanathapuram	Available	361.87	450.26	422.89	422.89	452.46	717.464
	Required	471.95	648.57	717.33	799.19	895.83	1,009.58
	Balance	-110.08	-198.31	-294.44	-376.3	-443.37	-292.116
Salem	Available	472.22	669.99	845.18	845.18	863.71	1,047.215
	Required		2,169.73	2,495.59	2,887.88	3,360.87	3,932.35
	Balance		-1,499.74	-1,650.41	-2,042.7	-2,497.16	-2,885.14
Sivaganga	Available	334.86	298.31	322.87	322.87	318.74	565.239
	Required		699.55	627.53	582.87	556.95	544.37
	Balance		-401.24	-304.66	-260	-238.21	20.869
Thanjavur	Available	642.59	1,086.92	767.69	767.69	852.42	1,302.4
	Required		1,377.91	1,411.16	1,456.89	1,517.71	1,596.92
	Balance		-290.99	-643.47	-689.2	-665.29	-294.52
Theni	Available	338.49	484.97	610.45	610.45	529.78	569.608
	Required	207.18	505.6	580.73	672.1	783.21	918.41
	Balance	131.31	-20.63	29.72	-61.65	-253.43	-348.802
Thiruvallur	Available	674.79	735.01	676.94	676.94	588.07	657.401
	Required		1,548.86	1,644.21	1,760.78	1,903.92	2,080.47
	Balance		-813.85	-967.27	-1,083.84	-1,315.85	-1,423.07
Thiruvarur	Available	322.47		437.23	437.23	810.9	1,224.36
	Required		800.84	748.41	707.15	675.74	653.51
	Balance			-311.18	-269.92	135.16	570.85
Tiruchirappalli	Available	473.67	771.85	620.63	620.63	725.71	753.849
	Required	1,677.25	1,537.66	1,523.13	1,514.75	1,512.32	1,515.79
	Balance	-1,203.58	-765.81	-902.5	-894.12	-786.61	-761.941
Tirunelveli	Available	616.51	866.69	840.98	840.98	815.77	969.497
	Required		2,194.35	2,431.5	2,725.45	3,090.01	3,542.45
	Balance		-1,327.66	-1,590.52	-1,884.47	-2,274.24	-2,572.95
Tiruvannamallai	Available		1,273.3	1,223.51	1,223.51	1,090.14	1,241.868
	Required		2,150.54	2,154.05	2,168.74	2,193.88	2,229.48
	Balance		-877.24	-930.54	-945.23	-1,103.74	-987.612
Thoothukkudi	Available	326.9	460.74	572.28	572.28	516.79	569.793
	Required		3,777.47	3,907.01	4,060.5	4,242.16	4,457.01
	Balance		-3,316.73	-3,334.73	-3,488.22	-3,725.37	-3,887.22
Vellore	Available	596.14	785.12	794.52	794.52	706.43	762.904
	Required	1,283.76	1,910.46	2,083.29	2,283.44	2,514.64	2,781.34
	Balance	-687.62	-1,125.34	-1,288.77	-1,488.92	-1,808.21	-2,018.44
Viluppuram	Available	999.54	1,687.86	1,615.23	1,615.23	1,622.63	1,726.128
	Required	1,656.43	2,481.05	2,677.2	2,913.99	3,199.93	3,545.45
	Balance	-656.89	-793.19	-1,061.97	-1,298.76	-1,577.3	-1,819.32
Virudhunagar	Available	358.36	653.18	574.12	574.12	412.05	526.721
	Required		988.71	883.08	800.47	736.12	686.65
	Balance		-335.53	-308.96	-226.35	-324.07	-159.929
Krishnagiri	Available	422.178	481.54	528.886	528.886	569.486	649.253
	Required						
	Balance						

SOURCE: Feedbase 2012, National Institute of Animal Nutrition and Physiology, Bangalore.



VI.2. Feed Resources - Availability vs. Requirement

TABLE VI.2.2: Availability, Requirement and Surplus/Deficit of Feed Nutrient

Year	Dry Matter ('000 MT)		
	Availability	Requirement	Deficit/ Surplus
1997	15,818.70	37,896.96	-22,078.3
2003	16,220.62	33,247.09	-17,026.5
2007	25,384.10	42,976.96	-17,592.9
2008	20,092.76	45,153.96	-25,061.2
2009	20,092.76	47,600.00	-27,507.2
2010	20,004.10	50,355.00	-30,350.9
2011	23,641.71	53,468.24	-29,826.5

Source: Feedbase 2012, National Institute of Animal Nutrition and Physiology, Bangalore.

VI.3. Feed Resources - Consumption

TABLE VI.3.1: Feed and Fodder Consumption – By Animal

(kg/animal/day)

Year	Green Fodder		Dry Fodder		Concentrate	
	Cattle	Buffalo	Cattle	Buffalo	Cattle	Buffalo
1993-94	7.1	7.4	6.9	7.6	2.8	2.4
1997-98	6.8	7.6	6.5	7.7	3.2	3.1
2003-04	7.1	7.2	7.0	7.6	2.5	2.2
2007-08	7.2	5.7	5.9	5.6	1.8	1.5
2008-09	6.5	5.6	5.5	5.3	1.8	1.6
2009-10	8.4	5.7	6.6	6.5	2.2	2.4
2010-11	7.6	5.9	6.1	6.1	1.9	1.9
2011-12	7.5	5.1	6.4	5.3	2.2	2.0

Source: Integrated Sample Survey Reports,(1993-94 to 2011-12), Govt. of Tamil Nadu.



PART VII : AGRICULTURE

Tamil Nadu covers an area of 130,060 sq km, about four per cent of the geographical area of India. Out of the total reported area, 38 per cent is net sown area, 16 per cent is under forests and 20 per cent is fallow land.

The state has seven agro-climatic zones, of which the "high rainfall" and "hilly and high altitude" zones receive maximum rainfall. The Cauvery delta zone is popularly known as the 'rice bowl' of the state.

The net sown area of the state declined from 5,486 thousand ha in 1997-98 to 4,986 thousand ha in 2011-12, registered an annual decline of 0.68 per cent. However, the net irrigated area remained almost same at 2,964 thousand ha during the above periods. Wells and tube wells formed the major source of irrigation.

The groundwater status in the state is deteriorating as 36 per cent blocks are over exploited, 9 per cent critical, 17 per cent semi-critical and 3 per cent are salinity affected.





VII.1. Agro-Climatic Zones

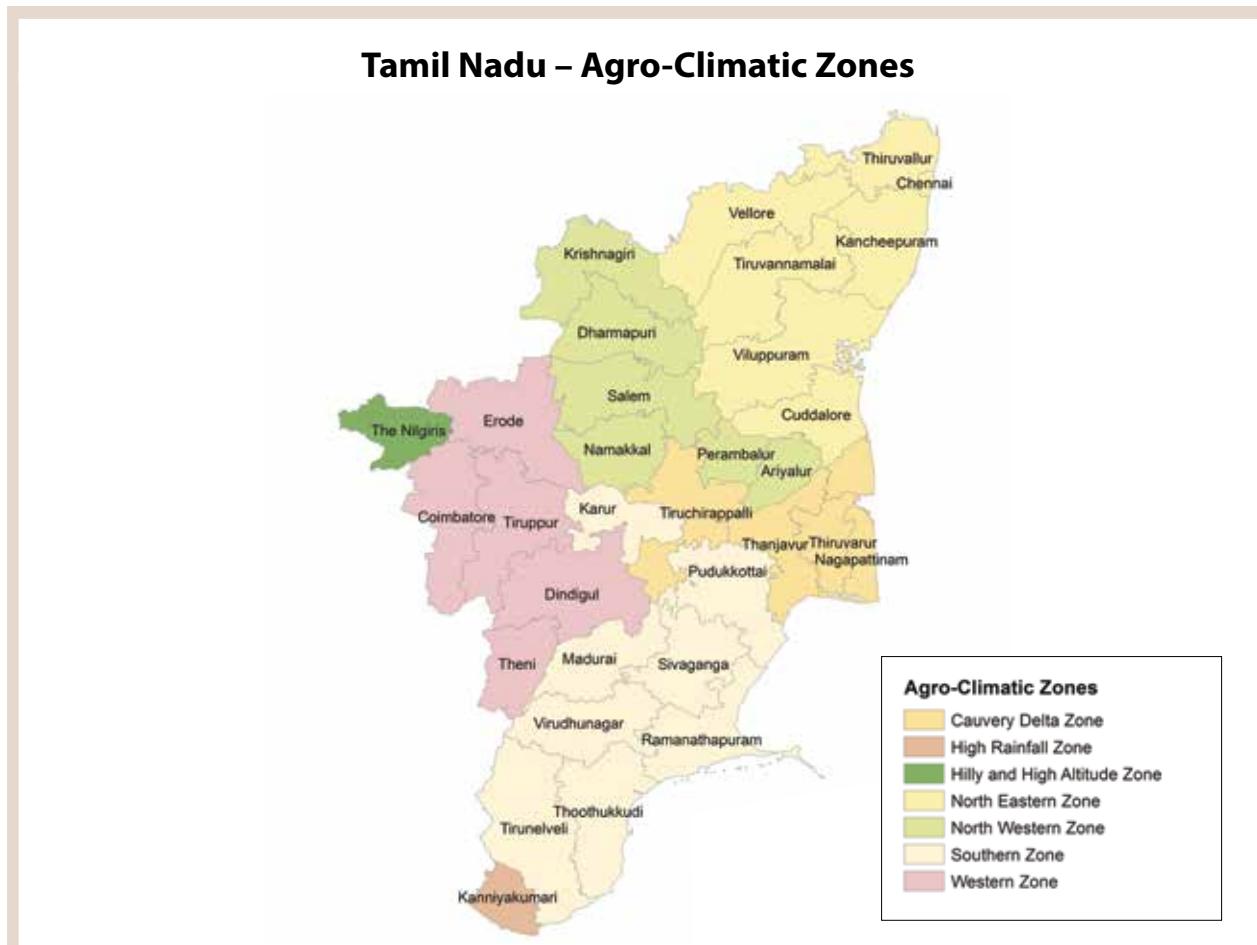


TABLE VII.1.1: Details of Agro-Climatic Zones

Agro-Climatic Zones	Districts Covered	Altitude (m)	Annual Average Rainfall (mm)	Area under Cultivation (%)	Irrigated Area to Cultivated Area (%)	Crops Grown	Major Rivers
North Eastern Zone	Kancheepuram, Thiruvallur, Vellore, Tiruvannamalai, Cuddalore, Viluppuram	100-200	1,109	50.5		Paddy, Jowar, Bajra, Ragi, Groundnut, Sugarcane and Cashewnut	Polar, Ponnai, Cheiyear, Vellar, Thenpennai, Manimuthar and Komugi
North Western Zone	Dharmapuri, Krishnagiri, Salem, Namakkal, Perambalur, Ariyalur	200-600	849	56.3	23	Paddy, Wheat, Maize, Ragi, Bajra, Sugarcane, Groundnut, Cotton, Sunflower	Cauvery, Thenpennai and Manimuthar



Agro-Climatic Zones	Districts Covered	Altitude (m)	Annual Average Rainfall (mm)	Area under Cultivation (%)	Irrigated Area to Cultivated Area (%)	Crops Grown	Major Rivers
Western Zone	Coimbatore, Erode, Tiruppur, Dindigul, Theni,	200-600	654	44.5	42.4	Jowar, paddy, Pulses, Maize, Banana, Sugarcane, Groundnut	Cauvery, Noiyal, Bhavani, Uppar, Sirvani and Amaravathi
Cauvery Delta Zone	Thanjavur, Thiruvarur, Nagapattinam, Tiruchirappalli	100-200	956	60.2	50.1	Paddy, Sugarcane, Cotton, Groundnut, Sunflower, Banana and Ginger	Cauvery, Vennaru, Kudamuruti, Paminiar, Arasalar and Kollidam
Southern Zone	Madurai, Ramanathapuram, Tirunelveli, Sivaganga, Virudhunagar, Thoothukkudi, Pudukkottai, Karur	100-600	816	45	44	Paddy, Jowar, Bajra, Ragi, Groundnut, Cotton, Banana and Tobacco	Vaigai, Sitrar, Thamraparani, Numbiar, Pachaiyar, Kludar, Arjunar, Kodumudiyaar, Manimuthar, Periyar and Vaigai
High Rainfall Zone	Kanniyakumari	100-2,000	1,456	63.1	47.4	Paddy, Coconut, Vegetables, Cashew nut, Banana and Rubber	Pazhaiyar, Kothair and Paraliyar
Hilly and High Altitude Zone	The Nilgiris	2,000	1857	28.9	0.84	Tea, Coffee, Vegetable, Paddy and Groundnut	

SOURCE: http://planningcommission.nic.in/reports/sereport/ser/7vgtn/v3_ch3.pdf, assessed on 09th July, 2014; <http://dolr.nic.in/dolr/downloads/spsp/TAMILNADU%20STATE%20PERSPECTIVE%20&%20STRATEGIC%20PLAN.pdf>, assessed on 09th July, 2014; <http://agritech.tnau.ac.in/pdf/2012/Season%20&%20Crop%20Report%202012.pdf>, assessed on 09th July, 2014.





VII.2. Land Use Pattern

TABLE VII.2.1: District-wise Land Use Pattern

(‘000 ha)

Districts	Reporting Area		Forest Area		Fallow Land		Permanent Pasture and Grazing Land		Net Sown Area	
	2000-01	2010-11	2000-01	2010-11	2000-01	2010-11	2000-01	2010-11	2000-01	2010-11
TAMIL NADU	12,974	13,033	2,133	2,125	2,362	2,595	123	110	5,303	4,954
Ariyalur		193		1		20		1		108
Chennai	-	17	-	0	-	-	-	-	-	-
Coimbatore	747	472	159	112	161	96	1	0	317	173
Cuddalore	368	368	1	1	46	52	1	1	231	218
Dharmapuri	964	450	366	164	68	46	14	6	400	159
Dindugul	627	627	139	139	129	133	7	7	236	231
Erode	816	572	229	228	195	85	0	0	308	197
Kanchipuram	443	443	24	24	72	100	18	18	150	119
Kanya kumara	167	167	54	54	3	1	0	0	81	79
Karur	290	290	6	6	63	74	11	11	102	90
Krishnagiri		514		204		53		8		170
Madurai	374	374	50	48	87	85	0	0	148	135
Nagapattinam	272	272	5	5	20	23	1	1	150	153
Namakkal	336	337	44	44	23	54	7	7	196	160
Perambalur	369	176	25	16	42	24	1	0	216	97
Pudukkottai	466	466	24	24	101	111	5	5	158	149
Ramanathapuram	409	409	4	4	94	85	0	0	184	187
Salem	521	521	126	126	24	59	6	4	265	223
Sivaganga	419	419	22	17	132	132	1	1	117	117
Thanjavur	340	340	3	3	31	34	2	1	203	201
The Nilgiris	254	254	143	143	11	12	5	5	77	76
Theni	289	324	104	104	35	34	0	0	112	114
Tiruppur		520		48		203		0		192
Thiruvallur	342	342	20	20	65	69	8	8	120	107
Tiruchirappalli	440	440	36	37	113	128	5	1	177	167
Tirunelveli	682	676	122	128	197	220	10	5	144	145
Tiruvannamalai	631	631	153	153	123	137	4	3	217	211
Thiruvarur	210	210	2	2	14	13	1	1	150	153
Thoothukkudi	459	471	11	11	128	87	5	5	159	185
Vellore	592	592	161	162	97	141	4	4	211	176
Villupuram	722	722	72	72	112	99	4	4	338	339
Virudhunagar	424	424	27	26	175	183	1	1	135	123

(-) Not reported/not available or reported zero. Zero denotes either nil or Negligible.

SOURCE: Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.



VII.3. Area and Production

TABLE VII.3.1: District-wise Area under Crops and Production of Cereals and Pulses

Districts	Cereals						Pulses					
	Area ('000 ha)			Production ('000 MT)			Area ('000 ha)			Production ('000 MT)		
	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13
TAMIL NADU	2,613.8	2,541.7	2,134.9	6,831.6	9,779.0	5,392.9	567.1	666.9	512.7	212.3	332.4	212.6
Ariyalur	45.6	38.8	34.0	104.4	164.9	74.2	1.6	1.7	1.8	0.7	1.3	1.0
Coimbatore	42.8	30.3	28.9	36.0	62.6	37.1	11.9	12.2	9.9	4.4	3.2	4.1
Cuddalore	126.2	138.1	131.5	330.8	281.2	371.2	41.8	55.0	43.1	15.9	31.4	23.8
Dharmapuri	67.5	69.4	41.8	138.9	229.5	103.1	20.0	46.4	33.7	9.5	22.1	18.7
Dindigul	97.4	91.0	67.7	295.5	416.8	179.0	24.1	26.2	21.0	8.3	7.4	6.5
Erode	64.9	51.9	25.7	270.2	226.4	102.7	14.4	4.2	3.4	6.3	2.1	1.2
Kancheepuram	98.7	90.6	77.9	340.8	396.1	345.1	2.0	1.2	0.9	1.0	0.7	0.3
Kanniyakumari	19.7	16.6	12.4	84.8	90.1	57.9	1.3	0.7	0.4	0.4	0.4	0.2
Karur	44.4	36.1	20.9	67.1	91.0	57.6	6.0	11.8	7.3	2.3	7.7	3.9
Krishnagiri	72.5	71.3	69.5	142.7	228.8	161.6	24.8	35.8	46.9	10.2	19.1	25.0
Madurai	85.2	87.2	34.9	264.8	355.7	91.1	8.9	7.5	6.3	3.1	4.2	3.0
Nagapattinam	159.4	170.1	142.3	310.9	577.1	201.7	81.4	82.3	53.5	20.4	27.7	15.9
Namakkal	38.2	25.2	68.8	95.4	86.0	91.9	7.4	6.6	12.6	4.3	4.2	2.3
Perambalur	60.1	55.5	54.6	112.6	295.9	111.1	0.4	0.5	0.7	0.3	0.4	0.2
Pudukkottai	96.7	97.9	87.9	232.8	371.2	263.8	2.5	4.5	2.0	1.0	2.8	1.1
Ramanathapuram	133.8	132.6	122.3	212.1	443.8	74.9	3.6	4.0	3.2	1.2	1.7	1.0
Salem	76.3	89.4	68.5	211.6	364.1	248.7	18.7	41.7	39.3	8.1	13.0	14.6
Sivaganga	82.5	84.1	70.8	146.2	311.4	130.6	0.9	1.7	1.3	0.3	1.0	0.7
Thanjavur	163.5	182.2	147.9	459.5	730.3	434.4	24.8	32.7	17.2	8.8	22.8	9.3
The Nilgiris	1.0	0.4	0.3	3.4	1.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Theni	40.7	39.6	28.7	153.5	195.6	128.7	7.7	11.1	7.5	3.8	4.5	3.5
Tirunelveli	97.4	98.6	59.4	379.5	528.4	220.5	24.2	16.4	15.1	10.5	13.9	5.8
Tiruppur	64.4	49.3	22.1	141.4	276.5	113.0	19.1	22.3	16.4	7.0	6.3	5.3
Thiruvallur	83.9	79.6	79.1	273.8	313.9	301.7	8.3	10.7	8.8	4.3	5.3	5.8
Tiruvannamalai	129.6	114.7	101.4	370.2	378.8	340.4	9.5	19.4	12.7	4.2	11.2	7.1
Thiruvarur	162.5	186.3	158.9	336.6	790.0	192.8	78.4	80.0	24.8	19.8	30.6	12.1
Thoothukkudi	53.4	53.3	57.0	160.9	239.6	69.1	57.2	65.6	60.4	23.0	45.4	9.9
Tiruchirappalli	107.7	96.3	75.1	287.7	350.2	169.0	8.9	6.4	3.6	4.2	4.3	1.5
Vellore	64.7	54.3	50.7	172.5	187.5	179.7	19.6	20.3	25.9	9.3	12.7	16.5
Villupuram	174.7	150.9	132.4	524.8	544.8	431.8	20.9	24.1	24.3	11.7	16.3	10.1
Virudhunagar	58.2	60.1	61.6	170.0	248.9	107.4	16.9	13.5	8.6	7.9	9.1	2.2

*Average from 2004-05 to 2010-11. Zero denotes either nil or Negligible.

SOURCE: Department of Economics and Statistics, Govt. of Tamil Nadu.



VII.3. Area and Production

TABLE VII.3.2: District-wise Area under Crops and Production of Food Grains and Oilseeds

Districts	Food Grains						Oilseeds					
	Area ('000 ha)			Production ('000 MT)			Area ('000 ha)			Production ('000 MT)		
	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13
TAMIL NADU	3,180.9	3,208.6	2,647.6	7,043.9	10,111.4	5,605.5	572.2	428.8	372.5	1,019.1	1,087.1	802.5
Ariyalur	47.2	40.5	35.8	105.1	166.2	75.2	20.1	14.2	9.7	32.0	54.3	23.3
Coimbatore	54.7	42.5	38.8	40.4	65.8	41.2	8.6	7.7	5.9	11.6	18.2	8.6
Cuddalore	168	193.1	174.6	346.7	312.6	395	19.3	12.7	14.0	42.3	36.6	41.5
Dharmapuri	87.5	115.8	75.5	148.4	251.6	121.8	13.6	18.2	12.1	26.3	55.3	26.9
Dindigul	121.5	117.2	88.7	303.8	424.2	185.5	15.3	13.4	7.8	36.6	45.2	18.5
Erode	79.3	56.1	29.1	276.5	228.5	103.9	44.5	26.5	19.8	64.4	31.9	24.3
Kancheepuram	100.7	91.8	78.8	341.8	396.8	345.4	22.0	16.6	16.6	74.4	62.5	57.5
Kanniyakumari	21	17.3	12.8	85.2	90.5	58.1	0.0	0.0	0.0	0.0	0.0	0.1
Karur	50.4	47.9	28.2	69.4	98.7	61.5	13.2	11.3	6.4	16.7	22.0	12.3
Krishnagiri	97.3	107.1	116.4	152.9	247.9	186.6	17.8	16.6	17.6	28.6	48.9	35.5
Madurai	94.1	94.7	41.2	267.9	359.9	94.1	6.1	4.2	3.0	9.2	6.9	4.9
Nagapattinam	240.8	252.4	195.8	331.3	604.8	217.6	4.4	3.4	2.8	8.7	10.2	5.3
Namakkal	45.6	31.8	81.4	99.7	90.2	94.2	38.5	26.8	29.4	63.0	64.8	39.5
Perambalur	60.5	56	55.3	112.9	296.3	111.3	3.3	2.5	1.6	5.1	4.8	3.8
Pudukkottai	99.2	102.4	89.9	233.8	374	264.9	22.8	19.1	13.2	34.6	39.3	24.8
Ramanathapuram	137.4	136.6	125.5	213.3	445.5	75.9	7.9	4.6	4.5	9.0	5.5	4.5
Salem	95	131.1	107.8	219.7	377.1	263.3	28.6	22.5	19.3	41.2	51.1	35.2
Sivaganga	83.4	85.8	72.1	146.5	312.4	131.3	5.4	6.3	3.8	6.8	16.7	9.1
Thanjavur	188.3	214.9	165.1	468.3	753.1	443.7	16.1	12.1	11.1	24.1	27.4	24.0
The Nilgiris	1	0.4	0.3	3.4	1.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Theni	48.4	50.7	36.2	157.3	200.1	132.2	3.0	3.1	2.6	5.0	6.1	9.4
Tirunelveli	121.6	115	74.5	390	542.3	226.3	4.6	2.1	2.0	6.4	4.0	3.5
Tiruppur	83.5	71.6	38.5	148.4	282.8	118.3	10.4	9.9	5.4	17.1	20.9	6.6
Thiruvallur	92.2	90.3	87.9	278.1	319.2	307.5	16.7	10.5	10.9	56.2	40.9	47.2
Tiruvannamalai	139.1	134.1	114.1	374.4	390	347.5	88.9	57.7	57.6	144.4	155.0	120.5
Thiruvarur	240.9	266.3	183.7	356.4	820.6	204.9	4.1	4.9	4.1	7.8	23.4	11.0
Thoothukkudi	110.6	118.9	117.4	183.9	285	79	3.9	1.6	1.3	3.3	2.1	1.4
Tiruchirappalli	116.6	102.7	78.7	291.9	354.5	170.5	14.2	11.8	9.3	25.4	27.0	21.8
Vellore	84.3	74.6	76.6	181.8	200.2	196.2	52.5	43.2	39.5	89.2	96.4	82.8
Villuppuram	195.6	175	156.7	536.5	561.1	441.9	56.1	38.2	35.8	120.0	100.3	93.6
Virudhunagar	75.1	73.6	70.2	177.9	258	109.6	10.1	6.9	5.5	9.8	9.5	5.2

*Average from 2004-05 to 2010-11. Zero denotes either nil or Negligible. Oilseeds includes only Groundnut and Gingely (Sesame).

SOURCE: Department of Economics and Statistics, Govt. of Tamil Nadu.



VII.3. Area and Production

TABLE VII.3.3: District-wise Area under Crops and Production of Sugarcane and Cotton

Districts	Sugarcane						Cotton					
	Area ('000 ha)			Production ('Lakh MT)			Area ('000 ha)			Production ('000 bales)		
	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13	*2004-10	2011-12	2012-13
TAMIL NADU	317.3	346.4	359.9	342.3	389.7	340.1	111.2	135.8	133.2	205.2	381.8	255.5
Ariyalur	9.4	8.0	7.8	9.3	8.8	7.1	2.5	7.8	8.6	5.6	36.6	15.7
Coimbatore	2.2	1.5	1.4	1.9	1.9	1.5	2.8	1.4	0.6	3.5	5.6	1.0
Cuddalore	33.6	31.1	30.7	37.4	29.5	34.5	3.2	5.8	5.1	2.8	14.5	12.1
Dharmapuri	16.4	20.3	16.4	15.0	22.9	13.0	6.5	11.0	13.7	13.3	34.4	41.6
Dindigul	5.8	5.7	5.5	6.8	7.5	3.0	1.7	2.8	2.2	3.8	10.4	3.6
Erode	36.2	31.5	31.2	43.3	35.5	28.3	2.8	0.8	0.7	8.6	2.7	1.7
Kancheepuram	3.4	1.8	1.8	3.2	2.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0
Kanniyakumari	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Karur	5.9	8.1	6.6	5.7	11.1	6.2	0.2	0.1	0.1	0.4	0.2	0.1
Krishnagiri	2.4	2.2	1.2	2.2	2.3	1.1	1.7	1.7	1.5	2.3	4.4	4.0
Madurai	4.6	4.3	5.1	4.6	4.9	4.9	8.5	6.7	5.2	11.4	14.0	6.9
Nagapattinam	4.5	3.1	3.8	3.7	2.7	3.2	1.2	0.3	0.7	2.2	0.9	1.7
Namakkal	17.1	19.7	20.3	22.1	26.8	16.1	3.0	2.9	2.7	8.3	11.8	5.3
Perambalur	4.6	6.7	6.5	5.2	8.1	5.7	14.1	26.2	24.3	23.1	69.2	27.7
Pudukkottai	8.3	9.2	9.3	9.5	12.2	8.0	0.1	0.0	0.0	0.2	0.1	0.0
Ramanathapuram	0.4	0.6	4.2	0.4	0.7	0.5	2.5	2.0	1.6	1.9	4.4	1.1
Salem	10.9	12.2	15.5	10.5	12.2	13.2	14.7	17.0	15.8	32.7	48.4	47.0
Sivaganga	4.8	6.3	6.1	4.8	7.8	5.5	0.3	0.3	0.2	0.5	0.7	0.3
Thanjavur	12.8	10.7	11.9	13.9	11.9	12.9	0.8	1.0	1.0	2.0	2.9	3.3
The Nilgiris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Theni	6.9	7.1	6.4	8.6	9.3	8.1	2.0	1.6	1.2	4.7	6.3	4.8
Tirunelveli	5.0	5.1	4.7	4.9	4.4	2.7	3.8	2.7	2.5	9.0	8.5	5.1
Tiruppur	6.0	7.6	5.4	7.8	9.2	4.9	1.2	0.7	0.4	2.3	1.8	0.7
Thiruvallur	6.0	7.4	7.8	6.7	8.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
Tiruvannamalai	26.3	37.8	43.5	25.8	44.1	43.8	1.4	0.8	0.5	3.5	2.1	1.0
Thiruvarur	2.2	0.5	0.7	2.4	0.6	0.6	1.1	1.3	1.3	1.8	4.6	2.4
Thoothukkudi	0.3	0.6	3.4	0.3	0.7	0.4	4.7	3.6	3.8	6.3	9.0	3.8
Tiruchirappalli	5.8	5.2	4.9	5.8	5.8	3.5	7.6	14.4	16.9	15.0	37.6	17.5
Vellore	16.9	15.1	13.2	15.1	14.6	12.4	5.8	7.1	7.7	11.8	14.1	18.1
Villupuram	55.2	73.5	79.5	61.8	80.6	87.0	6.2	6.2	6.9	13.3	13.0	17.1
Virudhunagar	3.5	3.3	3.7	3.6	3.7	3.0	10.9	9.6	8.2	15.0	23.3	11.9

* Average from 2004-05 to 2010-11, 1 bale = 170 kg. Zero denotes either nil or Negligible.

SOURCE: Department of Economics and Statistics, Govt. of Tamil Nadu.



VII.4. Land Holding and Water Resources

TABLE VII.4.1: Operational Holdings in Tamil Nadu

Size of Holding (ha)	Total Holdings		Average Size of Holding (ha)
	Number ('000)	Area ('000 ha)	
Marginal	6,266.6	2,291.7	0.37
Small	1,181.3	1,643.7	1.39
Semi-medium	502.3	1,355.5	2.70
Medium	150.6	847.8	5.63
Large	17.4	349.7	20.13
All Classes	8,118.2	6,488.4	0.80

SOURCE: Agricultural Census Database, 2010-11, Ministry of Agriculture, Govt. of India.

TABLE VII.4.2: Net Irrigated Area under Different Sources of Irrigation

Particulars	1997-98	2000-01	2003-04	2005-06	2007-08	2008-09	2010-11	2011-12
Gross Sown Area	6,558	6,338	5,316	6,033	5,815	5,824	5,753	5,890
Net Sown Area	5,486	5,303	4,689	5,244	5,062	5,043	4,954	4,986
Net Irrigated Area	2,945	2,888	2,148	2,920	2,864	2,931	2,912	2,964
Sources (net irrigated area) ('000 ha)								
Canals	838	833	449	800	753	766	747	746
Tanks	675	589	385	575	506	540	533	528
Wells and Tube Wells	1,413	1,449	1,298	1,536	1,593	1,614	1,622	1,683
Other Sources	19	16	15	7	11	11	9	7

SOURCE: Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

TABLE VII.4.3: Major River Basins of Tamil Nadu

Rivers	Origin	Length (km)	Catchment Area (sq km)	States Falling in the Catchment Area
Cauvery	Coorg (Karnataka)	800	81,155	Tamil Nadu, Karnataka, Kerala and Pondicherry

SOURCE: Hydrology and Water Resources Information System for India, National Institute of Hydrology, Roorkee.





VII.4. Land Holding

TABLE VII.4.4: Medium River Basins of Tamil Nadu – West-Flowing Rivers with Catchment Area

Name of River	Village/District (origin)	Length (km)	Catchment Area (sq km)
Bharathapuzha (known as Ponnani)	Annamalai Hills	209	6,186
Kortalaiyar	Chinglepet	131	3,521
Varahandi	Vellore	94	3,044
Vellar	Chithri Hills	193	8,558
Vaigai	Madurai	258	7,031
Pambar	Madurai	125	3,104
Gundar	Madurai	146	5,647
Vaippar	Tirunelveli	130	5,288
Tambraparni	Tirunelveli	130	5,969

SOURCE: Hydrology and Water Resources Information System for India, National Institute of Hydrology, Roorkee. http://www.nih.ernet.in/rbis/india_information/states_basins.htm assessed on 10th July, 2014.



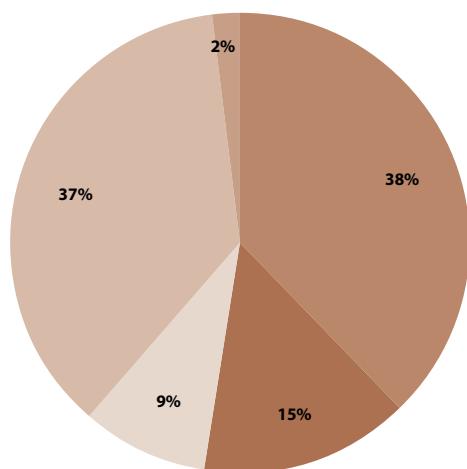
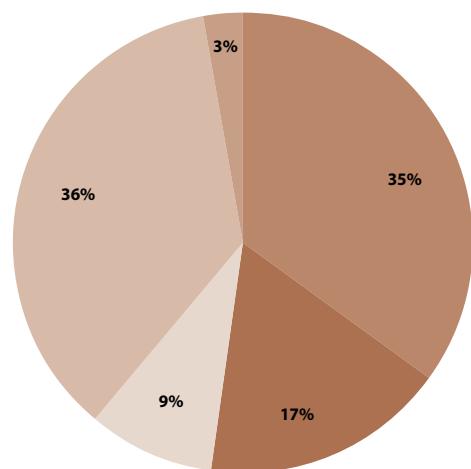


VII.5. Rainfall

TABLE VII.5.1: District- wise Average Annual Rainfall

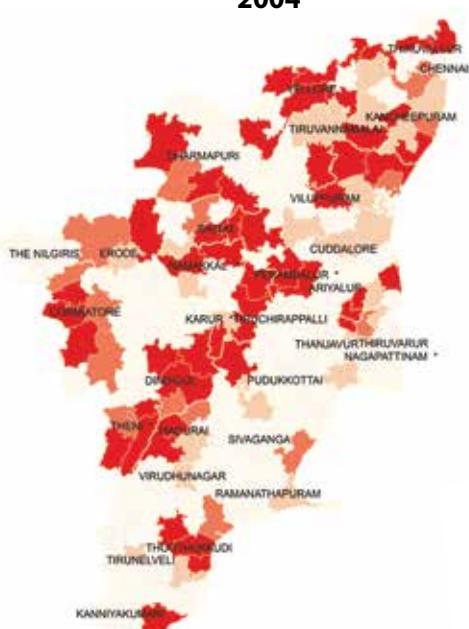
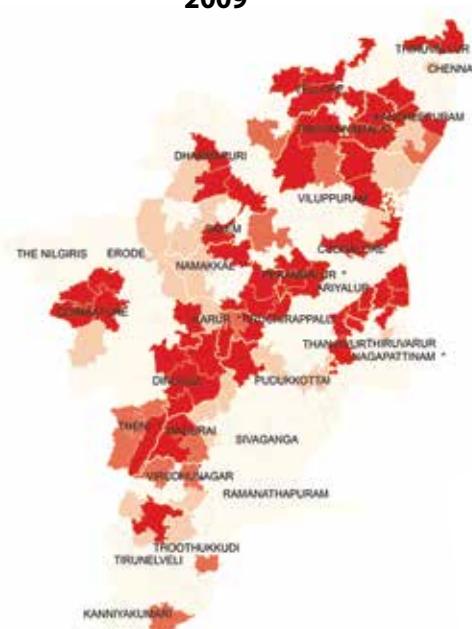
Districts	Average Annual Rainfall (mm)		
	2004-05 to 2009-10	2011-12	2012-13
TAMIL NADU	1,062	968	743
Ariyalur	824	886	653
Chennai	1,467	1,623	960
Coimbatore	924	782	620
Cuddalore	1,526	1,348	914
Dharmapuri	929	762	786
Dindigul	994	941	630
Erode	766	763	534
Kancheepuram	1,286	1,363	943
Kanniyakumari	1,249	1,012	849
Karur	754	776	405
Krishnagiri	940	839	695
Madurai	904	940	565
Nagapattinam	1,617	1,088	1,078
Namakkal	824	682	496
Perambalur	940	769	493
Pudukkottai	962	947	709
Ramanathapuram	1,057	767	657
Salem	970	1,011	799
Sivaganga	1,038	1,002	723
Thanjavur	1,192	847	757
The Nilgiris	1,972	1,579	1,578
Theni	872	977	680
Thiruvallur	1,248	1,316	1,114
Thiruvarur	1,393	992	1,090
Thoothukkudi	791	670	426
Tiruchirappalli	932	875	563
Tirunelveli	961	919	821
Tiruppur			346
Tiruvannamalai	1,108	1,103	1,080
Vellore	950	897	884
Viluppuram	1,212	1,013	924
Virudhunagar	824	817	476

SOURCE: Integrated Sample Survey Reports (2004-05 to 2012-13), Govt. of Tamil Nadu.

**Status of Ground Water (% of Blocks)****2004****2009**

Legend for ground water status:

- Safe (Dark Brown)
- Semi - Critical (Medium Brown)
- Critical (Light Brown)
- Over Exploited (Very Light Brown)
- Saline (Grey)

Blocks-wise Groundwater Status**2004****2009**

Legend for blocks-wise groundwater status:

- Safe (Lightest Orange)
- Semi - Critical (Light Orange)
- Critical (Medium Orange)
- Over Exploited (Dark Orange)



VII.6. Ground Water Status

TABLE VII.6.1: Distribution of Blocks According to Ground Water Status

Districts	Number of Blocks					
	Semi Critical		Critical		Over-Exploited	
	2004	2009	2004	2009	2004	2009
TAMIL NADU	57	67	33	33	142	139
Chennai						1
Coimbatore	1	4	4		11	6
Cuddalore	8	3				2
Dharmapuri		1	1		7	7
Dindigul		2	2		10	11
Erode	2	6	3	1	3	
Kancheepuram	3	4	2	1	2	3
Kanniyakumari						
Karur	2	1		1	2	4
Krishnagiri	3	2		1	4	5
Madurai	3	2	1	1	3	5
Nagapattinam	1			1	4	4
Namakkal	3	5	2	2	8	6
Perambalur					4	4
Pudukkottai	1	3				
Ramanathapuram	2		1			
Salem	3	5	1	3	14	10
Sivaganga	1					
Thanjavur	3	2	1		3	10
The Nilgiris						
Theni			3	6	5	2
Thiruvallur	2	1	2		6	6
Thiruvarur	2	1	1		1	3
Thoothukkudi	2	2	1	1	7	3
Tiruchirappalli		2	1		4	9
Tirunelveli	1	3		2	4	4
Tiruppur		7		1		2
Tiruvannamalai	5	6	2	4	9	8
Vellore	3	1	1	3	16	14
Viluppuram	4	3	3	1	14	9
Virudhunagar	2	1	1	4	1	1

SOURCE: Various Reports of Dynamics of Ground Water Resources, Central Ground Water Board, Ministry of Water Resources, Govt. of India.

NOTE: 8 and 11 blocks for the State were Saline category in the year 2004 and 2009 respectively.



GLOSSARY

AI	: Artificial Insemination is the process of deliberate introduction of sperm into the female reproductive tract for impregnation.
Bovine	: large ruminants like cattle, buffaloes, yak and mithun.
Breedable	: female animals that have attained the age of puberty.
Breeding Tract	: area where breeds/group of animals are found.
Calving Interval	: period between two calvings.
Castration	: technique by which males are made sterile for use in draught operations.
Crossbred	: animal produced by hybridization of two different breeds.
DM	: dry biomass available from feed and fodder.
Dry Animal	: adult animals calved at least once but not in-milk at present.
Food Grains	: cereals and pulses.
GSDP	: basic measure of a State's overall economic performance. It represents the market value of all final goods and services made within the borders of a State in a year.
Indigenous Animals	: animals native to a particular area.
In-milk Animals	: animals which are lactating.
Irrigation Intensity	: (Gross irrigated area/Net irrigated area) * 100.
Lactation Length	: number of days the animal secretes milk.
Lactation Yield	: total milk production over period of 300/305 days.
Literacy Rate	: percentage of literates in the age group above six years.
Livestock	: domesticated mammals.
Male to Female Ratio	: number of males to females.
Milch Animals	: sum of in-milk and dry animals.
Milk Utilisation Pattern	: quantities of milk retained for home consumption in liquid form, retained for product conversion and milk sold by the milk producers.
Marginal Holdings	: farmers possessing less than one hectare of operational holding.
Small Holdings	: greater than one hectare and less than two hectare of operational holding.
Semi Medium	: greater than two and less than four hectare of operational holding.
Medium Holdings	: are more than four and less than ten hectare of operational holding.
Large Holdings	: are those larger than ten hectare of operational holding.
Population Density	: number of human beings/animals per square km of geographical area.
Poultry	: all categories of chicken, guinea fowls, turkey, ducks and quails.
Sex Ratio	: number of females to 1,000 males in a population.
Small Ruminants	: sum of sheep and goats.
Urbanisation	: per cent of urban population to total population.
Wet to Dry Ratio	: number of in-milk animals to dry ones.



National Dairy Development Board

PB No 40, Anand 388 001

Telephone: (02692) 260148/260149/260160

Fax: (02692) 260157

E-mail: anand@nddb.coop