

## PART IV : MILK PRODUCTION

The “Integrated Sample Survey” report for 2012-13 highlights that the bovine milk production system in Karnataka is predominantly cattle based. The number of in-milk bovine population increased by 6 lakh from 40 lakh in 1997-98 to 46 lakh in 2012-13 wherein the indigenous cattle population declined, that of crossbred increased and the buffaloes population remained constant. Specie wise, the state had 16.6 lakh in-milk indigenous cattle, 11.4 lakh crossbred and 18 lakh buffaloes, respectively. Of the total 57 lakh tonnes (LMT) of milk produced, indigenous cattle produced 14 LMT, crossbred cattle produced 25 LMT and buffaloes accounted for 17.4 LMT.

Despite the predominantly arid and semi-arid climatic conditions in the state and the high acquisition cost for crossbreds, the share of crossbred in total cattle population rapidly increased between 1997 and 2013. District-wise, in-milk crossbred population demonstrated a significant increase in urban and peri-urban districts of Tumkur, Mandya, Kolar, Hassan, Dakshina Karnataka etc as higher yielding milk species were preferred to cater to the increased demand for milk. Figures also revealed decline in in-milk buffalo population in the corresponding districts of Karnataka.





## 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)
1986-87	2,905	1.938	2,055
1987-88	2,985	1.994	2,173
1988-89	3,056	2.001	2,232
1989-90	3,074	2.034	2,280
1990-91	3,169	2.056	2,378
1991-92	3,279	2.059	2,464
1992-93	3,353	2.106	2,578
1993-94	3,490	2.138	2,723
1994-95	3,566	2.296	2,989
1995-96	3,737	2.323	3,168
1996-97	3,939	2.394	3,442
1997-98	4,093	2.643	3,948
1998-99	4,133	2.784	4,200
1999-00	4,271	2.850	4,443
2000-01	4,042	3.088	4,555
2001-02	4,133	3.138	4,734
2002-03	3,999	3.077	4,491
2003-04	3,552	2.945	3,818
2004-05	3,609	2.945	3,879
2005-06	3,621	3.014	3,983
2006-07	3,673	3.044	4,081
2007-08	3,784	3.087	4,264
2008-09	3,914	3.141	4,487
2009-10	4,052	3.223	4,768
2010-11	4,232	3.274	5,057
2011-12	4,443	3.324	5,390
2012-13	4,604	3.368	5,659

SOURCE: Integrated Sample Survey Reports (1986-87 to 2012-13), Directorate of Animal Husbandry & Veterinary Services, Government of Karnataka.



## IV.1. Production Performance: Animal Population

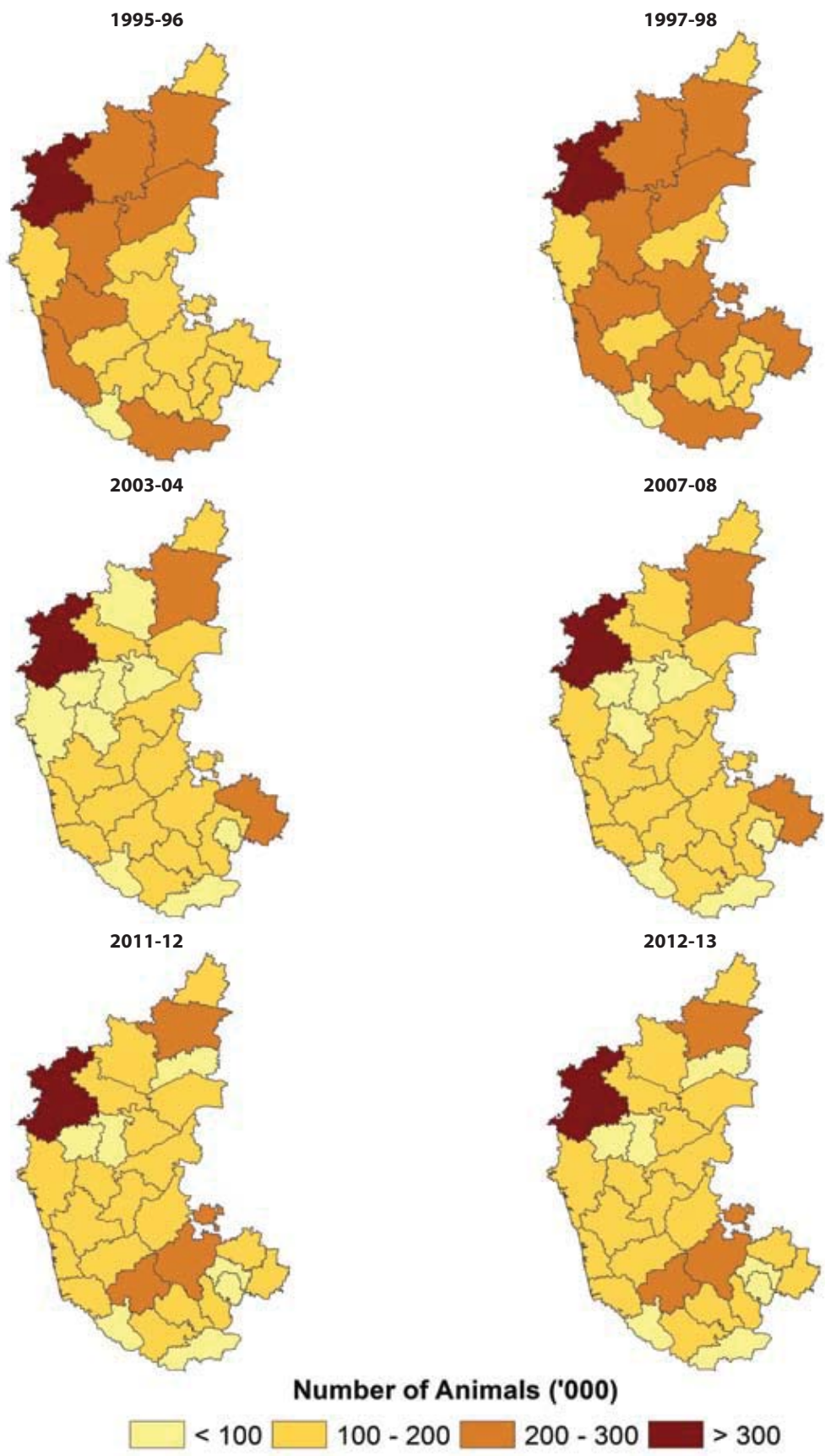
**TABLE IV.1.2: Year and District-wise In-milk Bovine Population**

Districts	In-milk Bovine Population ('000)								
	1995-96	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>KARNATAKA</b>	<b>3,737</b>	<b>4,093</b>	<b>3,552</b>	<b>3,784</b>	<b>3,914</b>	<b>4,053</b>	<b>4,232</b>	<b>4,443</b>	<b>4,604</b>
Bagalkot			129	133	149	153	160	170	175
Bangalore Rural	190	184	164	176	82	84	88	92	99
Bangalore Urban	122	105	76	82	64	64	70	67	75
Belgaum	338	369	410	435	481	522	531	537	551
Bellary	160	168	125	136	141	142	152	153	160
Bidar	136	137	122	128	128	130	135	142	149
Bijapur	228	279	96	103	116	118	123	124	131
Chamarajanagar			75	82	78	78	83	84	88
Chikkaballapura					101	92	111	118	123
Chikmagalur	144	128	106	113	112	117	121	128	145
Chitradurga	198	208	103	110	117	119	122	130	137
Dakshina Kannada	212	265	106	111	113	120	124	126	132
Davanagere			140	149	159	165	174	179	186
Dharwad	217	237	70	75	80	81	85	92	89
Gadag			44	47	59	60	64	68	70
Gulbarga	206	248	224	230	237	240	247	238	242
Hasan	182	204	189	196	205	227	233	235	244
Haveri			85	90	97	99	105	112	116
Kodagu	39	64	30	34	32	32	35	38	41
Kolar	198	251	206	224	114	114	120	127	135
Koppal			83	88	88	89	94	105	110
Mandya	178	183	143	155	152	161	169	177	186
Mysore	232	258	136	147	154	165	172	180	187
Raichur	226	227	130	137	146	147	152	154	140
Ramanagara					93	104	112	119	123
Shimoga	219	237	159	174	172	175	179	183	189
Tumkur	186	220	184	200	231	245	252	258	264
Udupi			121	125	104	105	109	114	117
Uttara Kannada	124	122	95	103	106	107	111	118	123
Yadgir								76	80

SOURCE: Integrated Sample Survey Reports (1995-96 to 2012-13), Directorate of Animal Husbandry & Veterinary Services, Government of Karnataka.



### District-wise In-milk Bovine Population





## IV.1. Production Performance: Animal Population

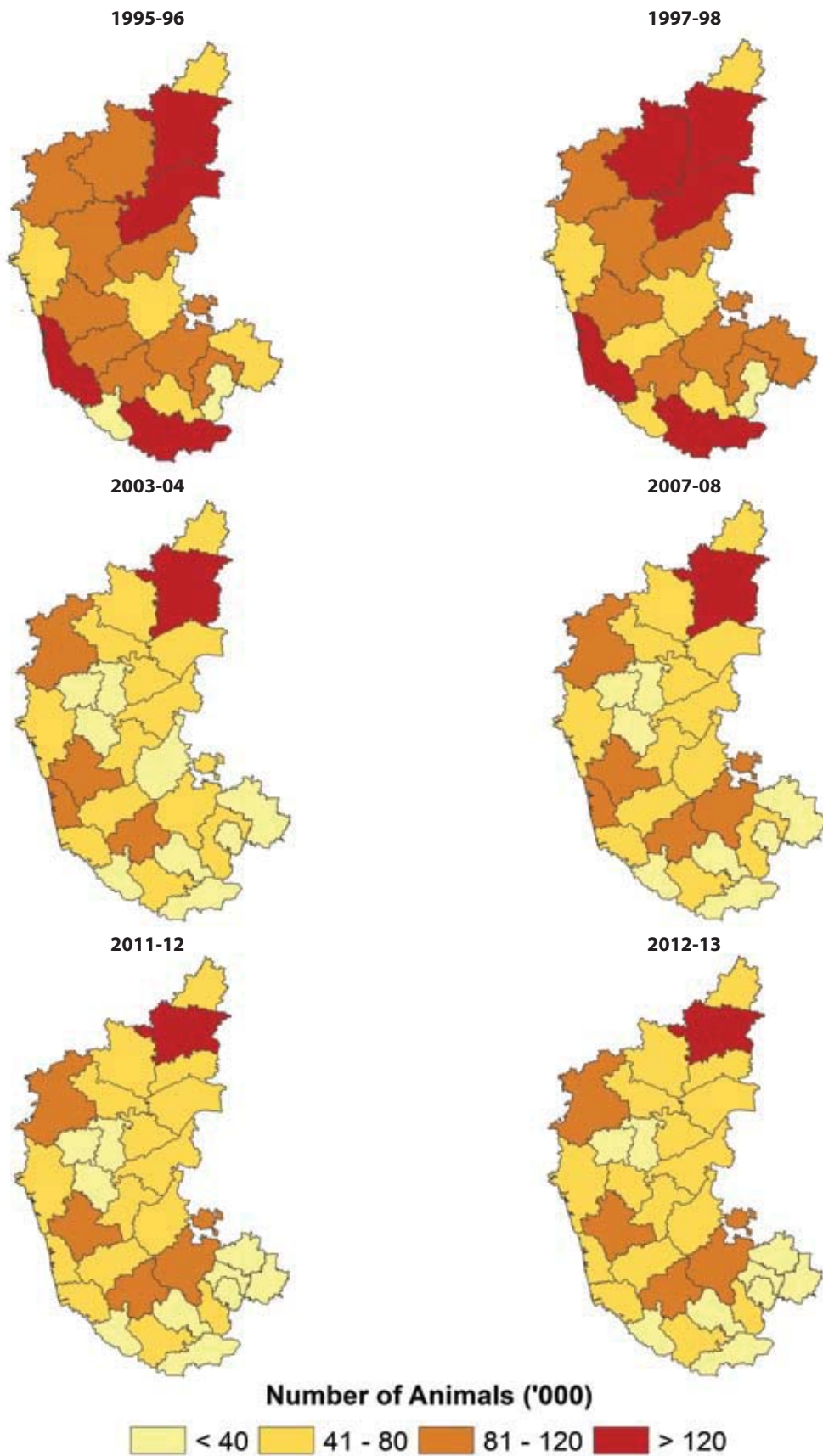
**TABLE IV.1.3: Year and District-wise In-milk Indigenous Cattle Population**

Districts	In-milk Indigenous Cattle Population ('000)								
	1995-96	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>KARNATAKA</b>	<b>1,803</b>	<b>1,975</b>	<b>1,414</b>	<b>1,499</b>	<b>1,476</b>	<b>1,496</b>	<b>1,553</b>	<b>1,625</b>	<b>1,658</b>
Bagalkot			43.3	44.7	49.4	50.2	54.0	60.1	61.2
Bangalore Rural	94.9	95.5	52.3	56.6	11.2	11.4	12.4	14.1	15.2
Bangalore Urban	34.9	28.0	11.6	11.9	7.3	7.3	9.5	7.6	7.9
Belgaum	81.7	92.5	80.1	84.2	82.4	83.4	85.3	84.1	87.6
Bellary	81.6	84.4	59.4	62.7	63.7	64.6	71.3	71.3	72.1
Bidar	70.1	68.5	52.1	53.5	54.1	54.9	57.1	59.7	62.7
Bijapur	100.8	122.8	40.4	42.9	49.2	49.9	53.5	53.4	57.1
Chamarajanagar			31.4	35.0	28.1	28.5	30.4	33.7	33.9
Chikkaballapura					16.8	17.1	18.4	20.2	20.8
Chikmagalur	87.7	78.4	62.0	67.0	66.0	67.0	67.1	68.5	70.0
Chitradurga	80.0	78.2	38.5	40.1	42.9	43.4	45.3	48.4	51.8
Dakshina Kannada	158.0	191.1	62.5	64.5	60.8	61.7	62.5	62.9	65.5
Davanagere			43.7	45.4	48.1	48.6	50.8	51.4	52.0
Dharwad	95.9	95.5	23.9	24.7	25.7	26.1	26.8	28.0	27.4
Gadag			18.0	19.2	23.3	23.7	25.8	26.9	26.3
Gulbarga	143.5	172.3	146.5	149.4	154.2	155.9	160.2	145.7	146.2
Hasan	98.5	107.9	80.7	87.7	85.5	86.5	87.2	86.9	86.9
Haveri			33.0	34.1	33.6	34.0	36.6	39.5	42.6
Kodagu	23.7	40.2	16.2	17.9	15.8	16.0	17.3	17.9	18.9
Kolar	75.6	92.4	34.2	37.4	13.6	13.8	14.6	15.9	16.6
Koppal			43.6	45.5	43.6	44.2	46.6	48.9	49.6
Mandya	50.4	52.7	16.5	17.0	11.4	11.6	13.5	14.3	15.0
Mysore	132.3	147.1	70.6	77.1	75.6	76.8	77.8	78.5	79.9
Raichur	128.0	138.4	66.1	69.2	75.0	76.2	79.0	78.7	78.5
Ramanagara					42.3	42.8	45.2	46.4	47.5
Shimoga	110.6	113.9	80.9	88.7	85.9	87.3	87.6	89.4	90.3
Tumkur	83.4	106.6	75.5	83.3	82.6	83.9	85.1	85.1	85.4
Udupi			80.6	83.1	70.3	71.4	73.1	74.5	75.1
Uttara Kannada	71.9	68.4	50.7	56.0	57.1	57.8	59.3	62.5	62.7
Yadgir								50.5	51.0

SOURCE: Integrated Sample Survey Reports (1995-96 to 2012-13), Directorate of Animal Husbandry & Veterinary Services, Government of Karnataka.



### District-wise In-milk Indigenous Cattle Population





## IV.1. Production Performance: Animal Population

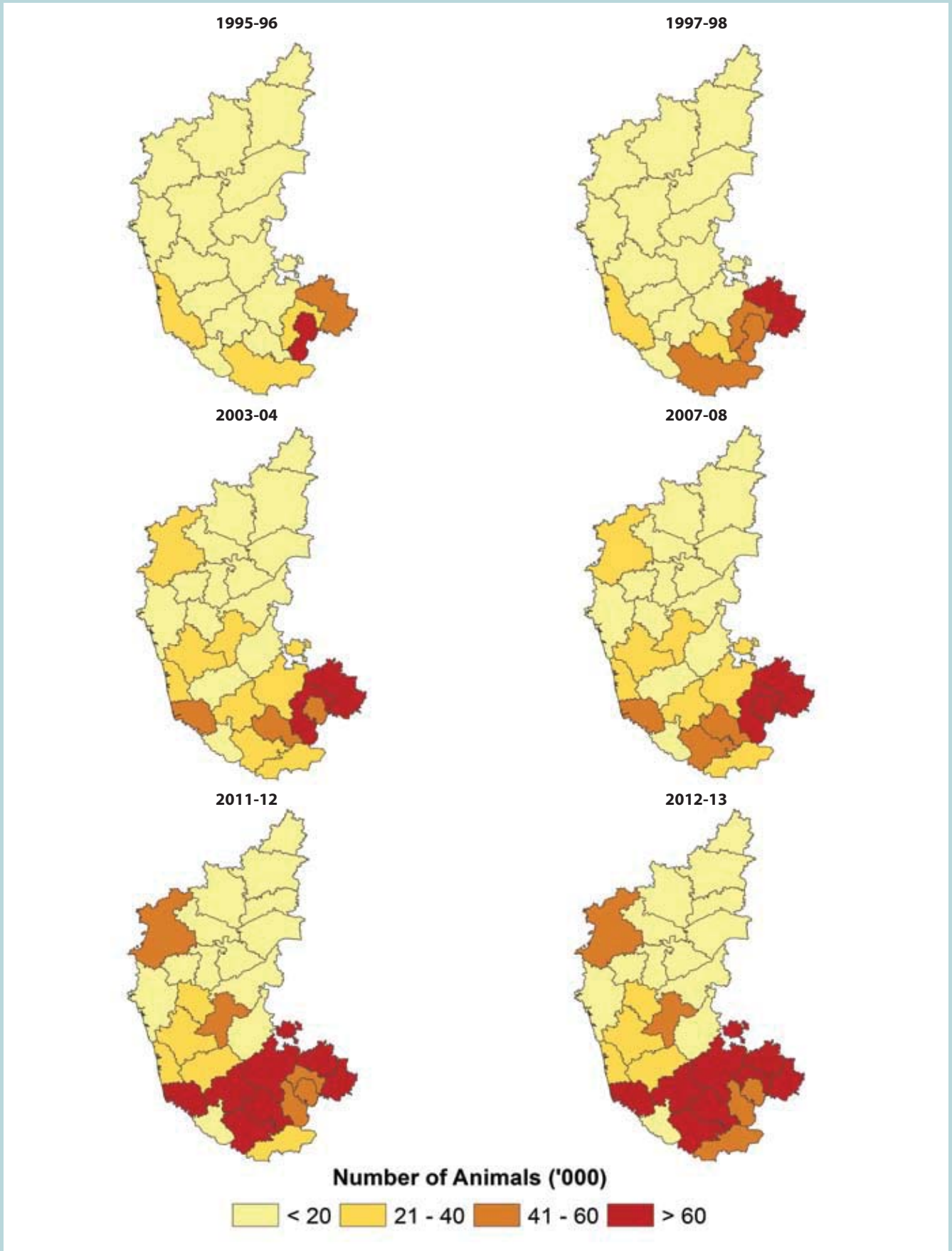
**TABLE IV.1.4: Year and District-wise In-milk Crossbred Cattle Population**

Districts	In-milk Crossbred Cattle Population ('000)								
	1995-96	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>KARNATAKA</b>	<b>306</b>	<b>416</b>	<b>685</b>	<b>763</b>	<b>865</b>	<b>940</b>	<b>1,002</b>	<b>1,068</b>	<b>1,143</b>
Bagalkot			8.7	9.3	12.7	12.5	14.0	15.3	16.3
Bangalore Rural	33.7	53.2	78.0	86.1	57.1	56.3	58.5	59.7	64.3
Bangalore Urban	60.5	48.0	57.4	62.6	51.7	50.8	53.9	53.3	59.2
Belgaum	8.4	14.3	27.4	31.2	35.0	45.1	47.2	48.7	52.9
Bellary	2.6	4.9	3.2	6.4	5.9	5.8	6.6	8.3	9.7
Bidar	2.1	2.4	4.5	7.3	5.0	4.9	5.4	6.5	6.8
Bijapur	2.0	4.5	0.7	1.8	0.5	0.5	0.5	0.8	0.9
Chamarajanagar			31.2	34.5	41.1	40.6	42.3	39.0	41.0
Chikkaballapura					64.4	66.7	69.5	73.0	75.8
Chikmagalur	6.5	7.5	11.9	12.6	15.7	19.9	21.4	25.1	27.9
Chitradurga	6.3	9.1	6.2	7.4	10.4	10.2	11.2	13.6	15.0
Dakshina Kannada	21.5	36.8	40.9	43.4	50.8	56.8	59.5	60.3	64.3
Davanagere			26.4	28.5	35.7	40.1	44.5	47.8	51.1
Dharwad	14.0	17.3	10.6	13.0	15.2	15.0	16.9	19.1	20.0
Gadag			4.7	5.3	6.0	5.9	6.6	7.6	8.3
Gulbarga	2.9	3.3	3.8	6.1	4.6	4.5	5.6	6.3	7.1
Hasan	14.6	19.3	37.0	38.7	48.3	67.2	70.5	72.3	77.8
Haveri			12.6	13.5	20.9	20.5	22.7	24.9	25.6
Kodagu	5.7	9.1	7.2	8.4	10.1	9.8	11.1	12.9	14.1
Kolar	43.4	69.1	119.1	131.7	78.3	76.9	80.9	85.1	90.4
Koppal			3.9	6.2	5.9	5.8	6.9	12.1	13.7
Mandya	19.5	28.7	50.7	59.9	67.0	74.1	78.2	82.5	88.8
Mysore	28.0	45.5	39.4	42.4	53.4	62.4	67.1	73.4	78.1
Raichur	2.1	3.3	4.1	5.3	3.5	3.4	3.9	5.0	5.6
Ramanagara					33.0	42.9	46.3	50.2	52.0
Shimoga	10.4	14.1	21.9	22.0	31.1	30.8	33.5	36.0	38.7
Tumkur	14.8	19.0	26.7	31.2	56.2	65.3	69.0	73.4	76.1
Udupi			36.8	38.1	32.4	32.0	34.1	37.7	39.3
Uttara Kannada	6.6	6.4	10.1	10.4	13.2	12.9	13.8	15.0	18.0
Yadgir								3.4	3.8

SOURCE: Integrated Sample Survey Reports (1995-96 to 2012-13), Directorate of Animal Husbandry & Veterinary Services, Government of Karnataka.



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







## IV.1. Production Performance: Animal Population

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

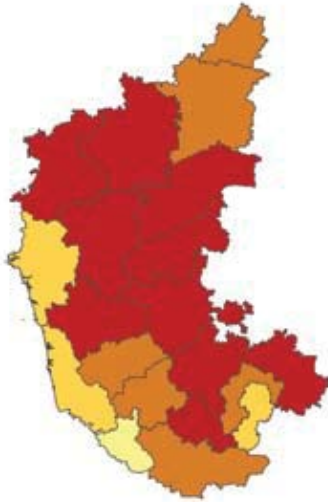
Districts	In-milk Buffalo Population ('000)								
	1995-96	1997-98	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<b>KARNATAKA</b>	<b>1,628</b>	<b>1,702</b>	<b>1,453</b>	<b>1,522</b>	<b>1,573</b>	<b>1,617</b>	<b>1,677</b>	<b>1,750</b>	<b>1,803</b>
Bagalkot			76.7	78.5	87.1	90.5	92.4	94.1	97.3
Bangalore Rural	61.3	35.0	33.8	33.0	14.1	16.1	17.2	18.2	19.5
Bangalore Urban	26.3	28.7	7.2	7.5	5.3	6.0	6.9	6.5	7.4
Belgaum	247.9	261.9	302.5	319.1	363.4	393.3	398.2	404.5	410.3
Bellary	76.0	78.8	62.6	66.6	71.8	71.9	73.6	73.8	78.0
Bidar	63.9	66.3	65.0	67.6	69.0	70.1	72.0	75.6	79.6
Bijapur	125.6	152.1	55.1	58.2	65.8	67.7	69.4	69.4	72.8
Chamarajanagar			12.0	12.6	9.2	9.3	10.5	11.4	12.7
Chikkaballapura					20.2	8.3	23.1	24.8	26.3
Chikmagalur	50.1	42.4	32.4	33.8	30.5	30.5	32.0	34.4	46.6
Chitradurga	111.8	120.5	58.6	62.9	63.8	65.0	65.8	67.6	70.3
Dakshina Kannada	32.8	37.2	2.9	3.1	1.7	1.8	2.0	2.4	2.6
Davanagere			70.1	74.6	75.0	76.6	78.4	79.7	82.9
Dharwad	107.3	124.1	35.6	37.3	38.7	39.8	41.3	44.5	41.3
Gadag			21.6	22.8	29.9	30.7	31.8	33.5	35.7
Gulbarga	59.7	72.2	73.6	74.9	78.2	79.1	81.4	86.2	88.7
Hasan	68.8	76.9	70.9	69.6	71.6	72.8	74.8	75.5	79.2
Haveri			39.6	42.3	42.8	44.1	45.7	47.6	47.4
Kodagu	9.8	14.9	6.8	7.2	6.1	6.2	6.7	7.3	7.6
Kolar	78.9	89.3	52.8	55.2	22.5	22.9	24.5	26.2	27.6
Koppal			35.3	36.7	38.0	38.6	40.0	44.2	46.6
Mandy	108.2	101.1	75.5	78.0	73.8	74.8	77.0	80.1	81.9
Mysore	72.0	64.9	26.0	27.9	24.6	25.7	27.0	28.1	29.3
Raichur	96.1	85.0	60.1	62.5	67.6	67.4	69.3	70.5	55.6
Ramanagara					17.6	18.6	20.1	22.5	23.8
Shimoga	97.8	109.3	56.3	63.7	55.1	56.4	58.0	57.9	60.4
Tumkur	88.2	94.1	82.2	85.9	92.5	95.3	97.6	99.4	102.3
Udupi			3.8	3.8	1.4	1.5	2.0	2.1	2.2
Uttara Kannada	45.4	46.9	34.2	36.5	35.4	36.3	38.3	40.0	41.9
Yadgir								22.3	24.8

SOURCE: Integrated Sample Survey Reports (1995-96 to 2012-13), Directorate of Animal Husbandry & Veterinary Services, Government of Karnataka.

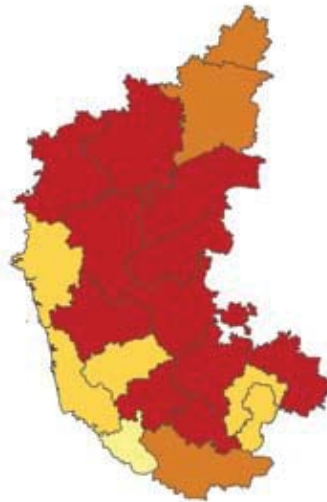


### District-wise In-milk Buffalo Population

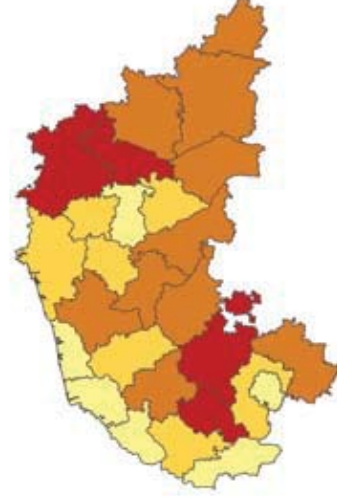
1995-96



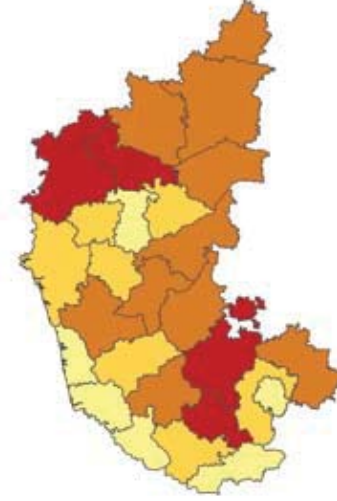
1997-98



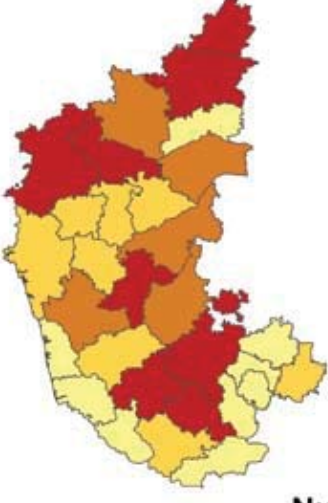
2003-04



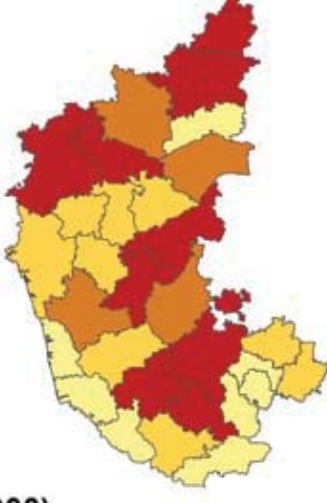
2007-08



2011-12



2012-13



Number of Animals ('000)

