



National Dairy
Development
Board

DAIRYING IN RAJASTHAN

A STATISTICAL PROFILE 2016



District Map of Rajasthan

Formation of Districts after Census 1991



CENSUS YEAR

- 1991
- 2001
- 2011



FOREWORD

In this publication "Dairying in Rajasthan - A Statistical Profile 2016", the major highlights are: trend in human demographics, livestock population and production; inputs for enhancement of productivity such as breeding, health and nutrition. This publication includes statistical tables and thematic maps on selected parameters along with time series data of districts wherever available.

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 various development interventions. We hope that a wide range of readers, students, researchers, veterinarians, planners, scientists, administrators, policy makers and professionals in government and non-governmental organisations, will find this publication useful. This publication 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 putting together data in a systematic and comprehensible manner, some errors cannot be ruled out.

This publication "Dairying in Rajasthan - A Statistical Profile 2016" is amongst a series of similar publications for different states being brought out by National Dairy Development Board (NDDB).

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Chairman, NDDB

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Anand, Gujarat



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PART I : GENERAL STATISTICS

Rajasthan has the largest geographical area in India covering one-tenth of country's land area wherein just 5.7% of the country's population reside. Of the total 68.5 million human population in Rajasthan, 75.1 per cent reside in rural areas and 24.9 per cent in urban areas. According to the 69th report of National Sample Survey Office (NSSO), more than three-fourth population stay in 'pucca' structure houses. Rajasthan is the first power surplus state in northern India and majority population have direct access to electricity for domestic use. In order to shore up the drinking water and sanitation facilities in Rajasthan, the State Government had amended its Panchayati Raj Act in December 2014 and as per the recent amendments, a candidate contesting for Panchayat election at village level need to have passed Class VIII for the post of Sarpanch and should have "functional toilet" facility at home.





I.1. Rajasthan at a Glance

TABLE I.1.1: General Statistics: Rajasthan vs. India

Particulars	Unit	Year	Rajasthan	India
State Geography & Rural Infrastructure				
Geographical area	'000 sq km	2011	342.2	3,287.3
Districts	Nos	"	33	640
Talukas	"	"	244	5,924
Villages	'000	"	44.6	640.9
Households	Million	"	12.7	249.5
Rural Households				
2001	'000	2001	7,157	137,414
2011	"	2011	9,490	168,565
Rural House Hold with Electricity				
2001	%	2001	44	44
2011	"	2011	58	55
Rural House Hold with Tap water supply				
2001	%	2001	22	24
2011	"	2011	27	31
Human Population				
Population	Millions	2011	68.5	1,210.1
Urban (% to total)	%	"	24.9	31.2
Rural (% to total)	"	"	75.1	68.8
Density of population	Persons/ sq.km	"	201	382
Scheduled castes (% to total)	%	"	17.8	16.6
Scheduled tribes (% to total)	"	"	13.4	8.6
Sex ratio	Ratio	"	928	943
Literacy rate (excluding population of 0 to 6 age group)				
Male	%	2011	79.2	80.9
Female	%	"	52.1	64.6
Urban	%	"	79.7	84.1
Rural	%	"	61.4	67.8
Per capita income (at current prices)	₹	2013-14	65,098	74,380
Livestock population				
Bovine population	Million	2012	57.7	512.0
Indigenous Cattle	"	"	26.3	299.9
Crossbred Cattle	"	"	11.6	151.2
Buffalo	"	"	1.7	39.7
Small ruminants	"	"	13.0	108.7
Poultry	"	"	31.0	200.2
Poultry	"	"	8.0	729.2
Livestock population				
Bovine population	Million	2007	56.7	529.7
Indigenous Cattle	"	"	23.2	304.8
Crossbred Cattle	"	"	11.3	166.0
Buffalo	"	"	0.8	33.1
Small ruminants	"	"	11.1	105.3
Poultry	"	"	32.6	212.1
			4.9	648.9



I.1. Rajasthan at a Glance

TABLE I.1.1: General Statistics: Rajasthan vs. India

Particulars	Unit	Year	Rajasthan	India
Number of major cattle breeds	Nos	2015	3	36
Number of major buffalo breeds	"	"	-	13
Milk Production				
Total Milk production	000MT	2014-15	16,934	146,313
Crossbred	"	"	1,840	36,938
Indigenous	"	"	4,286	29,484
Buffalo	"	"	8,985	74,709
Goats	"	"	1,822	5,180
Per capita milk availability	Grams/day	2013-14	572	307
Egg production	Millions	2014-15	1,320	78,484
Estimated meat production	000 MT	"	180.1	6,691
Marine & inland fish production	"	2013-14	35.1	9,579
Wool production	000 Kg	2014-15	14,463	48,139
Veterinary Infrastructure & Services				
Veterinary institutes	Nos	2014-15	4,696	61,123
Semen Production Center	"	"	2	58
AI centers	"	"	6,728	88,095
AI done	000	"	3,386	63,204
Vaccinations Done			13,059	
H.S. Vaccination	"	2014-15	5,305	
B.Q. vaccinations	"	"	1,216	
FMD vaccinations	"	"	6,538	
Agricultural Resources				
Forest cover	%	2012-13	8.0	21.30
Pasture and Grazing land	000 Ha	"	1,694	10,240
Pasture & Grazing Land (% to total reporting area)	%	"	4.9	3.3
Area under fodder crops	000 Ha	"	4,853	9,188
Gross irrigated area (% to Gross Cropped Area)	%	"	39.4	47.6
Cropping intensity	"	"	137	139
Irrigation intensity	"	"	126	138
Production of major crops				
Cereals	'000 MT	2014-15	17,670	234,871
Pulses	"	"	1,952	17,152
Oilseeds	"	"	5,314	27,511
Cotton	'000 bales (170 kg Each)	"	1,527	34,805
Sugarcane	'000 MT	"	409	362,333
Ground water status (2011 vs 2009)				
Safe	% of blocks	2011 & (2009)	10 (13)	69 (73)
Semi Critical	"	"	8 (7)	11 (9)
Critical	"	"	10 (10)	3 (3)



I.1. Rajasthan at a Glance

TABLE I.1.1: General Statistics: Rajasthan vs. India

Particulars	Unit	Year	Rajasthan	India
Over exploited	% of blocks	2011 & (2009)	71 (69)	16 (14)
Salinity Affected	"	"	1 (NA)	1(1)

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 and Farmers Welfare, 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 and Farmers Welfare, Govt. of India.
- Ministry of Statistics and Programme Implementation, Govt. of India.

TABLE I.1.2: Formation of New Districts in Rajasthan

New District	Year of formation	Carved out of
Dasua	10 th April 1991	Jaipur, Sawai Madhopur
Baran	10 th April 1991	Kota
Rajsamand	10 th April 1991	Udaipur
Hanumangarh	12 th July 1994	Ganganagar
Karauli	19 th July 1997	Sawai Madhopur
Pratapgarh	26 th January 2008	Chittaurgarh, Banswara, Udaipur

SOURCE: District Administration Websites of Govt. of Rajasthan.





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
RAJASTHAN	22,427	20,866	43,293	6,993	6,221	13,214	29,420	27,087	56,507
Ajmer	670	637	1,307	460	415	875	1,130	1,052	2,182
Alwar	1,350	1,208	2,558	237	198	435	1,587	1,406	2,993
Banswara	705	689	1,394	56	52	107	761	741	1,502
Baran	445	404	850	90	82	172	535	487	1,022
Barmer	960	860	1,819	78	67	145	1,038	927	1,965
Bharatpur	914	778	1,692	219	190	409	1,133	968	2,101
Bhilwara	808	791	1,599	219	196	415	1,027	987	2,014
Bikaner	569	510	1,079	317	278	595	886	788	1,674
Bundi	410	373	783	94	85	180	505	458	963
Chittaurgarh	768	747	1,514	151	139	289	918	885	1,804
Churu	711	677	1,388	277	259	536	988	936	1,924
Dausa	622	560	1,181	72	64	136	693	624	1,317
Dhaulpur	443	364	807	95	82	177	538	445	983
Dungarpur	506	521	1,027	42	39	81	548	560	1,108
Ganganagar	710	626	1,336	246	208	453	955	834	1,789
Hanumangarh	640	575	1,214	162	142	304	801	717	1,518
Jaipur	1,389	1,270	2,659	1,379	1,213	2,592	2,768	2,483	5,251
Jaisalmer	236	196	432	43	34	76	279	229	508
Jalor	680	659	1,339	58	52	110	738	711	1,449
Jhalawar	524	488	1,012	88	80	168	613	568	1,180
Jhunjhunun	776	743	1,519	208	187	395	984	930	1,914
Jodhpur	994	915	1,909	520	457	977	1,514	1,373	2,887
Karauli	560	477	1,038	92	80	172	652	558	1,210
Kota	382	347	730	445	394	839	827	741	1,569
Nagaur	1,176	1,122	2,298	249	228	477	1,425	1,350	2,775
Pali	715	715	1,429	204	187	391	919	901	1,820
Rajsamand	427	432	858	67	62	129	493	494	987
Sawai Madhopur	479	426	904	113	100	213	591	526	1,117
Sikar	927	888	1,815	246	227	473	1,173	1,115	2,288
Sirohi	357	343	700	81	70	151	438	413	851
Tonk	496	462	959	130	123	253	626	585	1,212
Udaipur	1,078	1,065	2,143	258	233	490	1,336	1,297	2,633

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
RAJASTHAN	26,642	24,859	51,500	8,909	8,139	17,048	35,551	32,997	68,548
Ajmer	789	758	1,548	535	501	1,035	1,324	1,259	2,583
Alwar	1,590	1,430	3,020	350	305	654	1,939	1,735	3,674
Banswara	843	827	1,670	65	63	128	908	890	1,797
Baran	502	466	969	132	122	254	634	589	1,223
Barmer	1,273	1,149	2,422	96	86	182	1,369	1,235	2,604
Bharatpur	1,093	960	2,053	262	233	495	1,356	1,193	2,548
Bhilwara	955	940	1,896	265	247	513	1,221	1,188	2,409
Bikaner	821	742	1,564	419	381	800	1,241	1,123	2,364
Bundi	462	426	888	115	107	223	577	534	1,111
Chittaurgarh	636	623	1,259	147	139	285	783	761	1,544
Churu	755	708	1,463	296	280	576	1,051	988	2,040
Dausa	752	681	1,433	106	96	202	858	777	1,634
Dhaulpur	521	438	959	133	115	247	654	553	1,207
Dungarpur	651	649	1,300	45	43	89	697	692	1,389
Ganganagar	758	675	1,434	285	250	535	1,043	926	1,969
Hanumangarh	747	677	1,424	184	166	350	931	844	1,775
Jaipur	1,643	1,511	3,154	1,826	1,646	3,472	3,469	3,158	6,626
Jaisalmer	312	268	581	49	40	89	362	308	670
Jalor	858	819	1,677	79	73	152	937	892	1,829
Jhalawar	607	575	1,182	119	111	229	725	686	1,411
Jhunjhunun	843	805	1,648	253	236	489	1,096	1,041	2,137
Jodhpur	1,260	1,162	2,423	664	601	1,265	1,924	1,763	3,687
Karauli	668	572	1,240	115	103	218	784	675	1,458
Kota	401	373	774	620	557	1,177	1,021	930	1,951
Nagaur	1,369	1,302	2,671	328	310	637	1,696	1,611	3,308
Pali	788	790	1,578	238	222	460	1,025	1,012	2,038
Pratapgarh	401	395	796	37	35	72	438	430	868
Rajsamand	487	486	973	94	89	184	581	575	1,157
Sawai Madhopur	565	504	1,069	139	127	266	704	632	1,336
Sikar	1,047	996	2,043	328	306	634	1,375	1,302	2,677
Sirohi	424	403	828	110	99	209	534	502	1,036
Tonk	568	536	1,104	160	158	318	728	693	1,421
Udaipur	1,251	1,209	2,460	315	293	608	1,567	1,502	3,068

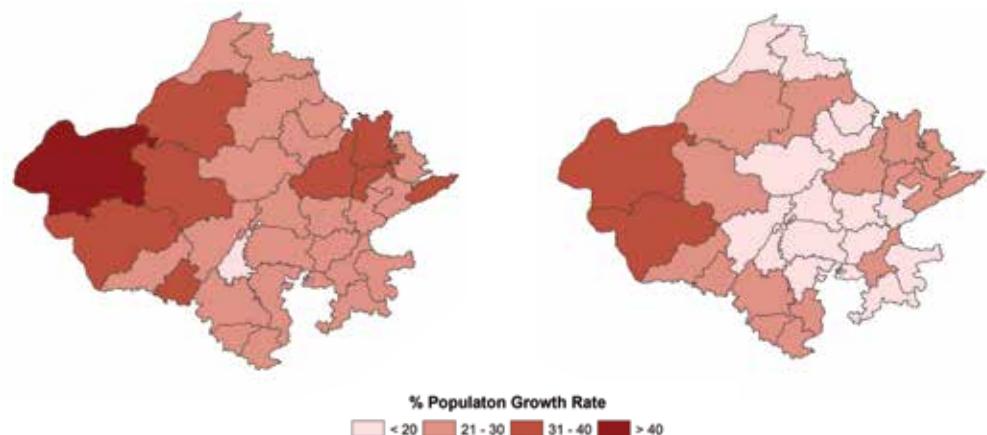
SOURCE: Census 2011, Office of the Registrar General and Census Commissioner, Govt. of India, New Delhi.



Decadal Growth Rate of Population

1991-2001

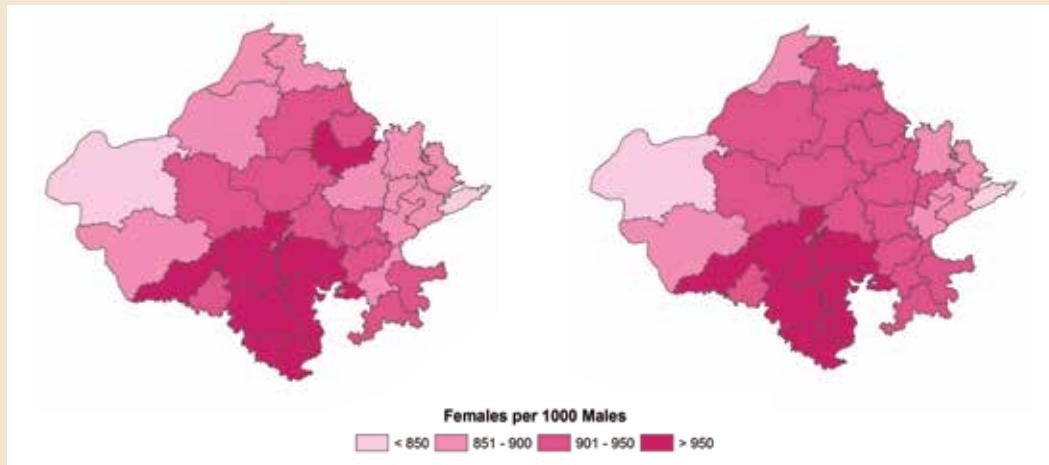
2001-2011



Sex Ratio (all age groups)

2001

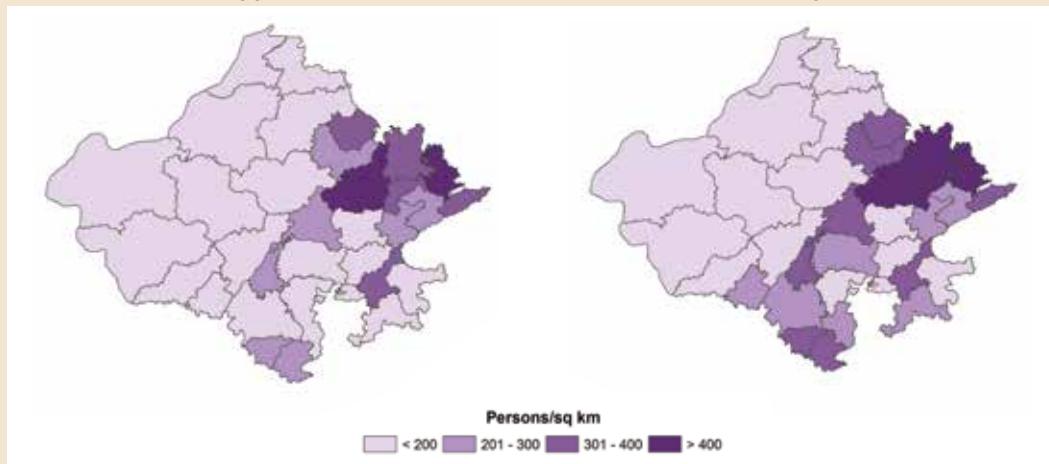
2011



Population Density

2001

2011





I.2. Social Statistics: Human Population

TABLE I.2.3: Rural Households, Electricity & Tap Water Supply - 2001 & 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
RAJASTHAN	7,157	9,490	3,151	5,528	1,544	2,554
Ajmer	232	295	115	210	41	78
Alwar	386	505	172	368	49	104
Banswara	241	339	52	95	19	20
Baran	142	192	66	118	11	23
Barmer	286	416	50	97	61	71
Bharatpur	249	338	115	212	20	42
Bhilwara	309	394	152	280	70	105
Bikaner	155	242	44	97	43	98
Bundi	137	178	65	99	11	18
Chittaurgarh	305	268	161	213	58	88
Churu	214	255	81	149	83	182
Dausa	173	256	68	163	17	29
Dhaulpur	116	162	30	63	7	8
Dungarpur	188	265	57	124	20	32
Ganganagar	216	270	117	187	109	177
Hanumangarh	197	262	106	181	97	183
Jaipur	371	503	208	366	65	122
Jaisalmer	71	98	14	31	8	15
Jalor	226	302	79	139	79	112
Jhalawar	174	237	87	179	14	44
Jhunjhunun	246	302	139	222	97	157
Jodhpur	293	413	110	206	72	105
Karauli	157	225	44	100	16	30
Kota	126	149	85	117	16	40
Nagaur	361	483	172	257	124	162
Pali	284	342	174	247	81	123
Pratapgarh		164		58		13
Rajsamand	175	210	95	160	29	59
Sawai Madhopur	144	207	43	98	16	25
Sikar	272	347	167	247	113	160
Sirohi	135	161	75	96	36	49
Tonk	158	214	62	109	14	18
Udaipur	416	497	145	241	44	59

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



Rural Households

2001



2011



Households('000)

< 200 201 - 300 301 - 400 > 400

Rural Households with Electricity

2001



2011



% Households

> 40 41 - 50 51 - 60 > 60

Rural Households with Tap Water

2001



2011



% Households

< 20 21 - 40 41 - 60 > 60



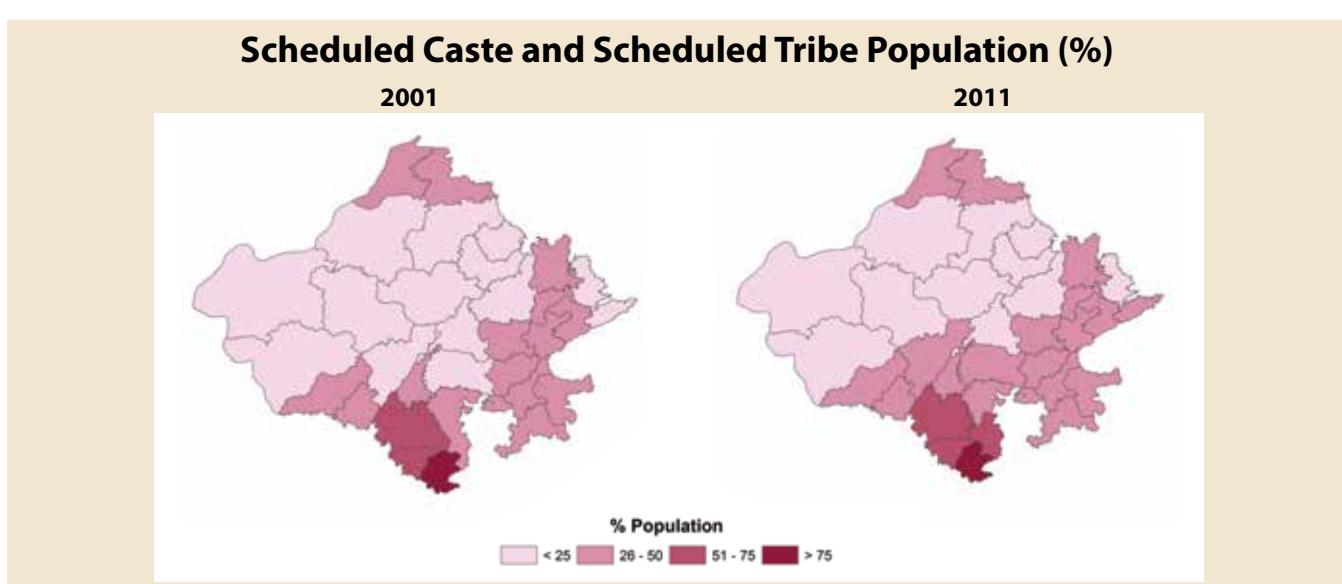
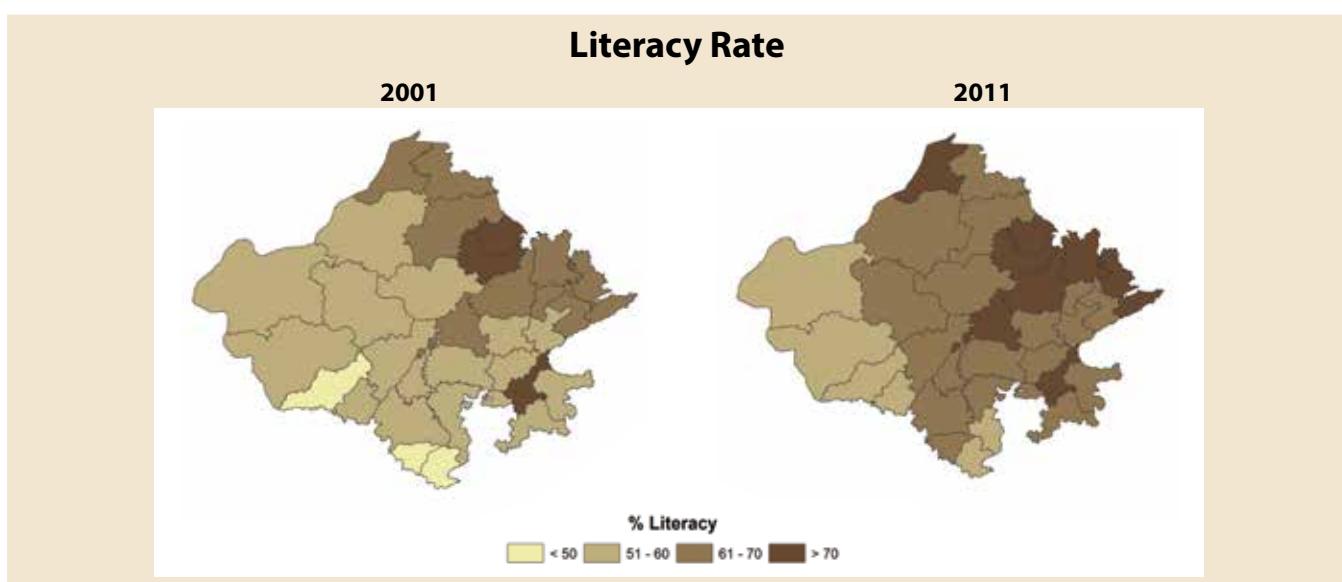
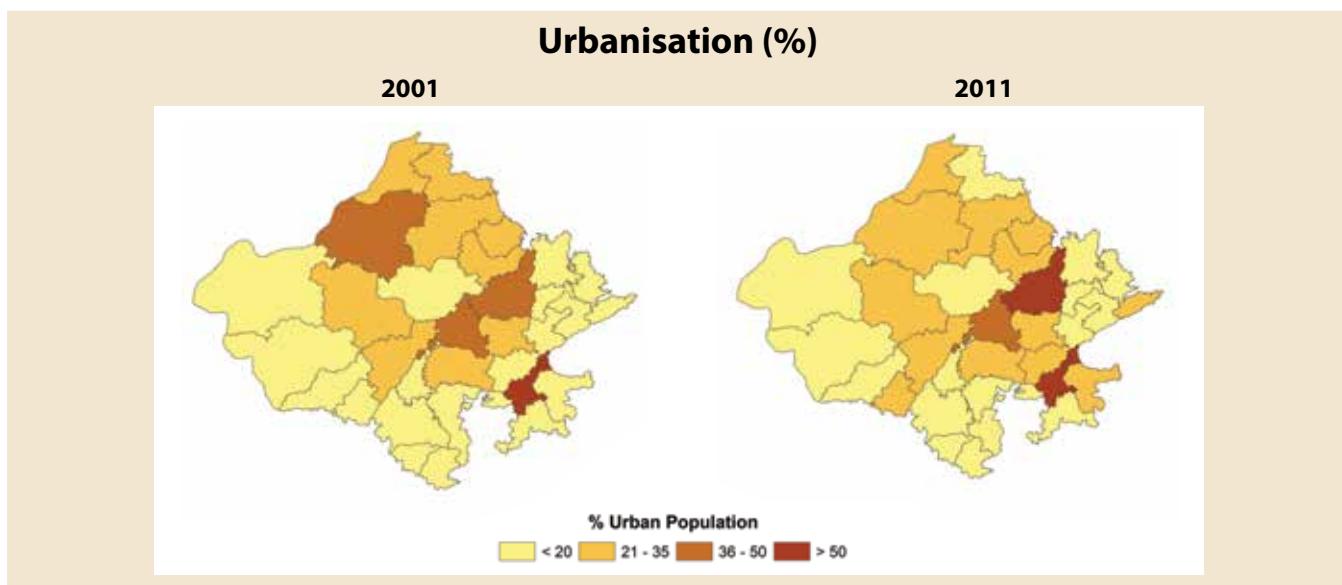
I.2. Social Statistics: Human Population

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

Districts	SC Population ('000)		ST Population ('000)	
	2001	2011	2001	2011
RAJASTHAN	9,694.5	12,221.6	7,097.7	9,238.5
Ajmer	386.3	478.0	52.6	63.5
Alwar	539.0	653.0	239.9	289.2
Banswara	64.3	80.1	1,085.3	1,373.0
Baran	181.1	221.2	216.9	276.9
Barmer	309.0	436.4	118.7	176.3
Bharatpur	455.9	557.3	47.1	54.1
Bhilwara	316.5	407.9	180.6	229.3
Bikaner	334.2	493.6	5.9	7.8
Bundi	174.3	210.8	194.9	228.5
Chittaurgarh	250.8	250.2	388.3	201.5
Churu	407.2	451.7	10.1	11.2
Dausa	279.4	354.3	353.2	433.3
Dhaulpur	197.9	245.7	47.6	58.6
Dungarpur	46.0	52.3	7,21.5	983.4
Ganganagar	603.4	720.4	14.7	13.5
Hanumangarh	396.6	494.2	10.0	14.3
Jaipur	777.6	1,003.3	412.9	528.0
Jaisalmer	74.1	99.1	27.8	42.4
Jalor	261.3	357.2	126.8	178.7
Jhalawar	184.6	243.6	141.9	182.2
Jhunjhunun	309.2	360.7	36.8	41.6
Jodhpur	456.4	608.0	79.5	118.9
Karauli	280.1	354.5	270.6	325.0
Kota	300.6	405.4	152.0	183.8
Nagaur	545.2	699.9	6.5	10.4
Pali	323.5	398.1	105.8	144.6
Pratapgarh		60.4		550.4
Rajsamand	122.5	148.2	129.2	160.8
Sawai Madhopur	223.2	278.8	241.1	285.8
Sikar	339.8	418.8	62.5	75.3
Sirohi	163.0	201.9	210.8	292.5
Tonk	233.1	287.9	145.9	178.2
Udaipur	158.3	188.5	1,260.4	1,525.3

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) & 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	2014-15
State Domestic Product	112,636	125,333	151,428	172,250	203,939	233,767	300,907	374,090	422,982	465,504	516,462
1. Agriculture	25,741	26,718	32,488	39,197	44,203	46,222	75,899	100,538	110,651	122,772	132,764
2. Forestry & Logging	4,665	5,264	6,486	6,288	7,453	9,366	11,065	14,066	14,158	14,952	16,556
3. Fishing	75	85	111	125	134	164	221	279	319	362	423
4. Agriculture & Allied (1+2+3)	30,480	32,068	39,085	45,609	51,789	55,752	87,185	114,883	125,128	138,087	149,743
As % of NSDP	27	26	26	26	25	24	29	31	30	30	29
A Sub-total of Primary	32,746	34,362	42,186	49,492	56,092	61,040	97,963	129,095	142,438	155,934	168,950
As % of NSDP	29	27	28	29	28	26	33	35	34	33	33
B Sub-total of Secondary	29,786	34,390	43,076	46,172	55,235	62,430	66,664	89,106	99,685	103,999	112,273
As % of NSDP	26	27	28	27	27	27	22	24	24	22	22
C Services	50,104	56,582	66,166	76,586	92,611	110,297	136,280	155,888	180,858	205,571	235,238
As % of NSDP	44	45	44	44	45	47	45	42	43	44	46
State Per Capita Income (₹)	18,565	20,275	24,055	26,882	31,279	35,254	44,644	54,637	60,844	65,974	72,156

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	2014-15
State Domestic Product	112,636	120,202	134,350	140,471	152,284	161,159	185,366	202,749	214,391	224,632	237,530
1. Agriculture	25,741	25,741	27,920	28,149	29,460	28,164	40,829	40,205	39,660	41,831	42,955
2. Forestry & Logging	4,665	4,630	4,759	4,876	4,911	4,982	5,159	5,149	5,183	5,305	5,471
3. Fishing	75	82	97	99	104	113	114	116	129	138	150
4. Agriculture & Allied (1+2+3)	30,480	30,452	32,777	33,124	34,475	33,259	46,102	45,470	44,972	47,275	48,576
As % of NSDP	27	25	24	24	23	21	25	22	21	21	20
Sub-total of Primary	32,746	32,846	36,247	36,768	37,674	36,889	52,193	52,829	53,573	55,692	57,229
As % of NSDP	29	27	27	26	25	23	28	26	25	25	24
Sub-total of Secondary	29,786	32,782	38,206	38,465	41,192	45,057	43,877	55,882	57,423	58,123	59,794
As % of NSDP	26	27	28	27	27	28	24	28	27	26	25
Services	50,104	54,574	59,897	65,239	73,417	79,214	89,295	94,038	103,395	110,817	120,507
As % of NSDP	44	45	45	46	48	49	48	46	48	49	51
State Per Capita Income (₹)	18,565	19,445	21,342	21,922	23,356	24,304	27,502	29,612	30,839	31,836	33,186

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

NOTE: The estimates are as on 31.07.2015.





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 and Allied	489	521	615	677	819	897	1,187
Agriculture	265	280	338	384	444	435	636
Livestock	167	177	198	220	289	345	418
Milk	114	122	138	152	211	250	308
Meat	8	10	10	12	14	16	18
Egg	1	1	1	1	1	2	2
Dung	39	39	42	46	53	63	73
Others^	5	5	7	9	10	14	17
Share of Value of Output to Agriculture and Allied (%)							
Agriculture	54	54	55	57	54	48	54
Livestock	34	34	32	32	35	38	35
Share of Value of Output to Livestock Output (%)							
Milk	68	69	70	69	73	72	74
Meat	5	6	5	5	5	5	4
Egg	1	1	1	0	0	1	0
Dung	23	22	21	21	18	18	17
Others^	3	3	4	4	3	4	4

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 and Allied	489	488	521	534	577	538	643
Agriculture	265	259	280	287	307	252	342
Livestock	167	173	183	186	217	225	239
Milk	114	119	128	130	159	165	177
Meat	8	9	9	9	9	10	11
Egg	1	1	1	1	1	1	1
Dung	39	39	40	41	42	43	44
Others^	5	5	5	5	6	6	6
Share of Value of Output to Agriculture and Allied (%)							
Agriculture	54	53	54	54	53	47	53
Livestock	34	35	35	35	38	42	37
Share of Value of Output to Livestock Output (%)							
Milk	68	69	70	70	73	73	74
Meat	5	5	5	5	4	4	5
Egg	1	1	1	1	0	0	0
Dung	23	23	22	22	19	19	18
Others^	3	3	3	3	3	3	3

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

SOURCE: State wise estimates of value of output from agriculture and allied activities with new base year 2004-2005 (Published in 2013), Ministry of Statistics and Programme Implementation, Govt. of India.



I.3. State Economy

TABLE I.3.3: Approved Project Cost for Dairying under Rashtriya Krishi Vikas Yojana (RKVY) in Rajasthan

Segment	Approved Project Cost (₹ crores)								Grand Total
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Establishment of new Dairy Infrastructure and quality labs and Strengthening the existing one	6.07	20.50		83.10		140.00			249.67
BMC Installation		20.00		61.80					81.80
Establishment of Cattle Feed and Milk powder Plant						25.00			25.00
Others		5.70			1.52				7.22
Capacity Building								3.03	3.03
Grand Total	6.07	46.20		144.90	1.52	165.00		3.03	366.72

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





I.3. State Economy

TABLE I.3.4: Approved Project Cost for Animal Husbandry under Rashtriya Krishi Vikas Yojana (RKVY) in Rajasthan

Segment	Approved Project Cost (₹ crores)								Grand Total
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Capacity Building/ establishment of center for Human Resource Development				12.78		47.33		35.78	95.88
Infrastructure Development-Veterinary Institutes, Semen Station and lab, Disease Lab, Diagnostic Center, etc		8.27	4.50	2.00		18.42	24.69	29.51	87.39
Mukhyamantri Pashudhan Dawa Yojna/ Animal drug and medicine distribution				4.73			35.00	41.80	81.53
Fodder and Pasture Development		1.40	25.00	0.36		20.55	0.48	6.80	54.59
Establishment of Breeding Farms (Rathi, Kankrej, Tharparkar & Gir)		26.19						7.00	33.19
Breeding bull registration & scrub bull and calf castration				29.38				2.42	31.79
Others				7.00		7.00		3.86	17.86
Management of crop residue								13.90	13.90
National Mission of Protein Supplements								13.02	13.02
Programme to combat infertility and other Programmes		0.99	0.99			5.00	4.12	0.65	11.75
Camel Development				0.51		2.50		0.93	3.94
Pashupalak Samman Samaroh						2.50		0.55	3.05
Cattle and buffalo development				0.90				1.12	2.02
Horse Development						2.00			2.00
Poultry Development				0.26		0.30		1.06	1.62
Animal Health and extension services			1.31						1.31
Mineral Mixture Supplementation				1.10				0.06	1.16
Utilisation of Sexed semen								0.75	0.75
Grand Total		36.85	31.80	59.02		105.60	64.29	159.21	456.77

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



PART II : LIVESTOCK CENSUS

The total bovine population consisting of Cattle & Buffalo in Rajasthan was 26.3 million numbers in 2012. It has increased by 13 per cent over the previous census. Bovine population has increased substantially in Bharatpur (67 per cent), Bikaner (37 per cent), Churu (36 per cent), Bhilwara (36 per cent), Barmer (26 per cent) & Jodhpur (26 per cent); whereas it declined in Chittaurgarh (31 per cent), Dungarpur (8 per cent), Rajsamand (5 per cent) and Jhalawar (5 per cent). The number of milch animals (in-milk and dry) in cows and buffaloes has Increased at higher rate of 17 per cent from 10.4 million in previous census to 12.2 million. The Female Cattle Population has increased by 18.6 per cent over the previous census (2007) to 10.0 million numbers. The buffalo population has also increased by 17 per cent.

Rajasthan is the second state in the country to have a dedicated ministry for cow husbandry called "Gaupalan department". To boost milk production, the Rajasthan government is setting up its first cow sanctuary in Bikaner near Indira Canal. Cattle which have become old, infertile and disabled are sent to gaushalas in these states. The state has one of the highest number of gaushalas wherein old, infertile and disabled dairy animals are nurtured with care.





II.1. Animal Population

TABLE II.1.1: Summary of Livestock Census (1997 to 2012) – Rajasthan

Population	Livestock Census			
	1997	2003	2007	2012
Total Bovine	21,911,892	21,267,346	23,211,486	26,300,557
Total Cattle	12,141,402	10,853,512	12,119,512	13,324,462
Total Exotic/ Crossbred cows	210,685	463,607	815,675	1,735,072
Females	178,071	394,287	692,639	1,496,504
Under 1 year	30,587	79,435	162,875	353,929
1 to 2.5 year	62,128	65,363	109,571	213,160
In-milk	54,143	172,671	315,510	654,393
Dry	24,092	62,042	81,855	205,718
Milch	78,235	234,713	397,365	860,111
Not even calved once	5,880	12,909	16,720	59,743
Others	1,241	1,867	6,108	9,561
Males	32,614	69,320	123,036	238,568
Total Indigenous cows	11,930,717	10,389,905	11,303,837	11,589,390
Females	7,702,811	6,842,908	7,790,537	8,566,178
Under 1 year	1,427,895	1,137,973	1,515,712	1,740,383
1 to 3 years	1,282,768	1,052,278	1,181,482	1,285,369
In-milk	2,408,575	2,208,499	2,902,557	3,090,516
Dry	2,148,161	2,039,823	1,727,900	1,916,800
Milch	4,556,736	4,248,322	4,630,457	5,007,316
Not even calved once	391,777	348,461	308,335	474,772
Others	43,635	55,874	154,551	58,338
Males	4,227,906	3,546,997	3,513,300	3,023,212
Total Buffaloes	9,770,490	10,413,834	11,091,974	12,976,095
Females	8,588,810	9,288,291	9,766,093	11,400,819
Under 1 year	1,832,447	1,793,231	2,186,008	2,625,479
1 to 3 years	1,535,416	1,837,505	1,756,136	1,842,029
In-milk	3,135,969	3,392,360	3,929,229	4,447,558
Dry	1,676,745	1,829,904	1,470,720	1,874,203
Milch	4,812,714	5,222,264	5,399,949	6,321,761
Not even calved once	367,853	418,865	327,986	551,259
Others	40,380	16,426	96,014	60,291
Males	1,181,680	1,125,543	1,325,881	1,575,276

SOURCE: 16th, 17th, 18th and 19th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, 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)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	11,931	10,390	11,304	11,589	211	464	816	1,735	9,770	10,414	11,092	12,976
Ajmer	469	295	373	362	13	13	19	43	313	276	336	439
Alwar	202	175	185	144	2	8	12	63	758	917	975	1,061
Banswara	578	657	640	589	1	1	6	10	224	260	275	282
Baran	411	328	352	338	1	1	3	5	179	190	226	250
Barmer	534	537	637	786	0	0	0	2	92	131	156	214
Bharatpur	101	102	115	129	3	5	11	37	538	696	475	836
Bhilwara	724	548	515	596	27	55	68	122	382	313	304	452
Bikaner	555	588	629	849	6	20	42	57	107	133	131	193
Bundi	319	257	269	229	2	4	4	14	229	245	281	317
Chittaurgarh	688	673	719	424	7	21	42	33	395	409	475	393
Churu	331	211	244	315	2	5	12	32	211	195	215	293
Dausa	142	117	120	104	2	5	14	34	347	382	414	488
Dhaulpur	75	56	61	53	1	2	1	6	258	306	310	359
Dungarpur	400	416	425	372	1	1	1	3	177	216	233	232
Ganganagar	375	349	494	464	36	56	92	173	326	268	283	271
Hanumangarh	297	312	363	404	14	30	41	98	331	308	326	389
Jaipur	414	345	340	290	25	67	169	345	767	889	947	1,073
Jaisalmer	310	243	348	433	0	0	1	2	1	2	3	4
Jalor	288	247	294	294	0	0	0	2	315	356	412	469
Jhalawar	429	425	434	377	0	1	1	3	228	264	291	311
Jhunjhunu	116	85	85	49	7	38	90	183	352	379	370	385
Jodhpur	654	488	620	792	15	32	34	56	209	180	263	305
Karauli	151	104	117	92	0	1	2	9	342	359	399	477
Kota	267	228	245	214	2	2	4	9	182	190	227	236
Nagaur	487	355	403	429	2	8	15	73	441	420	460	557
Pali	423	283	350	347	3	5	5	9	317	286	315	312
Pratapgarh				314				16				150
Rajsamand	300	237	263	235	9	15	24	26	222	200	224	222
Sawai Madhopur	187	151	117	108	0	3	1	2	233	232	250	318
Sikar	200	159	179	130	14	37	76	201	459	508	516	554
Sirohi	214	187	202	191	1	0	1	3	128	145	166	186
Tonk	334	219	242	218	1	1	4	9	251	229	311	392
Udaipur	956	1,013	927	919	13	26	19	53	457	530	524	554

Zero denotes either nil or negligible.

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



II.1. Animal Population

TABLE II.1.3: District-wise Female Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	7,703	6,843	7,791	8,566	178	394	693	1,497	8,589	9,288	9,766	11,401
Ajmer	329	217	290	303	12	11	16	37	272	247	295	386
Alwar	151	133	149	126	2	7	10	55	676	833	871	940
Banswara	222	261	253	251	1	1	4	8	199	228	244	254
Baran	222	197	236	248	1	1	2	3	148	161	188	211
Barmer	419	436	508	646	0	0	0	2	79	114	133	181
Bharatpur	80	84	95	112	3	4	10	32	478	625	417	731
Bhilwara	455	345	351	436	22	47	58	103	333	278	265	379
Bikaner	459	501	509	713	5	18	35	50	94	117	112	166
Bundi	161	143	162	170	1	3	4	12	194	216	243	278
Chittaurgarh	358	356	429	266	5	17	33	23	341	355	409	340
Churu	283	181	207	271	2	4	11	28	187	176	192	258
Dausa	94	78	89	87	1	4	12	30	310	349	371	436
Dhaulpur	49	40	48	45	0	1	1	6	227	279	277	318
Dungarpur	146	161	172	165	1	1	1	2	159	195	209	211
Ganganagar	291	272	401	380	30	47	78	148	291	243	254	240
Hanumangarh	245	254	297	332	12	25	34	82	297	279	293	345
Jaipur	294	260	273	251	22	58	148	308	683	804	845	960
Jaisalmer	235	203	272	346	0	0	0	1	1	2	2	3
Jalor	192	175	221	236	0	0	0	2	282	322	369	419
Jhalawar	236	243	256	250	0	1	1	2	196	224	247	266
Jhunjhunu	98	72	73	43	6	33	79	165	316	346	336	345
Jodhpur	535	411	507	668	14	30	30	50	181	156	226	265
Karauli	96	69	80	70	0	1	2	7	303	326	353	416
Kota	159	153	174	169	2	2	3	7	156	165	191	202
Nagaur	404	298	337	370	2	7	12	61	368	362	392	482
Pali	296	205	267	275	2	4	4	8	280	257	279	275
Pratapgarh				168				13				131
Rajsamand	172	144	163	160	8	12	19	22	196	178	197	194
Sawai Mdhopur	98	92	76	85	0	3	1	1	203	208	218	279
Sikar	160	126	146	113	11	30	63	174	406	451	458	489
Sirohi	129	117	138	141	1	0	1	3	114	130	150	171
Tonk	197	135	165	176	1	1	4	8	217	202	272	342
Udaipur	438	479	448	494	11	22	16	44	401	460	457	488

Zero denotes either nil or negligible.

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



II.1. Animal Population

TABLE II.1.4: District-wise Breedable Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	5,634	5,179	5,684	6,183	116	282	475	1,036	5,989	6,576	6,702	7,854
Ajmer	243	169	212	222	8	8	11	26	194	182	208	272
Alwar	110	96	104	89	1	4	7	37	461	567	575	634
Banswara	170	200	192	190	1	1	3	5	146	171	179	184
Baran	164	147	167	180	1	1	1	2	107	118	131	147
Barmer	309	329	372	462	0	0	0	1	55	80	92	124
Bharatpur	59	61	66	80	2	3	6	22	341	430	279	499
Bhilwara	339	265	261	322	14	33	40	72	239	202	188	269
Bikaner	334	376	367	499	3	14	26	34	65	83	76	112
Bundi	120	109	116	125	1	2	2	8	140	158	169	198
Chittaurgarh	267	271	322	196	3	12	23	16	244	258	290	241
Churu	202	134	145	192	1	3	7	19	126	120	127	174
Dausa	69	59	63	64	1	3	8	21	215	245	249	298
Dhaulpur	37	31	35	34	0	1	1	4	163	200	194	221
Dungarpur	112	125	132	125	0	1	1	1	117	144	152	151
Ganganagar	202	199	288	266	20	33	56	102	197	170	165	165
Hanumangarh	170	182	204	230	8	17	23	56	197	189	194	229
Jaipur	215	195	196	182	14	41	100	213	479	566	574	663
Jaisalmer	173	168	203	249	0	0	0	1	1	2	2	2
Jalor	134	129	161	166	0	0	0	1	187	218	249	277
Jhalawar	178	186	194	188	0	0	1	2	141	162	178	193
Jhunjhunun	67	51	50	30	4	22	51	111	202	224	215	225
Jodhpur	387	312	364	467	10	25	22	37	125	136	157	181
Karauli	72	52	57	51	0	1	1	5	213	228	235	285
Kota	118	113	125	124	1	1	2	5	114	121	137	145
Nagaur	298	230	252	275	1	5	9	43	256	258	276	333
Pali	209	157	195	200	2	3	3	6	191	183	191	188
Pratapgarh				122				9				92
Rajsamand	127	108	120	118	5	9	13	16	139	127	140	138
Sawai Madhopur	74	69	56	62	0	2	1	1	145	147	151	193
Sikar	112	94	103	82	7	20	42	119	268	307	307	327
Sirohi	93	90	102	104	0	0	1	2	79	95	105	118
Tonk	148	104	121	125	0	1	3	5	155	148	191	233
Udaipur	324	365	338	363	7	16	12	32	287	338	325	345

Zero denotes either nil or negligible.

SOURCE: 16th, 17th, 18th and 19th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, 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)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	2,409	2,208	2,903	3,091	54	173	316	654	3,136	3,392	3,929	4,448
Ajmer	103	74	107	115	3	5	6	16	101	95	116	151
Alwar	51	45	62	50	1	3	5	24	263	302	365	374
Banswara	59	72	85	80	0	0	2	3	67	78	94	91
Baran	69	59	94	90	0	0	1	1	54	55	79	81
Barmer	142	158	190	242	0	0	0	1	31	41	53	72
Bharatpur	30	32	41	47	1	2	4	14	193	249	183	301
Bhilwara	123	98	119	147	5	17	23	41	107	88	97	137
Bikaner	154	165	182	258	2	9	19	22	30	41	42	62
Bundi	48	44	61	56	0	1	1	4	69	76	96	96
Chittaurgarh	99	103	167	88	1	7	13	9	114	122	157	123
Churu	95	69	82	105	1	2	5	12	63	63	74	103
Dausa	31	27	38	36	0	2	5	13	119	127	157	172
Dhaulpur	16	14	22	19	0	1	0	2	92	110	129	134
Dungarpur	35	41	53	48	0	0	0	1	50	65	76	72
Ganganagar	102	100	160	140	10	20	39	60	106	85	89	90
Hanumangarh	89	94	121	129	4	10	15	35	109	105	121	137
Jaipur	98	89	112	100	7	25	66	135	269	308	359	399
Jaisalmer	71	60	93	120	0	0	0	1	0	1	1	1
Jalor	64	57	75	86	0	0	0	1	105	113	134	157
Jhalawar	69	72	95	91	0	0	0	1	69	81	102	107
Jhunjhunun	39	29	33	18	2	15	37	80	116	131	141	141
Jodhpur	175	148	197	254	5	18	15	25	66	69	87	103
Karauli	30	22	32	26	0	0	1	2	116	120	144	165
Kota	47	52	72	67	1	1	1	3	56	60	83	82
Nagaur	123	96	119	128	1	3	6	26	133	135	159	191
Pali	95	61	94	94	1	2	2	3	103	94	110	105
Pratapgarh				51				5				45
Rajsamand	47	45	56	57	2	5	8	10	67	61	74	72
Sawai Mdhopur	33	31	33	35	1	1	1	1	81	82	100	117
Sikar	55	45	60	49	3	13	30	82	136	160	188	202
Sirohi	40	35	46	45	0	0	0	1	41	47	56	62
Tonk	58	39	62	66	0	0	2	3	78	72	111	133
Udaipur	118	133	139	154	3	10	7	19	130	155	152	171

Zero denotes either nil or negligible.

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



II.1. Animal Population

TABLE II.1.6: District-wise Milch Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	4,557	4,248	4,630	5,007	78	235	397	860	4,812	5,222	5,400	6,322
Ajmer	199	142	175	183	5	7	9	22	160	152	171	223
Alwar	89	79	87	73	1	4	6	31	370	440	470	504
Banswara	137	164	155	153	0	1	2	4	118	138	144	150
Baran	130	121	140	149	0	0	1	1	86	94	109	122
Barmer	252	276	305	371	0	0	0	1	45	63	74	100
Bharatpur	50	51	57	68	1	2	6	19	281	355	235	408
Bhilwara	277	217	216	266	9	27	33	60	191	159	154	218
Bikaner	271	304	290	396	2	12	23	27	50	65	60	86
Bundi	96	90	95	99	0	2	2	6	113	127	136	155
Chittaurgarh	213	221	264	158	2	10	18	13	197	208	236	192
Churu	165	111	116	155	1	2	6	16	95	89	97	136
Dausa	56	49	54	53	1	2	7	17	174	192	205	242
Dhaulpur	30	26	29	29	0	1	1	3	136	163	162	182
Dungarpur	90	102	104	97	0	0	1	1	91	113	119	118
Ganganagar	163	159	234	205	14	27	47	81	153	126	118	124
Hanumangarh	138	145	163	182	6	14	18	44	153	144	150	177
Jaipur	176	163	167	150	10	34	85	179	395	461	475	544
Jaisalmer	138	145	164	204	0	0	0	1	1	1	1	2
Jalor	106	100	124	136	0	0	0	1	149	165	192	217
Jhalawar	146	154	155	152	0	0	0	1	115	131	144	157
Jhunjhunun	55	42	41	25	3	18	42	94	149	166	167	176
Jodhpur	308	256	294	385	7	22	18	32	103	109	127	149
Karauli	58	43	45	42	0	0	1	3	175	184	188	232
Kota	95	93	103	104	1	1	2	4	94	98	112	119
Nagaur	243	193	206	225	1	4	7	36	210	214	229	270
Pali	170	127	161	163	1	3	2	5	156	147	158	153
Pratapgarh				98				7				73
Rajsamand	101	89	98	97	3	7	11	13	111	99	111	111
Sawai Mdhopur	62	58	49	53	0	2	1	1	121	125	130	162
Sikar	91	76	85	69	5	17	35	101	202	231	244	262
Sirohi	75	72	83	81	0	0	0	1	64	75	83	94
Tonk	121	87	101	105	0	0	2	4	127	123	157	191
Udaipur	257	292	269	281	4	14	9	26	227	264	240	272

Zero denotes either nil or negligible.

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



II.1. Animal Population

TABLE II.1.7: District-wise Male Population

Districts	Indigenous Cattle ('000)				Crossbred Cattle ('000)				Buffalo ('000)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	4,228	3,547	3,513	3,023	33	69	123	239	1,182	1,126	1,326	1,575
Ajmer	140	78	84	59	2	2	3	6	40	29	41	53
Alwar	52	41	35	18	0	1	2	8	82	84	104	121
Banswara	356	396	387	338	0	0	2	2	25	32	31	28
Baran	189	131	116	90	0	0	1	3	31	29	37	40
Barmer	116	101	129	140	0	0	0	0	14	17	23	33
Bharatpur	20	19	20	17	1	1	2	5	60	71	58	105
Bhilwara	269	203	164	160	4	8	10	19	49	35	39	73
Bikaner	96	88	120	135	1	2	7	7	13	16	19	28
Bundi	158	114	108	59	0	1	1	2	35	29	38	39
Chittaurgarh	330	316	290	157	2	4	9	10	55	54	66	53
Churu	48	30	37	45	0	1	2	4	24	18	23	35
Dausa	48	40	31	17	0	1	2	4	37	33	43	52
Dhaulpur	26	16	13	8	0	0	0	1	31	27	33	41
Dungarpur	254	255	253	207	0	0	0	1	17	21	24	21
Ganganagar	84	77	93	84	6	9	13	25	35	26	29	31
Hanumangarh	51	58	66	72	2	6	7	16	34	29	34	44
Jaipur	120	84	66	39	3	10	20	37	84	86	102	113
Jaisalmer	76	40	76	87	0	0	0	0	0	0	1	1
Jalor	96	71	73	58	0	0	0	0	33	35	43	50
Jhalawar	193	182	177	127	0	0	0	1	33	40	44	45
Jhunjhunun	17	13	12	6	1	5	11	19	36	33	34	39
Jodhpur	119	76	112	124	1	2	4	7	28	24	37	40
Karauli	56	35	37	22	0	0	0	2	38	33	46	61
Kota	108	75	70	45	0	0	1	2	26	26	35	35
Nagaur	83	58	66	59	0	1	3	11	72	58	69	75
Pali	127	78	83	72	0	0	1	1	37	29	36	37
Pratapgarh				147				3				19
Rajsamand	128	93	100	74	2	2	4	4	26	23	27	28
Sawai Madhopur	88	59	41	24	0	0	0	0	30	24	32	39
Sikar	41	33	33	17	3	8	13	27	53	56	57	65
Sirohi	84	70	64	50	0	0	0	0	14	14	16	16
Tonk	137	84	77	43	0	0	1	2	34	27	39	50
Udaipur	518	533	479	425	2	4	3	9	56	70	67	65

Zero denotes either nil or negligible.

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



II.2. Sex Ratio in Dairy Animals

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

Districts	Indigenous Cattle (%)				Crossbred Cattle (%)				Buffalo (%)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	35	34	31	26	12	15	15	14	15	11	12	12
Ajmer	30	26	22	16	13	13	17	15	12	10	12	12
Alwar	25	24	19	12	11	14	13	12	8	9	11	11
Banswara	62	60	60	57	11	28	29	17	36	12	11	10
Baran	46	40	33	27	17	28	29	51	15	15	17	16
Barmer	22	19	20	18	15	20	22	19	36	13	15	15
Bharatpur	20	18	17	13	11	15	16	14	21	10	12	13
Bhilwara	37	37	32	27	13	15	15	15	16	11	13	16
Bikaner	17	15	19	16	12	12	16	13	19	12	15	14
Bundi	50	45	40	26	15	19	17	18	15	12	13	12
Chittaurgarh	48	47	40	37	14	20	22	29	27	13	14	13
Churu	15	14	15	14	11	15	14	13	12	9	11	12
Dausa	34	34	26	16	11	14	13	11	9	9	10	11
Dhaulpur	34	28	21	15	12	15	23	13	18	9	11	12
Dungarpur	63	61	60	56	10	33	27	21	24	10	10	9
Ganganagar	22	22	19	18	11	16	14	15	17	10	10	12
Hanumangarh	17	19	18	18	10	19	18	16	14	9	10	11
Jaipur	29	24	19	13	11	14	12	11	10	10	11	11
Jaisalmer	24	16	22	20	21	22	21	16	17	15	20	19
Jalor	33	29	25	20	10	22	38	17	30	10	10	11
Jhalawar	45	43	41	34	14	22	23	31	13	15	15	14
Jhunjhunu	15	15	14	12	10	13	12	10	11	9	9	10
Jodhpur	18	16	18	16	13	6	12	12	7	14	14	13
Karauli	37	34	31	24	11	26	12	26	34	9	12	13
Kota	40	33	29	21	14	16	17	19	15	13	16	15
Nagaur	17	16	16	14	16	15	21	16	14	14	15	13
Pali	30	28	24	21	12	10	13	12	13	10	12	12
Pratapgarh				47				17				13
Rajsamand	43	39	38	32	12	15	19	15	19	11	12	13
Sawai Madhopur	47	39	35	22	13	10	13	20	10	10	13	12
Sikar	20	21	18	13	12	20	17	13	23	11	11	12
Sirohi	39	37	32	26	11	19	17	13	24	10	10	8
Tonk	41	38	32	20	14	15	13	20	26	12	13	13
Udaipur	54	53	52	46	12	16	18	17	16	13	13	12

Zero denotes either nil or negligible.

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



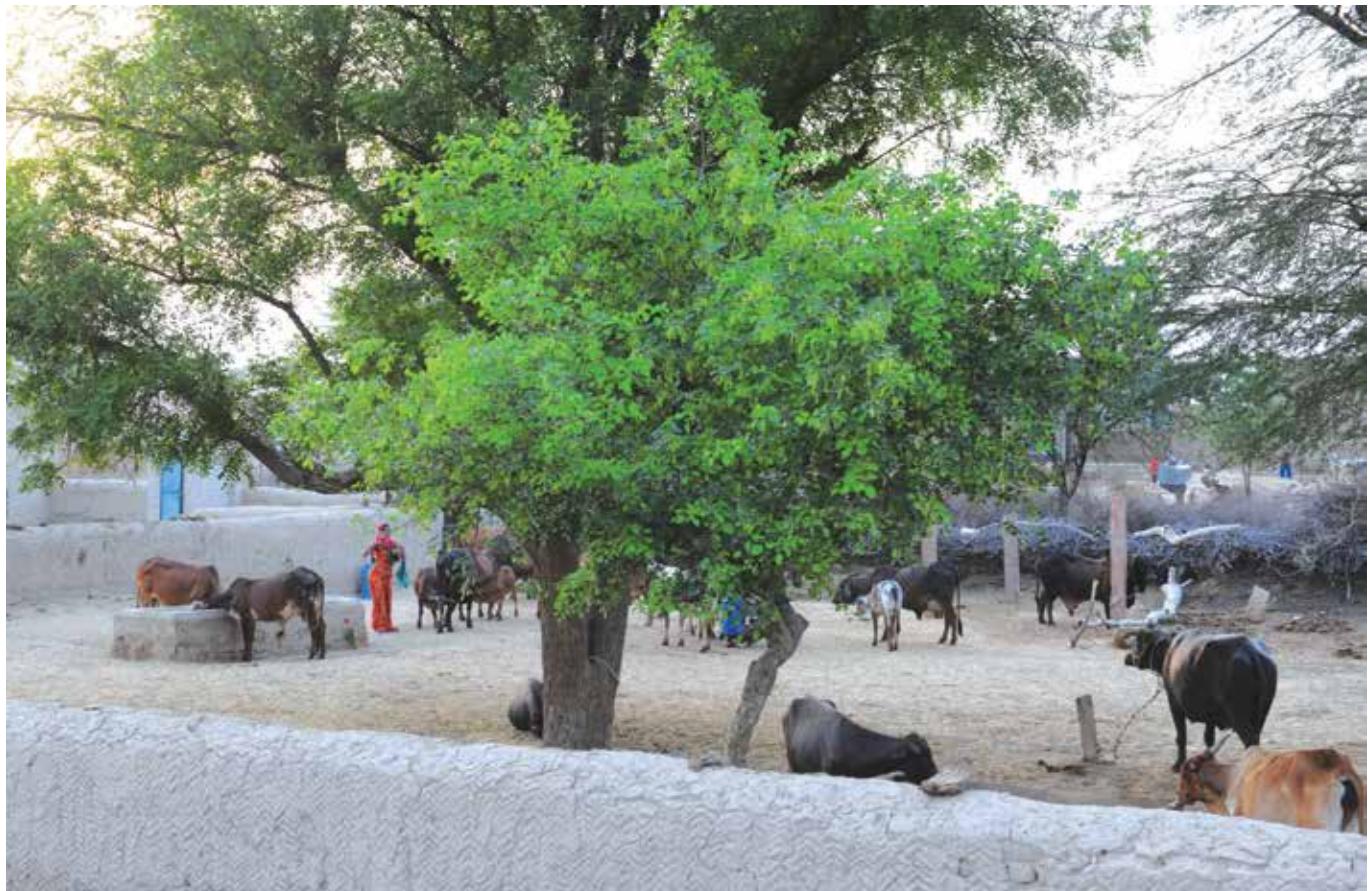
II.3. Wet-Dry Ratio of Dairy Animals

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

Districts	Indigenous Cattle (%)				Crossbred Cattle (%)				Buffalo (%)			
	1997	2003	2007	2012	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	53	52	63	62	69	74	79	76	65	65	73	70
Ajmer	52	52	61	63	63	66	74	73	63	63	68	68
Alwar	57	57	70	69	69	73	83	76	71	69	78	74
Banswara	43	44	55	52	67	69	72	71	57	56	65	61
Baran	53	49	68	61	77	75	70	66	63	58	73	66
Barmer	56	57	62	65	65	74	79	66	68	65	71	71
Bharatpur	60	62	73	69	64	73	79	76	69	70	78	74
Bhilwara	44	45	55	55	60	65	67	68	56	55	63	63
Bikaner	57	54	63	65	74	74	83	81	59	64	71	73
Bundi	50	48	63	56	64	65	70	67	61	60	71	62
Chittaurgarh	47	47	63	56	64	68	71	68	58	59	67	64
Churu	58	62	71	68	72	81	82	75	66	70	77	76
Dausa	56	55	70	68	65	73	75	73	69	66	77	71
Dhaulpur	53	55	75	65	67	71	76	71	68	67	80	74
Dungarpur	39	40	51	50	81	69	74	76	55	57	64	61
Ganganagar	63	63	68	68	70	74	83	75	69	68	75	73
Hanumangarh	64	65	74	71	70	75	82	78	71	73	80	77
Jaipur	56	55	67	67	72	73	78	75	68	67	75	73
Jaisalmer	51	41	57	59	71	77	74	79	57	52	65	71
Jalor	60	57	60	63	53	61	85	78	70	68	70	72
Jhalawar	47	47	61	60	72	69	71	69	60	62	71	68
Jhunjhunun	72	70	79	72	78	84	88	84	78	79	84	80
Jodhpur	57	58	67	66	76	78	80	79	64	63	69	69
Karauli	52	52	70	62	73	68	88	65	66	65	76	71
Kota	49	56	70	65	80	72	69	72	60	62	74	69
Nagaur	51	50	58	57	78	72	77	72	63	63	69	71
Pali	56	48	58	58	62	68	74	72	66	64	70	69
Pratapgarh				52				65				62
Rajsamand	47	50	57	58	65	67	72	73	60	62	67	64
Sawai Madhopur	53	54	69	67	63	76	86	83	67	66	77	72
Sikar	60	59	71	71	73	78	85	82	67	69	77	77
Sirohi	53	49	56	55	60	72	72	70	65	63	67	66
Tonk	48	45	61	63	49	62	77	74	61	59	70	69
Udaipur	46	46	52	55	70	77	76	72	57	59	63	63

Zero denotes either nil or negligible.

SOURCE: 16th, 17th, 18th and 19th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, 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)			
	1997	2003	2007	2012	1997	2003	2007	2012
RAJASTHAN	159	144	166	169	64	62	68	77
Ajmer	248	190	239	232	94	69	86	100
Alwar	194	199	240	206	115	131	140	151
Banswara	259	310	309	309	178	203	204	195
Baran	117	112	124	115	85	74	83	85
Barmer	145	116	158	189	22	24	28	35
Bharatpur	182	207	183	251	127	159	119	198
Bhilwara	259	203	194	234	108	88	85	112
Bikaner	84	81	85	92	22	25	27	36
Bundi	169	155	172	167	95	88	96	97
Chittaurgarh	221	238	256	176	139	141	158	109
Churu	154	104	137	134	39	30	34	46
Dausa	233	243	283	292	143	147	160	182
Dhaulpur	149	158	174	174	110	120	123	138
Dungarpur	273	303	309	289	153	168	175	161
Ganganagar	130	120	151	144	67	61	79	83
Hanumangarh	129	120	140	138	66	67	76	92
Jaipur	208	221	255	252	108	117	131	153
Jaisalmer	64	46	74	83	8	6	9	11
Jalor	170	154	179	153	57	57	66	72
Jhalawar	149	167	182	165	106	111	117	111
Jhunjhunun	210	200	237	217	80	85	92	104
Jodhpur	172	116	146	157	38	31	40	50
Karauli	144	140	177	169	89	84	94	105
Kota	126	126	139	124	86	81	91	88
Nagaur	183	149	176	178	52	44	50	60
Pali	223	172	187	186	60	46	54	54
Pratapgarh				172				108
Rajsamand	265	233	249	242	114	97	110	104
Sawai Madhopur	176	166	196	179	93	86	82	95
Sikar	232	241	293	274	87	91	100	114
Sirohi	188	189	188	175	67	65	72	74
Tonk	175	141	169	168	81	62	77	86
Udaipur	216	253	233	237	122	134	125	130

Zero denotes either nil or negligible.

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





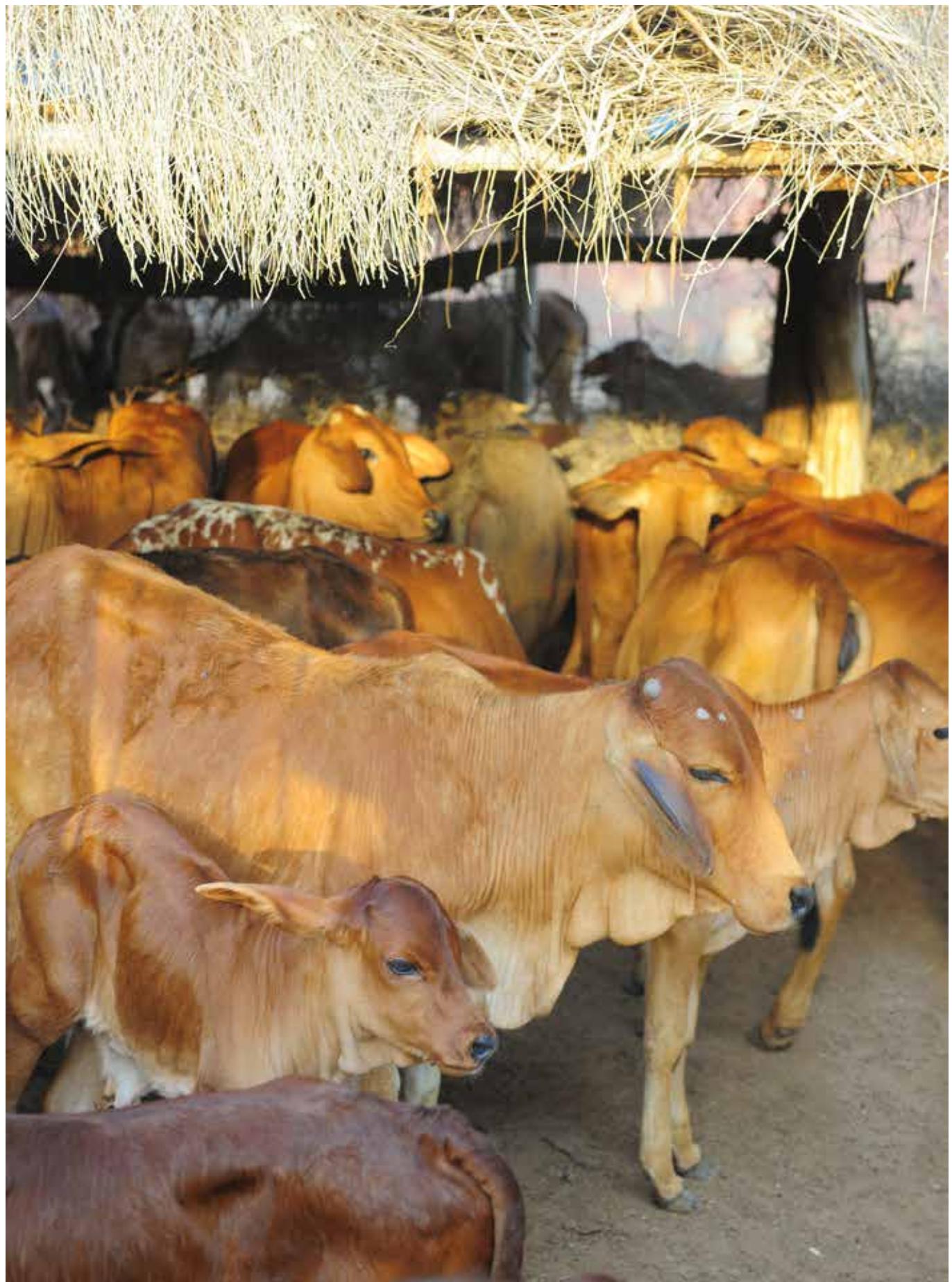
II.5. Cattle and Buffalo Breeds

TABLE II.5.1: Cattle and Buffalo Breeds of Rajasthan - 2012

('000)

Category			Total Male	Milch Female	Total Female
Cattle	Jersey	Exotic	11.6	41.5	68.7
		Crossbred	85.4	268.4	469.1
	Holstein Friesian	Exotic	11.2	38.2	70.2
		Crossbred	130.3	512.1	1,018.8
	Gir	Pure	70	155.4	259.1
		Graded	85.9	205.2	358.3
	Hariana	Pure	34.9	117.5	195.8
		Graded	33.1	102.3	179.6
	Kankrej	Pure	79.3	218.1	372.4
		Graded	75.9	135.6	240
	Malvi	Pure	203.8	164.2	271.8
		Graded	83.2	67.4	111.4
	Nagori	Pure	59.7	190.9	309.9
		Graded	23.9	67.4	109.6
	Rathi	Pure	137.5	405.6	722.3
		Graded	54.5	163.1	303.9
	Tharparkar	Pure	22.7	65.7	109.7
		Graded	59	169.9	294.9
Buffalo	Murrah	Pure	236.1	934.4	1,682
		Graded	518.9	2,181	4,011.6
	Surti	Pure	53.9	255.8	449.3
		Graded	46.6	191.5	342.3

SOURCE: Estimated Livestock Population Breedwise, Based on Breed Survey, 2013, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India.





II.5. Cattle and Buffalo Breeds

**TABLE II.5.2: District and Breed-wise Population of Indigenous Cattle breed
in Rajasthan - 2007**

Districts	Indigenous Cattle breed Population ('000)									
	Gir	Hariana	Kankrej	Malvi	Nagori	Rathi	Thar-parkar	Other's graded	Non-descript	Total Indigenous Cattle
RAJASTHAN	506.1	574.5	1,195.8	789.4	837.3	924.1	460.2	76.9	5,894.5	11,303.8
Ajmer	175	0.3	1.5	0.5	17.8	0.9	0	3.4	173.6	373.3
Alwar	0	41.8	0	0.5	0.5	0.1	0	8.4	133.1	184.5
Banswara	5.1	0.5	12.1	60	2.2	0	0	2.1	558.2	640.4
Baran	26.1	1.7	0.6	46.9	0.3	0	0	0	275.9	352.1
Barmer	0	0.1	393.8	0	0.4	0	69	0.4	171.2	637.1
Bharatpur	0.3	37.7	0.1	0.1	3.2	0	0.4	0.2	71	114.6
Bhilwara	50.7	1.5	7.5	2.5	3.2	1.5	0	0.4	447.1	514.6
Bikaner	0	13.6	0.9	0	114.7	419.5	10.6	0	67.7	629.2
Bundi	0	0	0	58	0	0	0	3.8	207.3	269.2
Chittaurgarh	39	1.8	14.9	43.7	5.9	0.5	4.9	1	603.5	718.9
Churu	0.5	95.4	0.5	2.7	48.9	50.9	0.6	0	44.1	243.8
Dausa	0	42.3	5	0	0.1	0	0	6.4	65.9	119.8
Dhaulpur	0.1	0.3	0.1	0.5	0.6	0	0	0	58	60.7
Dungarpur	0.4	0.1	1.7	66.3	1.1	2.6	0	0.4	351.5	425.2
Ganganagar	0.4	56.3	0.2	0	7	244.5	11	0.5	169.1	494
Hanumangarh	0.1	88.6	0.9	0	6.8	122.6	8.2	0.2	135	363.2
Jaipur	72.1	59.8	2.3	3.6	38.3	1	1.1	30.4	122.5	339.5
Jaisalmer	0	0.1	11.5	0	2.3	10.1	230.9	0	93.4	348.3
Jalor	0	0	292.8	0	0.1	0	0	0	0.9	293.8
Jhalawar	16.9	0	0	136	0	30	0	0.7	249.6	433.6
Jhunjhunun	0	53.5	0.8	0	6.9	6.1	0.4	0	17.3	84.9
Jodhpur	0	0.1	85.6	0.5	138.9	10	121.3	0	254.8	619.8
Karauli	2.4	5.4	0	5.8	1.8	0.7	0	0	100.2	117.1
Kota	14.5	4.9	0.6	41.7	8	0	0	2.7	171.9	244.8
Nagaur	5.1	0.8	0.3	0.1	349.8	10.2	1.2	0	33.8	402.7
Pali	16.2	0	220.1	0	24.3	0	0	0	89.5	350.2
Rajsamand	16.7	0.1	8	26.5	6.2	0.2	0	0	204	262.7
Sawai Madhopur	2	4.8	0	0.9	0	0.1	0	0.4	108.1	116.6
Sikar	0	47.4	0.1	0.4	47.5	12.2	0	0.1	69.9	178.8
Sirohi	0	0	132.1	0	0.1	0.1	0	0.1	68.6	201.7
Tonk	62.2	15.6	0.3	0	0	0	0	0	163.6	241.8
Udaipur	0.2	0.1	1.4	292.1	0.5	0	0.4	15.3	614	926.8

Zero denotes either nil or negligible.

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



II.5. Cattle and Buffalo Breeds

TABLE II.5.3: District and Breed-wise Population of Buffalo breed Animals in Rajasthan - 2007

Districts	Buffalo breed Population ('000)				
	Murrah	Surti	Others graded	Non-descript	Total Buffalo
RAJASTHAN	4,257	951.2	162.2	5,695.2	11,091.4
Ajmer	165.6	10.5	3.5	156.7	336.3
Alwar	248.6	0	15.3	708.8	974.7
Banswara	19.4	40.3	1.4	213.4	274.7
Baran	21.4	28.8	0	175.4	225.7
Barmer	135.7	1.4	0.5	18.9	156.5
Bharatpur	207.2	9.2	1.1	257	474.7
Bhilwara	27.5	19.8	6.4	249.4	303.7
Bikaner	116.1	2.5	0	12.7	131.3
Bundi	63	0	4.7	212.4	281.2
Chittaurgarh	59.4	43	2.1	369.2	474.5
Churu	179.8	3.3	0.4	30.9	214.7
Dausa	110.8	25	35.5	241.9	413.9
Dhaulpur	23.3	3.6	10.5	272.4	310
Dungarpur	26.6	25.5	0	180.1	233
Ganganagar	230.2	6.2	2.5	43.2	282.8
Hanumangarh	225.3	4.8	3.9	91.9	326.4
Jaipur	510.7	83.7	4.5	344.5	946.5
Jaisalmer	2	0.1	0	0.6	2.7
Jalor	411.3	0.1	0	0.2	411.6
Jhalawar	26.6	41.7	0	222.4	290.7
Jhunjhunun	268.3	30.6	6.9	64.6	370.5
Jodhpur	178.3	9.4	1.5	73.8	263
Karauli	53.7	4.4	29	303.1	399.3
Kota	36.5	21.5	4.8	163.8	226.6
Nagaur	193	76.9	5.3	184.1	460.3
Pali	226.5	12.4	0	76.6	315.4
Rajsamand	33.1	27.7	0.1	162.6	223.6
Sawai Madhopur	22.9	5.1	4.4	215.9	250.3
Sikar	167.1	94.2	17.2	236.8	515.7
Sirohi	122.4	4.5	0	39.1	166
Tonk	102.4	0	0.6	207.5	311.4
Udaipur	42.4	315.1	0.2	165.4	523.7

Zero denotes either nil or negligible.

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

PART III : CATTLE AND BUFFALO BREEDS

The Rajasthan state has three native cattle breeds viz Rathi, Tharparker and Nagori, having great deal of endurance. Rathi cattle breed is reared for dairy purposes in the northern districts of Shri Ganganagar, Bikaner and parts of Jaisalmer which are irrigated or partially irrigated arid zones with alluvial or loamy soil. The Tharparkar cattle breed is native of the Jodhpur and Jaisalmer districts in eastern region of the state which has arid climate characterised by low rainfall and desert soil. Tharparkar is also known as "White Sindhi", "Cutchi" or "Thari" cattle breed reared for dual purpose of draught and milk production as it can produce milk under rigorous feeding and unfavourable environmental conditions. Nagori cattle breed has been named after the Nagaur district which is in central part of the state. The Nagori cattle are sturdy and used for ploughing, cultivation, drawing water from wells as well as transportation of field produce to markets. Earlier they were used as trotters in light iron-wheeled carts for quick transportation. There was a good demand of Nagori animals in Bihar but after implementation of Rajasthan Bovine Animal (Prohibition on Slaughter and Regulation of Temporary Migration or Export) Act, the demand has tapered off. In addition to native breeds, Gir, Malvi, Kankrej and Haryana cattle are found in large numbers in the State.

In case of buffalo, there is no native breed. However, enormous number of Murrah, Surti buffaloes are reared in the region.





II.1. Distribution of Native Breeds in Rajasthan

TABLE III.1.1: Distribution of Cattle Breeds in Rajasthan

Breed	Breeding Tract	Utility	Distribution
Rathi	Bikaner, Ganganagar and Jaisalmer districts of Rajasthan	Milch	Mainly distributed in Bikaner, Ganganagar and Hanumangarh districts
Tharparkar	Jodhpur, Barmer, Jaisalmer districts of Rajasthan and Kutch district of Gujarat	Milk and Draught	Distributed in Jaisalmer, Jodhpur and Barmer districts
Nagori	Nagaur, Bikaner and Jodhpur districts of Rajasthan	Draught	Mainly distributed across Nagaur, Jodhpur, Bikaner districts

SOURCE: Animal Genetic Resources of India (AGRI-IS), National Bureau of Animal Genetic Resources, ICAR and 18th Livestock Census, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India.

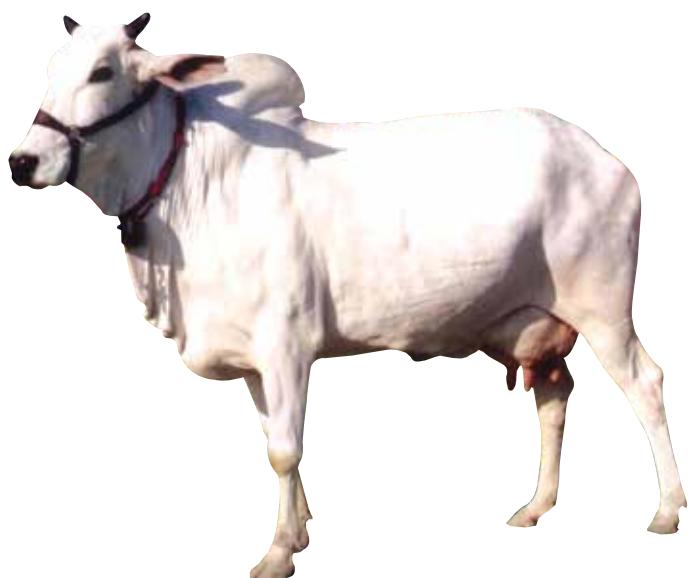




Distribution of Indigenous Cattle Breeds



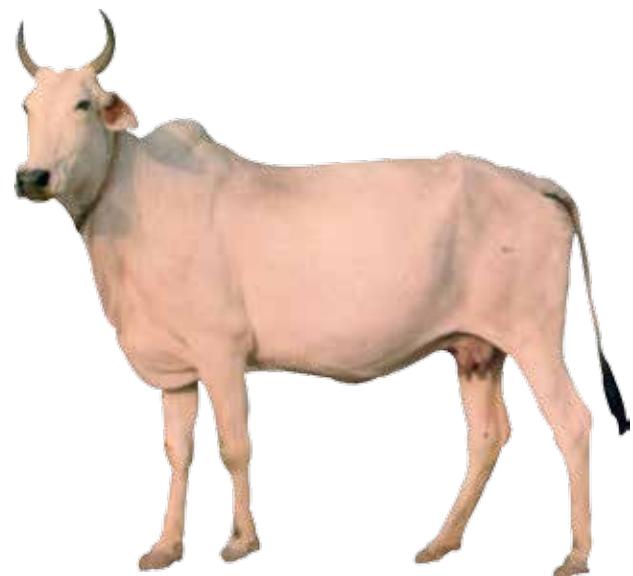
Rathi



Tharparkar



Distribution of Indigenous Cattle Breeds



Nagori



Gir



Distribution of Indigenous Cattle Breeds



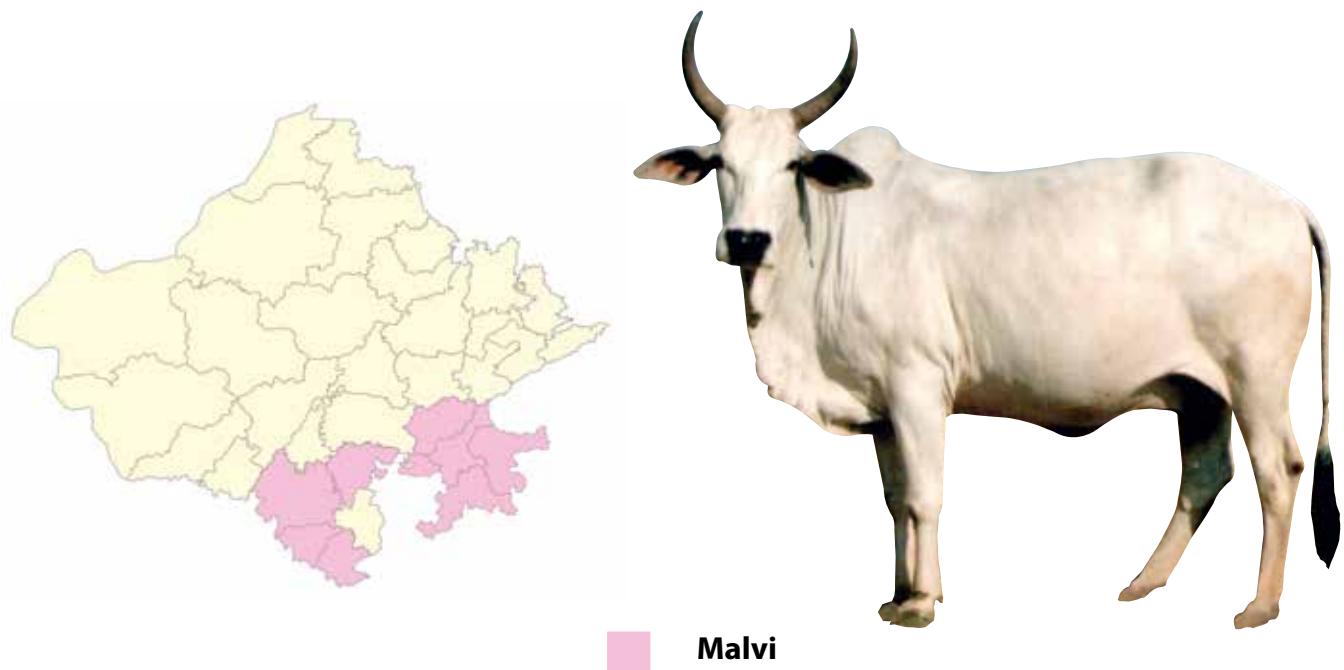
Hariana

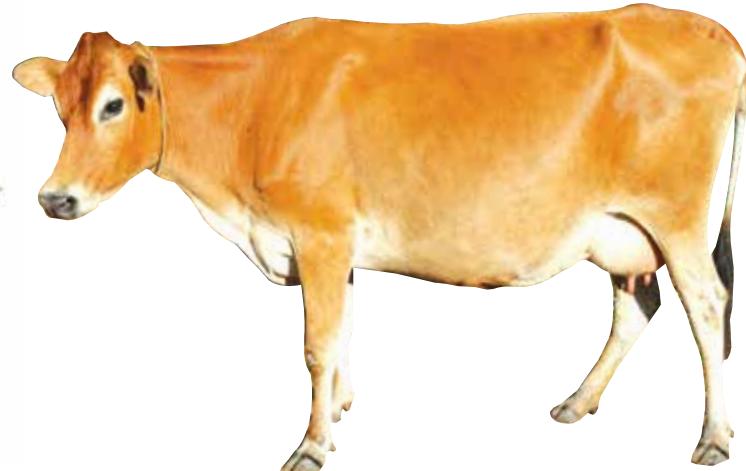


Kankrej



Distribution of Indigenous Cattle Breeds



**Distribution of Jersey Crossbred**

Jersey Crossbred

Distribution of Holstein Friesian Crossbred

Holstein Friesian Crossbred





Distribution of Buffalo Breeds



Murrah



Surti



III.2. Performance of Major Breeds

TABLE III.2.1: Performance of Native Cattle Breeds

Parameters	Cattle		
	Rathi	Tharparkar	Nagori
Breed Population as on 2012	1,218,294	486,339	503,193
Colour	The animals are usually brown with white patches all over the body, but animals having completely brown, or black coat with white patches are often encountered.	Animals are white or light grey. Face and extremities are of a darker shade than the body.	Generally white or light grey. In some cases head, face and shoulder are slightly greyish.
Average Adult Body Weight (Kg)	Male : 475 Female : 295	Male : 475 Female : 295	Male : 363 Female : 318
Lactation Yield (Kg)	1,560 (1,062 - 2,810)	1,749 (913 - 2,147)	603 (479 - 905)
Lactation Length (days)	336	285	267 (237 - 300)
Calving Interval (days)	512 (420 - 600)	425 (403-565)	455 (420 - 540)
Age at First Calving (days)	1,392 (1,080 - 1,560)	1,231 (1,101 - 1,575)	1,421 (1,260 - 1,500)
Average Milk Fat (%)	3.7 - 4.0	4.9 (4.7 - 4.9)	5.8

SOURCE: Animal Genetic Resources of India (AGRI-IS), National Bureau of Animal Genetic Resources, ICAR and Estimated Livestock Population Breed Wise, Based on Breed Survey 2013, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India. AE Nivsarkar et al., (2000), Animal Genetic Resources of India, Cattle and Buffalo, ICAR publication.



PART IV : MILK PRODUCTION

In Rajasthan, livestock sector play major role in improving socio-economic status and fulfilling nutritional needs of rural masses. The state is second highest in milk production in the country. Of the total milk produced, 53 per cent is buffalo milk, 36 per cent is cattle milk and 11 per cent is goat milk. Per capita availability of milk is highest in Jaisalmer district having 1,085 grams of milk per day per person. Approximately, 50 per cent of the milk produced is sold in the market and only 25 per cent is consumed at home as liquid milk. Remaining 25 per cent of the milk produced is converted into milk products. Highest livestock density is in Rajsamand and Dausa district having 292 livestock per square kilometer.

Animal Husbandry is a major economic activity of the rural people of Rajasthan, especially in the arid and semi-arid regions. The State faces frequent droughts and famine which causes frequent crop failure as most of the agriculture is rain fed. In this climatic scenario, dairy sector provides sustainable year-round income to large number of farmers. Over a decade, there has been an incremental increase of 3 per cent in number of in-milk bovine with maximum increase in Jaisalmer and Pali districts.





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)
2001-02	4,941	3.775	6,808
2003-04	5,199	3.706	7,033
2004-05	5,162	3.828	7,213
2006-07	6,342	3.871	8,960
2007-08	6,554	4.119	9,855
2008-09	6,518	4.355	10,361
2009-10	6,563	4.543	10,882
2010-11	6,810	4.684	11,644
2011-12	6,757	4.802	11,842
2012-13	6,905	4.851	12,238
2013-14	7,100	4.933	12,793

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.





IV.1. Production Performance: Animal Population

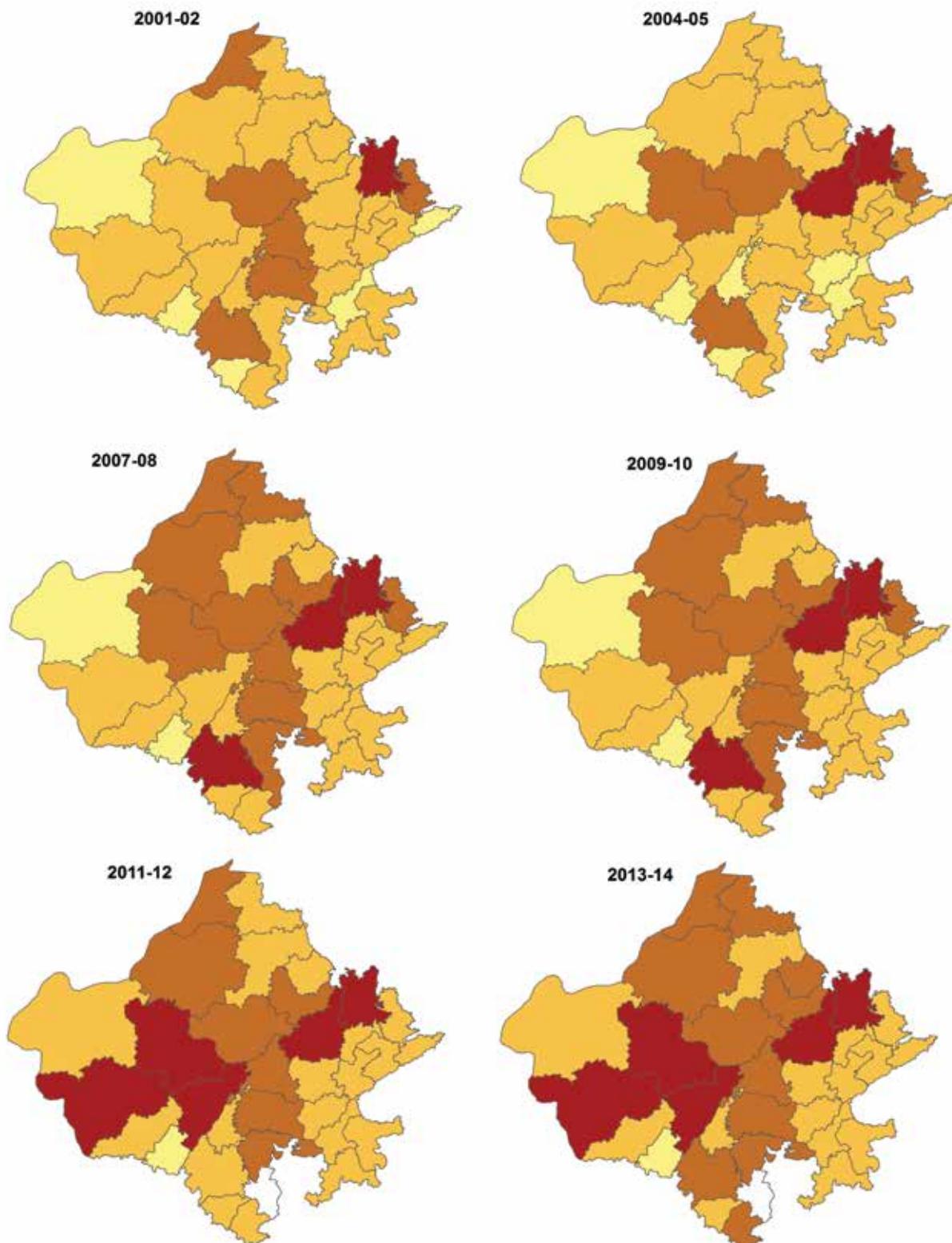
TABLE IV.1.2: Year & District-wise In-milk Bovine Population

Districts	In-milk Bovine Population ('000)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	4,941	5,199	5,162	6,554	6,518	6,563	6,810	6,757	6,905	7,100
Ajmer	203	183	186	224	223	225	234	240	247	254
Alwar	310	316	322	371	363	361	376	434	438	449
Banswara	110	125	126	167	167	168	174	191	198	209
Baran	112	97	179	187	185	185	192	156	160	156
Barmer	164	177	179	185	188	191	196	332	315	313
Bharatpur	207	263	247	298	290	288	301	153	167	177
Bhilwara	222	187	185	263	265	269	280	289	285	288
Bikaner	173	191	190	258	263	268	277	275	285	296
Bundi	104	107	92	136	134	135	140	187	180	194
Chittaurgarh	189	202	180	260	259	262	272	203	228	274
Churu	136	121	122	157	157	158	164	148	158	152
Dausa	134	198	105	149	146	146	152	185	191	185
Dhaulpur	100	108	112	130	127	126	131	109	109	115
Dungarpur	74	89	84	118	117	117	122	153	144	153
Ganganagar	210	209	188	263	265	269	278	265	273	281
Hanumangarh	193	193	195	235	235	236	245	199	211	213
Jaipur	172	368	376	492	488	490	511	380	422	421
Jaisalmer	67	59	57	79	81	83	85	105	104	111
Jalor	162	156	165	187	185	186	193	163	178	173
Jhalawar	127	135	139	172	172	173	179	180	188	188
Jhunjhunun	143	142	142	185	182	183	191	186	193	205
Jodhpur	172	202	209	273	277	283	293	375	356	377
Karauli	133	130	130	149	146	145	151	143	157	160
Kota	93	96	57	129	129	129	134	130	137	138
Nagaur	233	205	225	257	255	257	266	266	262	268
Pali	188	154	160	183	181	182	189	302	285	312
Pratapgarh										
Rajsamand	105	91	100	159	158	159	166	127	138	141
Sawai Madhopur	113	104	111	120	118	118	122	144	143	151
Sikar	171	173	172	235	233	235	245	281	270	267
Sirohi	71	69	73	88	87	88	91	92	94	95
Tonk	127	101	105	123	122	122	127	173	168	167
Udaipur	223	249	249	321	321	324	336	192	222	218

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise In-milk Bovine Population



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.1. Production Performance: Animal Population

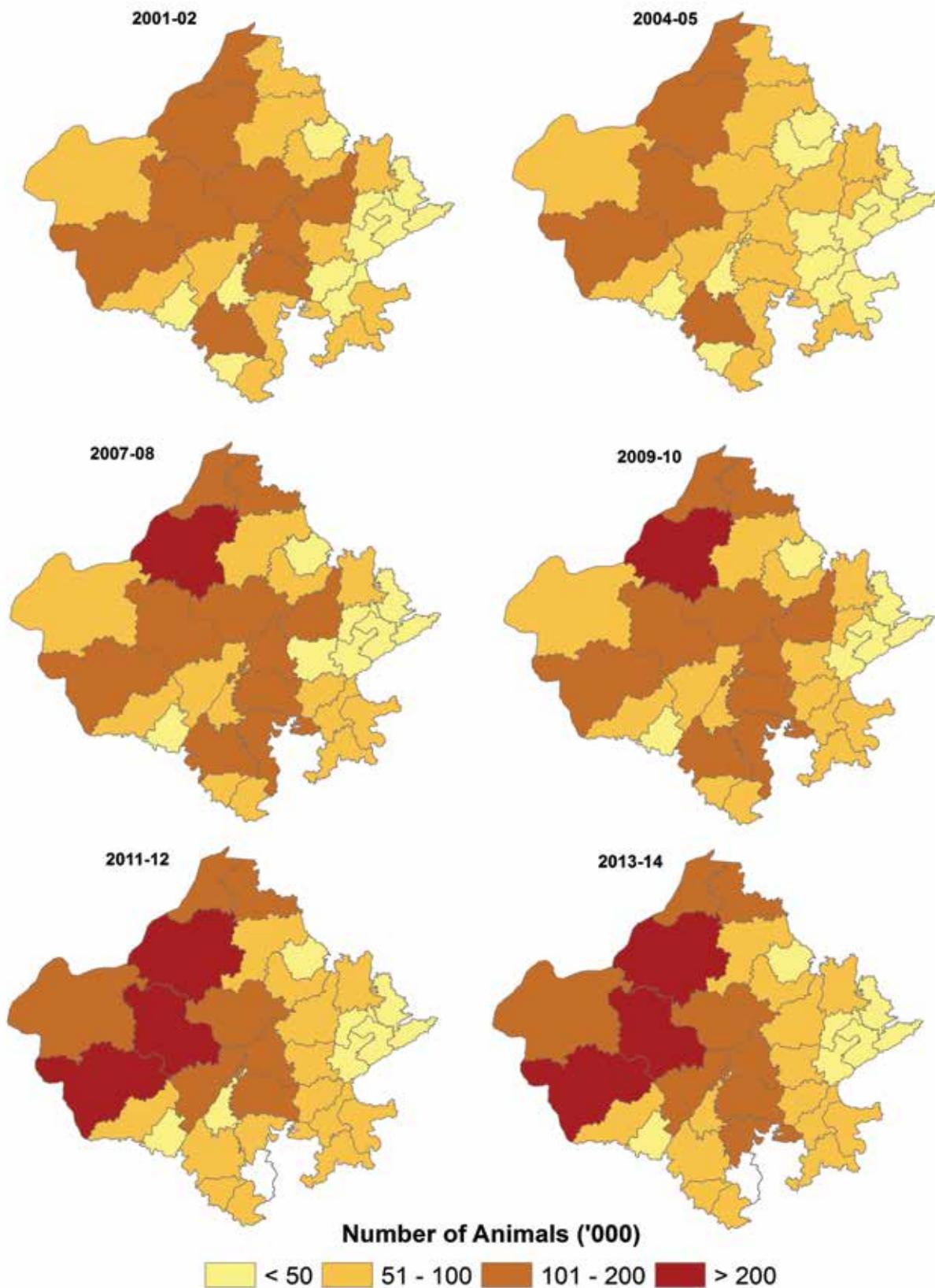
TABLE IV.1.3: Year & District-wise In-milk Indigenous Cattle Population

Districts	In-milk Indigenous Cattle Population ('000)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	2,286	2,080	2,017	2,786	2,854	2,924	2,995	2,947	3,051	3,111
Ajmer	101	82	83	109	111	114	117	106	112	112
Alwar	51	53	53	69	71	73	74	72	74	75
Banswara	51	60	63	89	92	94	96	78	86	88
Baran	65	52	45	62	64	65	67	82	82	81
Barmer	137	142	147	146	150	153	157	277	254	251
Bharatpur	28	29	28	41	42	43	44	30	34	36
Bhilwara	125	99	93	134	138	141	144	143	145	151
Bikaner	146	157	157	201	206	211	217	219	225	228
Bundi	45	42	28	59	61	62	64	78	73	84
Chittaurgarh	86	95	74	130	133	136	139	92	116	122
Churu	80	65	65	93	95	97	100	80	87	79
Dausa	28	27	58	50	51	52	53	30	44	39
Dhaulpur	15	14	16	20	20	21	21	27	26	29
Dungarpur	31	35	30	52	53	55	56	80	71	79
Ganganagar	107	112	101	143	147	150	154	156	157	161
Hanumangarh	84	93	64	121	124	127	130	101	108	105
Jaipur	101	94	96	136	139	142	146	79	99	92
Jaisalmer	67	58	57	78	80	82	84	104	103	109
Jalor	61	54	60	76	78	79	81	66	79	75
Jhalawar	64	66	69	95	97	100	102	82	88	84
Jhunjhunun	37	28	25	37	38	39	40	28	32	39
Jodhpur	171	142	141	172	177	180	185	216	216	225
Karauli	28	20	23	28	29	29	30	26	27	28
Kota	45	44	4	64	66	68	69	53	58	56
Nagaur	116	87	98	122	125	128	131	135	129	134
Pali	88	54	57	75	77	79	80	178	161	187
Pratapgarh										
Rajsamand	44	35	40	52	53	54	56	46	52	53
Sawai Madhopur	33	25	29	34	35	36	37	34	37	39
Sikar	51	42	32	58	60	61	63	61	61	68
Sirohi	33	30	32	44	45	46	47	42	45	46
Tonk	55	33	34	49	50	51	52	65	62	64
Udaipur	112	110	114	146	149	153	157	80	105	92

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise In-milk Indigenous Cattle Population



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.1. Production Performance: Animal Population

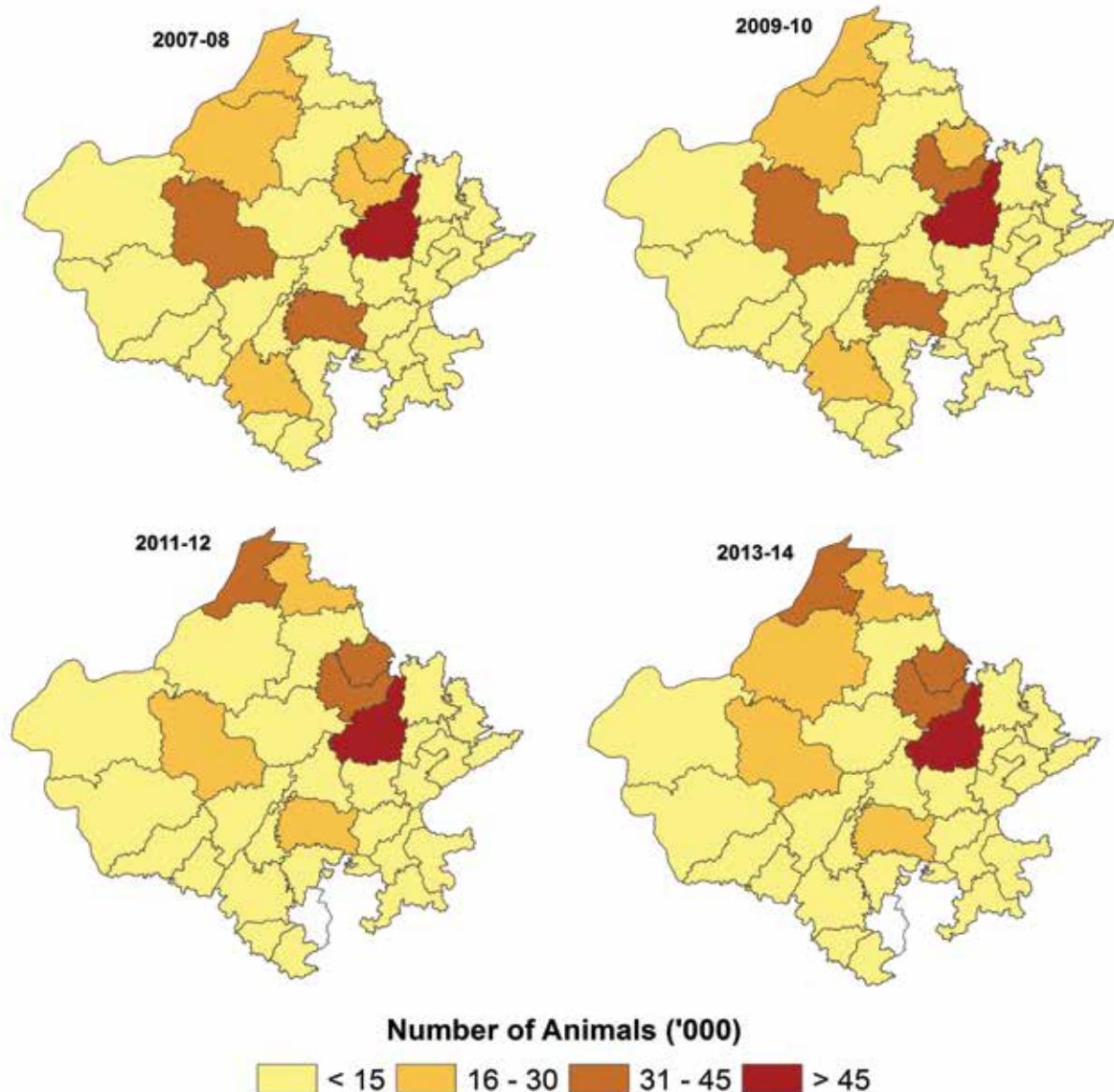
TABLE IV.1.4: Year & District-wise In-milk Crossbred Cattle Population

Districts	In-milk Crossbred Cattle Population ('000)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	243.51	272.79	291.45	311.00	332.00	311.94	326.48	331.80
Ajmer	7.01	8.39	8.95	9.55	10.19	10.42	10.50	10.69
Alwar	1.70	1.90	2.03	2.16	2.31	5.22	5.25	5.37
Banswara	0.55	0.61	0.65	0.69	0.74	2.11	2.11	2.17
Baran	0.69	0.77	0.82	0.88	0.94	0.71	0.76	0.78
Barmer	0.14	0.15	0.16	0.17	0.18	0.15	0.18	0.20
Bharatpur	0.85	0.96	1.02	1.09	1.16	6.16	6.31	6.47
Bhilwara	29.10	32.53	34.70	37.03	39.53	24.42	25.94	25.94
Bikaner	14.56	16.28	17.37	18.53	19.78	15.26	18.47	18.61
Bundi	1.63	1.83	1.95	2.08	2.22	1.59	1.72	1.82
Chittaurgarh	10.90	12.18	12.99	13.87	14.80	12.18	13.94	13.80
Churu	0.01	0.01	0.01	0.02	0.02	5.04	5.52	5.61
Dausa	0.42	0.47	0.50	0.53	0.57	6.03	6.61	7.00
Dhaulpur	0.15	0.17	0.18	0.19	0.20	0.41	0.45	0.49
Dungarpur	0.61	0.68	0.73	0.78	0.83	0.43	0.45	0.48
Ganganagar	20.11	22.48	23.99	25.59	27.32	41.75	42.13	42.71
Hanumangarh	3.58	4.01	4.27	4.56	4.87	15.70	16.27	16.42
Jaipur	42.71	47.75	50.94	54.35	58.02	48.04	49.44	49.88
Jaisalmer	0.01	0.01	0.01	0.01	0.01	0.15	0.24	0.25
Jalor	0.14	0.15	0.16	0.17	0.18	0.22	0.24	0.25
Jhalawar	0.07	0.08	0.09	0.09	0.10	0.22	0.33	0.35
Jhunjhunun	17.05	19.06	20.34	21.70	23.16	37.08	38.22	38.69
Jodhpur	31.39	35.09	37.43	39.94	42.64	17.40	18.01	18.35
Karauli	0.56	0.63	0.67	0.72	0.76	1.05	1.05	1.08
Kota	1.75	1.95	2.08	2.22	2.37	1.47	1.57	1.69
Nagaur	2.08	2.33	2.48	2.65	2.83	5.85	5.92	6.04
Pali	1.16	1.30	1.38	1.48	1.58	2.01	2.03	2.16
Pratapgarh								
Rajsamand	9.84	11.00	12.18	13.00	13.87	8.35	8.84	8.98
Sawai Madhopur	0.33	0.37	0.40	0.43	0.45	0.62	0.67	0.72
Sikar	24.22	27.08	28.89	30.82	32.90	33.13	33.65	34.14
Sirohi	0.25	0.28	0.30	0.32	0.34	0.32	0.33	0.39
Tonk	0.57	0.63	0.68	0.72	0.77	1.79	1.87	1.95
Udaipur	19.38	21.67	23.12	24.67	26.33	6.64	7.48	8.34

SOURCE: Integrated Sample Survey Reports (2006-07 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise In-milk Crossbred Cattle Population



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.1. Production Performance: Animal Population

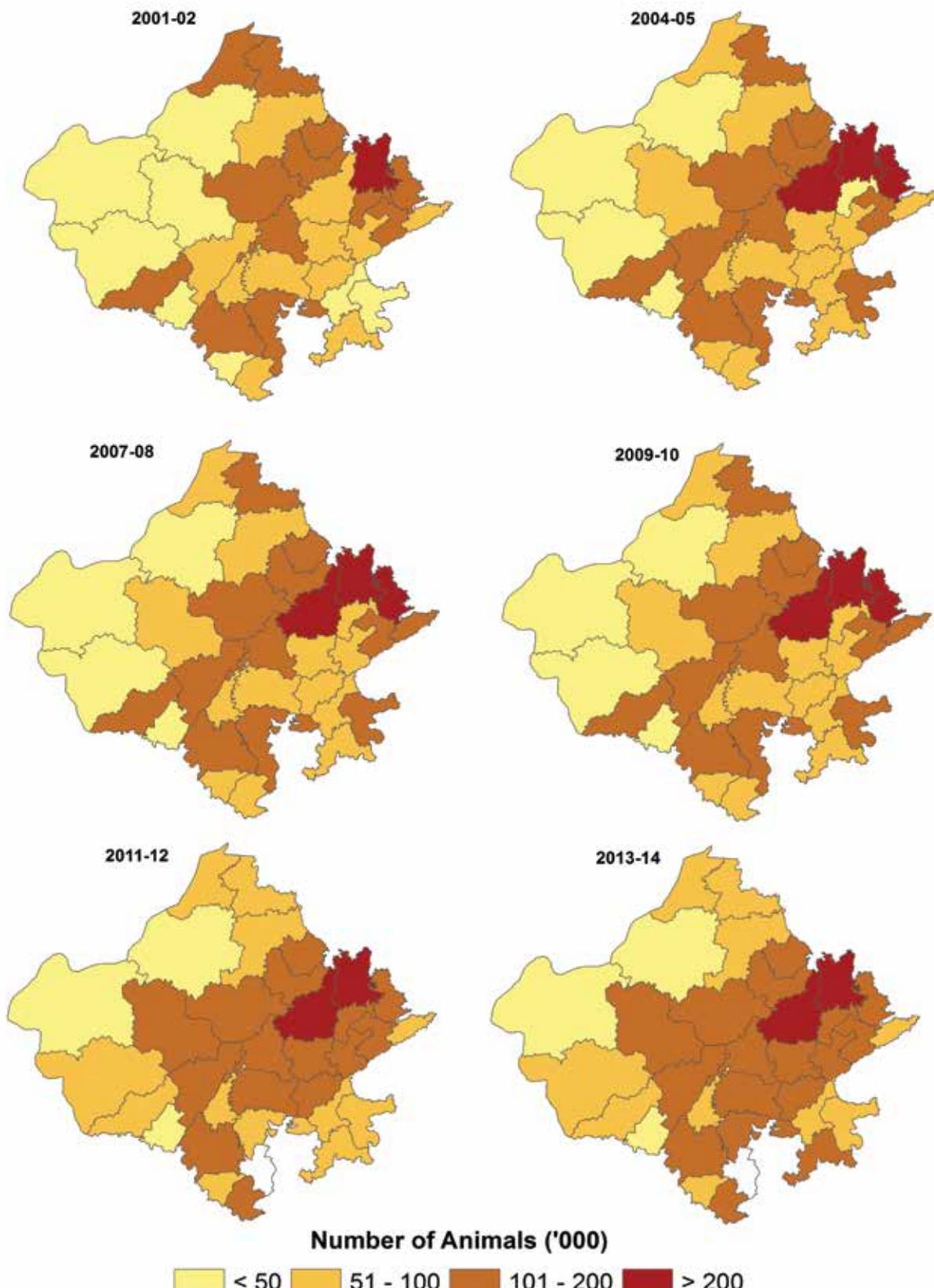
TABLE IV.1.5: Year & District-wise In-milk Buffalo Population

Districts	In-milk Buffalo Population ('000)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	2,655	3,119	3,145	3,495	3,373	3,328	3,483	3,498	3,527	3,657
Ajmer	103	101	103	107	103	102	106	123	125	131
Alwar	259	263	268	300	290	286	299	357	359	369
Banswara	59	65	64	77	74	73	77	110	110	118
Baran	47	45	134	124	120	118	124	74	77	74
Barmer	26	36	32	39	38	37	39	55	60	62
Bharatpur	179	233	219	256	247	244	255	117	126	135
Bhilwara	97	88	92	96	93	91	96	122	114	111
Bikaner	27	34	33	40	39	38	40	41	42	50
Bundi	59	65	64	74	72	71	74	107	105	108
Chittaurgarh	104	107	106	118	114	112	117	98	98	138
Churu	55	56	57	64	62	61	64	64	65	67
Dausa	107	171	47	98	95	94	98	149	140	139
Dhaulpur	85	94	96	110	107	105	110	81	83	85
Dungarpur	43	54	54	65	63	62	65	73	72	74
Ganganagar	103	96	88	97	94	93	97	68	73	78
Hanumangarh	108	100	131	110	106	105	110	83	87	92
Jaipur	71	275	281	308	297	294	307	253	274	280
Jaisalmer	0	1	1	1	1	1	1	1	1	1
Jalor	101	102	105	112	108	106	111	97	99	98
Jhalawar	63	69	70	77	74	73	77	97	100	104
Jhunjhunun	106	114	117	129	124	123	128	121	123	127
Jodhpur	1	60	68	65	63	62	65	142	122	133
Karauli	105	110	106	121	116	115	120	116	128	130
Kota	49	53	53	63	60	60	62	76	77	80
Nagaur	117	118	127	133	128	127	132	124	126	128
Pali	100	100	103	107	103	102	107	122	121	123
Pratapgarh										
Rajsamand	61	56	60	97	93	92	96	73	77	80
Sawai Madhopur	80	79	82	85	82	81	85	110	106	111
Sikar	120	131	140	150	144	143	149	187	176	165
Sirohi	38	39	41	44	42	42	44	49	48	48
Tonk	71	67	71	74	71	70	74	107	104	101
Udaipur	111	139	135	154	148	146	153	105	109	117

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise In-milk Buffalo Population





IV.2. Production Performance: Milk Yield

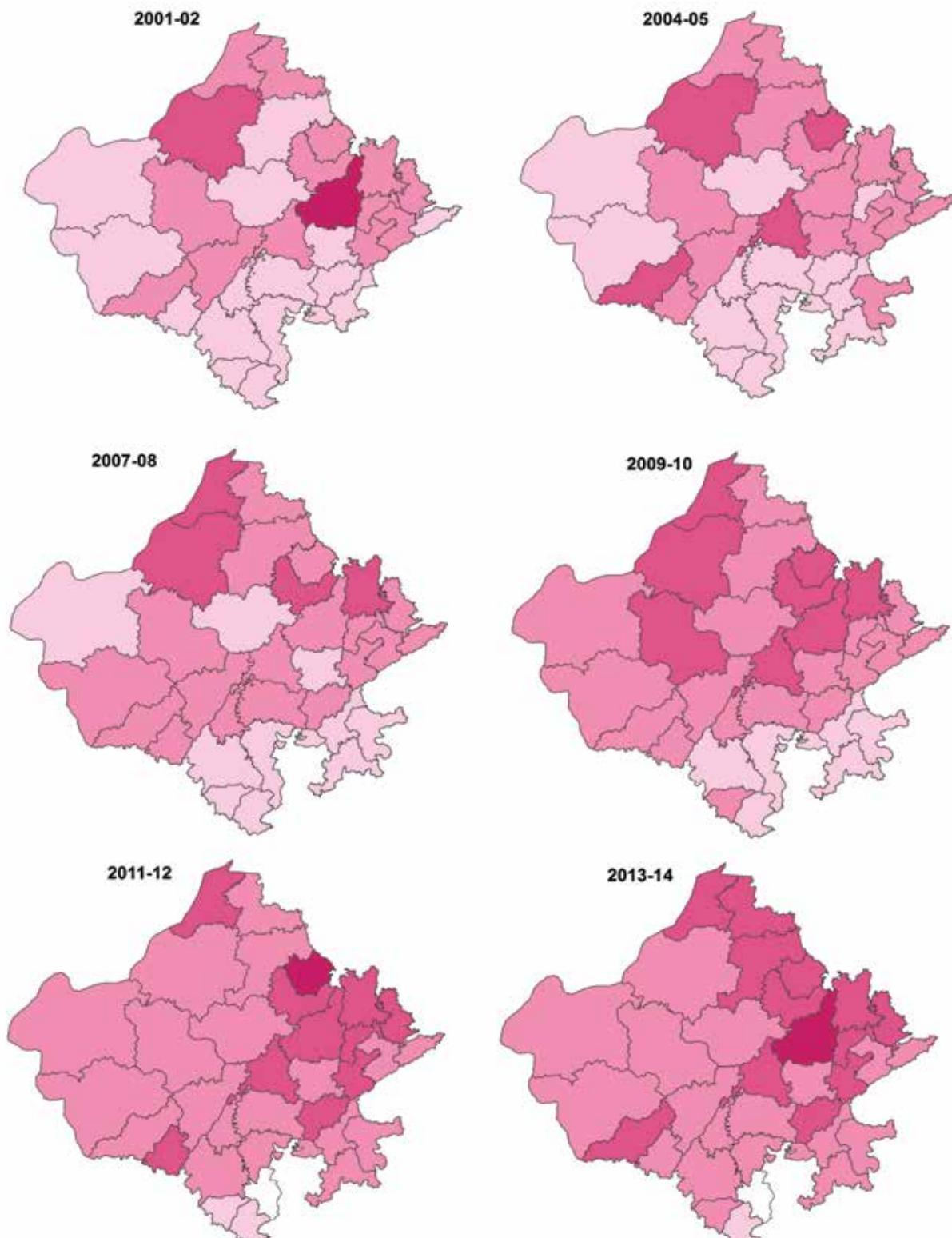
TABLE IV.2.1: Year & District-wise Bovine Milk Yield

Districts	In-milk Bovine Yield (kg/day)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	3.775	3.706	3.828	4.119	4.355	4.543	4.684	4.802	4.851	4.933
Ajmer	3.736	3.958	5.152	4.791	5.121	5.371	5.525	5.754	5.832	6.344
Alwar	4.516	4.552	4.965	5.850	6.097	6.237	6.482	5.760	5.862	6.198
Banswara	2.690	2.997	3.055	2.734	2.899	2.990	3.097	3.024	3.038	3.455
Baran	2.067	8.230	4.273	2.907	3.031	3.098	3.222	3.687	3.801	3.949
Barmer	2.652	3.197	3.161	3.628	3.920	4.076	4.207	4.027	4.079	3.970
Bharatpur	3.921	3.830	3.768	3.843	4.029	4.134	4.290	5.174	5.283	5.078
Bhilwara	3.223	3.307	3.290	3.544	3.745	4.013	4.097	4.121	4.183	4.122
Bikaner	5.281	4.912	5.058	5.142	5.614	5.958	6.092	3.519	3.934	3.891
Bundi	2.810	3.341	3.240	4.266	4.527	4.681	4.841	5.629	5.631	5.136
Chittaurgarh	2.372	2.224	2.430	2.952	3.113	3.254	3.355	3.889	3.730	4.152
Churu	3.293	3.647	3.520	4.121	4.437	4.609	4.757	4.866	4.920	5.025
Dausa	4.405	1.192	2.069	3.986	4.186	4.296	4.459	5.564	5.381	5.683
Dhaulpur	3.444	3.560	3.839	4.076	4.258	4.356	4.526	4.672	4.711	4.202
Dungarpur	2.259	2.495	2.277	3.284	3.486	3.601	3.727	3.427	3.572	3.876
Ganganagar	4.594	4.610	4.521	5.096	5.440	5.749	5.891	5.009	5.282	5.056
Hanumangarh	4.619	4.221	4.191	4.181	4.468	4.649	4.796	4.922	5.052	5.130
Jaipur	10.533	5.020	4.487	4.927	5.161	5.438	5.582	6.273	6.211	6.556
Jaisalmer	2.311	2.615	2.682	3.388	3.790	4.008	4.105	3.733	3.883	3.675
Jalor	3.651	4.773	5.088	4.284	4.548	4.692	4.858	4.744	4.732	5.237
Jhalawar	2.128	2.261	2.309	2.588	2.727	2.800	2.907	3.962	3.852	4.044
Jhunjhunun	4.096	4.685	5.031	4.679	4.863	5.155	5.288	6.626	6.598	6.401
Jodhpur	4.522	3.215	3.618	4.563	4.860	5.208	5.312	4.856	4.945	4.871
Karauli	3.535	3.599	3.717	4.229	4.423	4.531	4.706	3.577	3.645	4.040
Kota	2.389	2.303	3.205	2.592	2.732	2.826	2.926	3.936	3.839	4.089
Nagaur	3.043	3.057	3.353	3.475	3.698	3.833	3.962	4.426	4.511	4.580
Pali	3.589	3.763	3.753	4.413	4.681	4.836	5.004	4.716	4.764	4.782
Pratapgarh										
Rajsamand	2.845	2.557	2.496	3.583	3.729	3.884	4.008	4.385	4.369	4.502
Sawai Madhopur	3.744	3.855	4.221	4.650	4.866	4.984	5.178	5.112	5.116	5.326
Sikar	3.979	4.365	4.856	5.402	5.617	5.926	6.081	6.385	6.386	6.434
Sirohi	3.378	3.582	3.834	4.169	4.460	4.622	4.776	5.079	5.088	4.815
Tonk	3.387	4.097	3.605	3.200	3.392	3.504	3.626	4.616	4.715	4.381
Udaipur	2.680	2.528	2.474	3.037	3.183	3.345	3.444	4.709	4.539	4.666

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise In-milk Bovine Milk Yield



Milk Yield (Kg/day)

< 3.5 3.6 - 5.0 5.1 - 6.5 > 6.5

Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.2. Production Performance: Milk Yield

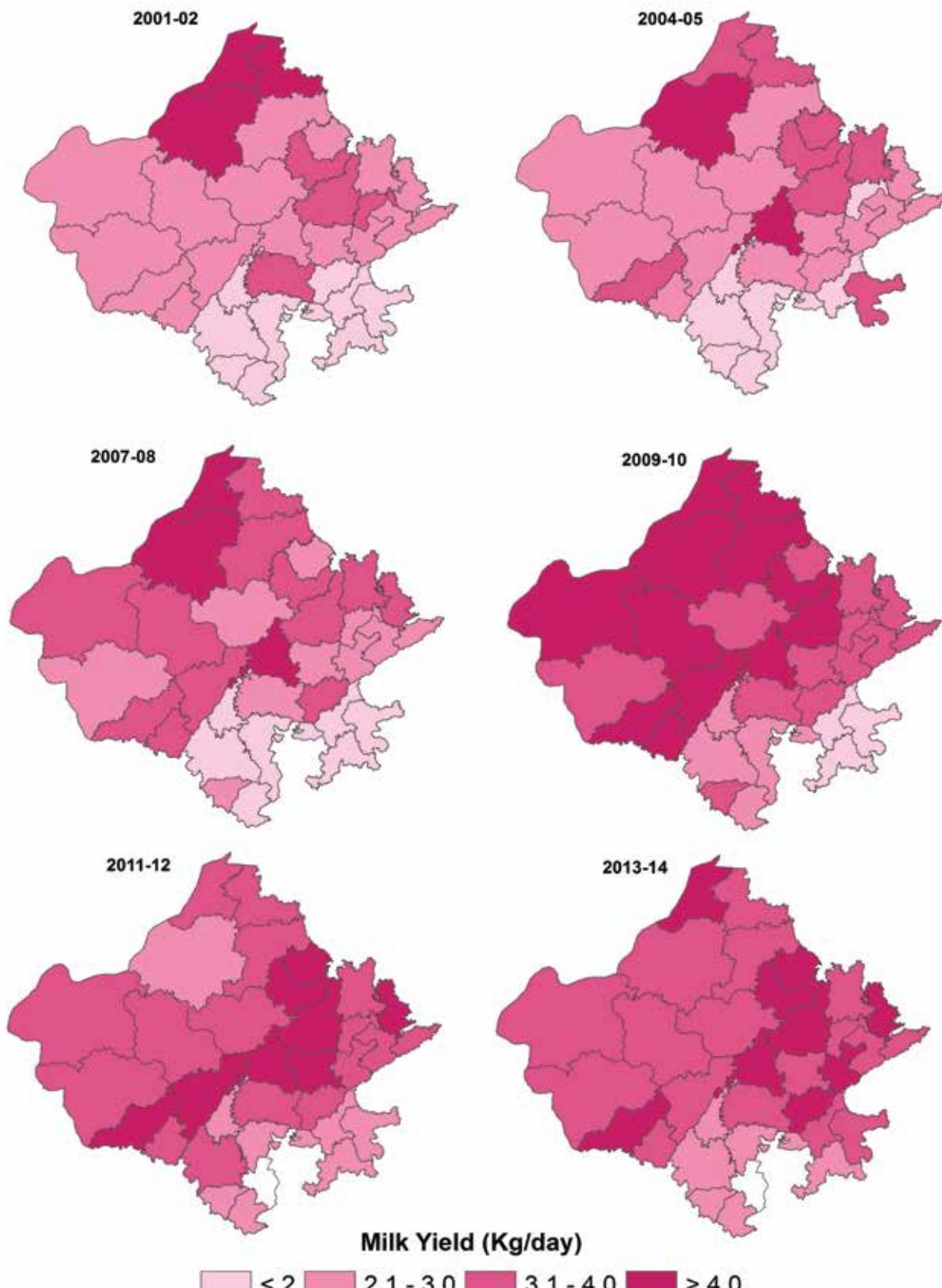
TABLE IV. 2.2: Year & District-wise Indigenous Cattle Milk Yield

Districts	Indigenous Cattle Milk Yield (kg/day)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	2.787	2.790	2.862	3.100	3.480	3.680	3.769	3.544	3.667	3.674
Ajmer	2.884	3.343	4.386	4.197	4.712	4.982	5.103	4.438	4.626	5.177
Alwar	2.995	3.101	3.514	3.109	3.490	3.691	3.780	3.682	3.810	3.984
Banswara	1.665	1.587	1.791	1.904	2.137	2.260	2.315	2.125	2.223	2.537
Baran	1.420	1.320	3.149	1.418	1.592	1.683	1.724	2.679	2.901	3.093
Barmer	2.387	3.055	2.988	2.874	3.226	3.412	3.494	3.856	3.875	3.859
Bharatpur	2.510	2.784	2.488	3.322	3.730	3.944	4.040	4.094	4.305	4.388
Bhilwara	3.127	3.004	2.380	2.709	3.041	3.215	3.293	3.098	3.159	3.192
Bikaner	5.326	4.899	4.859	4.837	5.430	5.743	5.882	2.966	3.445	3.254
Bundi	1.771	2.212	2.135	3.335	3.744	3.959	4.055	3.969	3.960	4.231
Chittaurgarh	1.385	1.383	1.573	1.987	2.230	2.359	2.416	2.653	2.613	2.908
Churu	2.818	3.290	2.971	3.557	3.993	4.223	4.325	3.839	3.955	3.853
Dausa	3.009	2.757	1.394	2.581	2.897	3.064	3.138	3.205	3.167	3.152
Dhaulpur	2.427	2.138	2.137	2.641	2.965	3.135	3.211	3.235	3.205	3.319
Dungarpur	1.676	1.679	1.557	2.548	2.861	3.025	3.098	2.639	2.776	2.826
Ganganagar	4.593	4.311	3.703	4.392	4.930	5.214	5.340	3.923	4.276	4.116
Hanumangarh	4.040	3.457	3.285	3.483	3.910	4.135	4.235	3.822	4.032	3.918
Jaipur	3.804	3.394	3.699	3.853	4.325	4.574	4.685	4.359	4.388	4.774
Jaisalmer	2.321	2.289	2.316	3.379	3.793	4.011	4.108	3.717	3.866	3.653
Jalor	2.348	3.308	3.263	3.446	3.869	4.091	4.190	4.020	4.065	4.065
Jhalawar	1.285	1.204	1.209	1.570	1.762	1.864	1.909	2.761	2.646	2.712
Jhunjhunun	2.936	3.429	3.740	2.893	3.248	3.434	3.518	4.521	4.309	4.563
Jodhpur	2.869	2.690	2.818	3.666	4.115	4.352	4.457	3.587	3.828	3.726
Karauli	2.248	2.648	2.797	2.784	3.126	3.305	3.385	3.495	3.556	3.496
Kota	1.777	1.321	1.394	1.643	1.845	1.951	1.998	2.855	2.737	3.089
Nagaur	2.453	2.396	2.592	2.746	3.082	3.259	3.338	3.488	3.516	3.514
Pali	2.458	2.430	2.430	3.495	3.924	4.149	4.249	4.025	4.059	3.997
Pratapgarh										
Rajsamand	1.922	1.815	1.940	1.891	2.123	2.245	2.299	2.536	2.646	2.764
Sawai Madhopur	2.450	2.582	2.738	2.768	3.108	3.286	3.366	3.991	4.014	4.029
Sikar	3.039	3.321	3.684	3.466	3.891	4.115	4.215	5.112	4.962	4.966
Sirohi	2.401	2.668	2.858	3.545	3.979	4.208	4.310	4.000	4.086	3.727
Tonk	2.536	2.707	2.712	2.533	2.843	3.007	3.080	4.331	4.541	3.639
Udaipur	1.842	1.844	1.983	1.870	2.099	2.220	2.274	3.060	3.046	2.993

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise Indigenous Cattle Milk Yield



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.2. Production Performance: Milk Yield

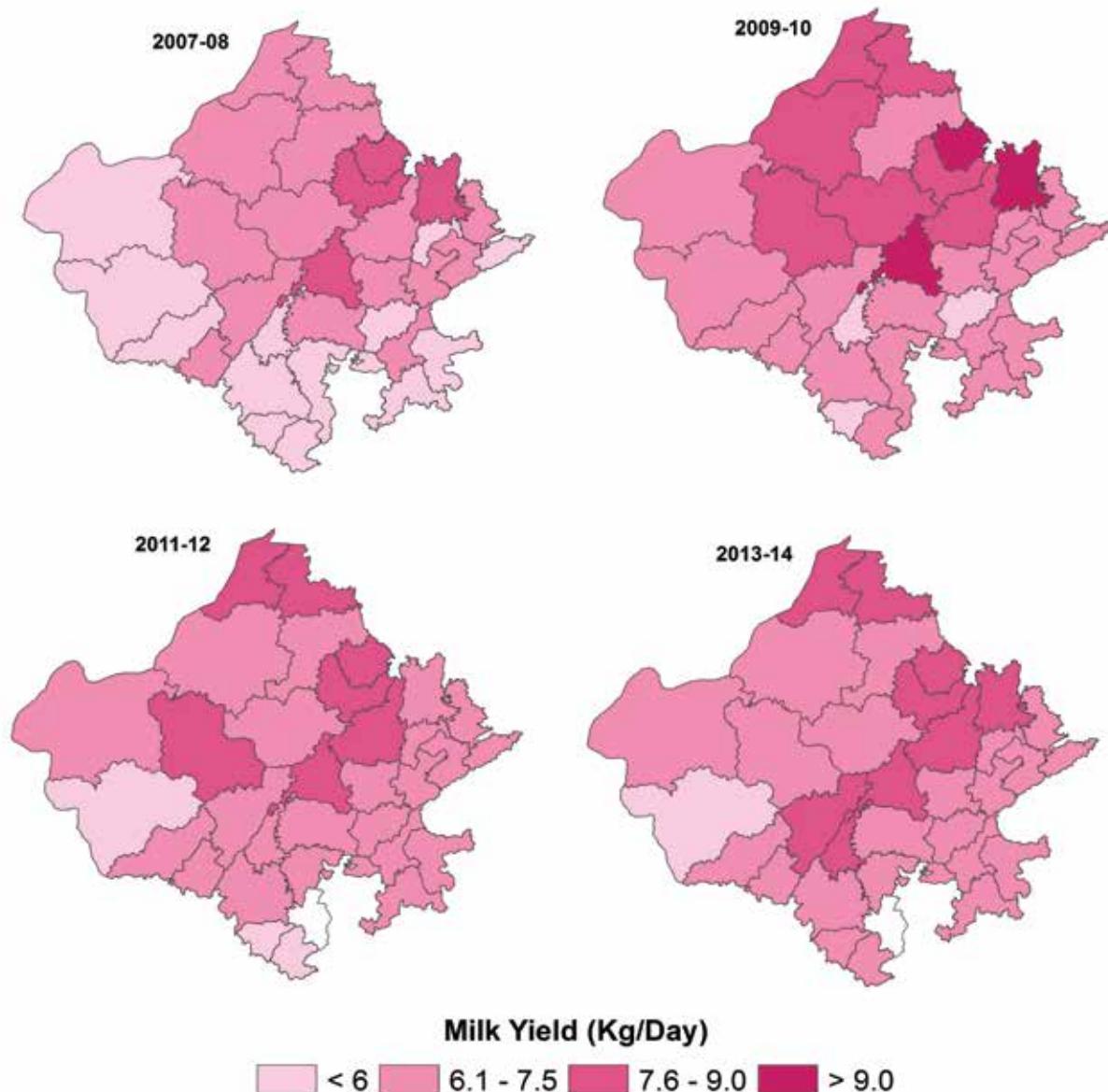
TABLE IV.2.3: Year & District-wise Crossbred Cattle Milk Yield

Districts	Crossbred Cattle Milk Yield (kg/day)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	6.820	6.823	6.608	7.770	7.535	7.595	7.669	7.749
Ajmer	8.620	8.620	8.350	9.819	9.522	7.885	8.089	8.669
Alwar	8.700	8.700	8.428	9.911	9.611	7.448	7.488	7.666
Banswara	5.462	5.462	5.291	6.222	6.034	5.937	5.905	6.109
Baran	5.350	5.350	5.183	6.094	5.910	6.266	6.258	6.386
Barmer	5.850	5.850	5.667	6.664	6.462	5.295	5.448	5.719
Bharatpur	6.012	6.012	5.824	6.849	6.641	7.309	7.295	7.431
Bhilwara	6.017	6.017	5.829	6.854	6.647	7.116	7.131	7.203
Bikaner	6.780	6.780	6.568	7.723	7.490	6.932	6.867	7.267
Bundi	4.900	4.900	4.747	5.582	5.413	7.010	7.044	7.107
Chittaurgarh	5.450	5.450	5.280	6.208	6.021	7.060	7.015	7.336
Churu	6.500	6.500	6.297	7.404	7.180	6.707	7.054	7.178
Dausa	6.000	6.000	5.812	6.835	6.628	6.949	6.920	6.933
Dhaulpur	5.420	5.420	5.250	6.174	5.987	6.669	6.743	6.945
Dungarpur	5.100	5.100	4.940	5.810	5.634	5.877	5.877	6.161
Ganganagar	6.839	6.839	6.625	7.791	7.555	7.967	8.321	8.212
Hanumangarh	6.780	6.780	6.568	7.723	7.490	7.945	8.321	7.971
Jaipur	7.156	7.156	6.932	8.152	7.905	7.850	7.822	7.917
Jaisalmer	5.511	5.511	5.339	6.278	6.088	6.240	6.584	6.594
Jalor	5.950	5.950	5.764	6.778	6.573	6.796	6.659	6.997
Jhalawar	5.480	5.480	5.309	6.243	6.054	6.180	6.607	6.623
Jhunjhunun	8.410	8.410	8.147	9.580	9.290	7.817	7.981	8.021
Jodhpur	6.940	6.940	6.723	7.906	7.667	7.766	7.845	7.461
Karauli	6.100	6.100	5.909	6.949	6.739	6.748	6.759	6.965
Kota	6.200	6.200	6.006	7.063	6.849	6.966	7.055	7.001
Nagaur	7.430	7.430	7.198	8.464	8.208	7.061	7.273	7.347
Pali	6.320	6.320	6.122	7.199	6.982	7.341	7.370	7.538
Pratapgarh								
Rajsamand	5.200	5.200	5.037	5.924	5.744	6.985	7.154	7.730
Sawai Madhopur	6.500	6.500	6.297	7.404	7.180	6.540	6.547	6.787
Sikar	7.800	7.800	7.556	8.885	8.617	8.121	8.267	8.313
Sirohi	6.130	6.130	5.938	6.983	6.772	6.518	6.528	6.682
Tonk	6.200	6.200	6.006	7.063	6.849	7.032	7.038	7.111
Udaipur	5.722	5.722	5.543	6.518	6.321	6.731	6.533	6.553

SOURCE: Estimated from Integrated Sample Survey Reports (2006-07 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise Crossbred Cattle Milk Yield



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.2. Production Performance: Milk Yield

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

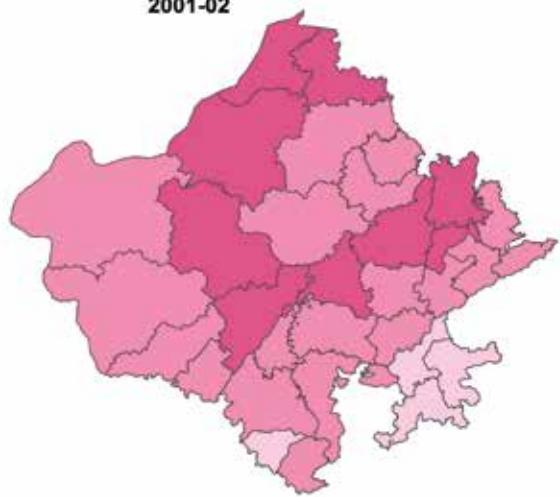
Districts	Buffalo Milk Yield (kg/day)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	4.218	4.293	4.412	4.700	4.900	5.000	5.200	5.587	5.624	5.756
Ajmer	4.572	4.455	5.772	5.066	5.282	5.390	5.605	6.708	6.718	7.159
Alwar	4.810	4.839	5.247	6.443	6.717	6.854	7.129	6.152	6.253	6.624
Banswara	3.589	4.303	4.292	3.661	3.816	3.894	4.050	3.607	3.615	4.095
Baran	2.950	4.899	4.597	3.627	3.782	3.859	4.013	4.779	4.730	4.856
Barmer	4.033	4.561	3.913	6.395	6.667	6.803	7.075	4.887	4.937	4.824
Bharatpur	4.146	3.947	3.927	3.907	4.073	4.156	4.322	5.333	5.450	5.147
Bhilwara	3.358	3.624	4.203	3.847	4.011	4.093	4.256	4.714	4.811	4.665
Bikaner	5.056	4.882	6.007	5.911	6.162	6.288	6.540	5.213	5.277	5.538
Bundi	3.587	4.066	3.714	4.971	5.182	5.288	5.500	6.809	6.769	5.809
Chittaurgarh	3.194	2.966	3.013	3.737	3.896	3.975	4.135	4.658	4.593	4.938
Churu	3.958	4.059	4.151	4.911	5.120	5.225	5.434	6.007	6.032	6.226
Dausa	4.776	3.735	2.880	4.670	4.868	4.968	5.166	5.984	6.008	6.332
Dhaulpur	3.630	3.773	4.149	4.317	4.500	4.592	4.776	5.140	5.164	4.487
Dungarpur	2.673	3.025	2.690	3.838	4.002	4.083	4.247	4.278	4.343	4.987
Ganganagar	4.590	4.929	5.465	5.691	5.933	6.054	6.297	5.675	5.698	5.267
Hanumangarh	5.082	4.828	4.650	4.829	5.035	5.138	5.343	5.688	5.715	6.006
Jaipur	5.280	5.560	4.758	5.034	5.248	5.355	5.569	6.565	6.577	6.896
Jaisalmer	3.475	3.242	3.242	3.279	3.419	3.488	3.628	5.173	5.128	5.593
Jalor	4.438	5.556	6.141	4.830	5.035	5.138	5.343	5.232	5.260	6.126
Jhalawar	2.998	3.279	3.392	3.825	3.988	4.070	4.232	4.970	4.905	5.103
Jhunjhunun	4.486	4.990	5.335	4.622	4.819	4.917	5.114	6.742	6.758	6.478
Jodhpur	4.701	4.485	5.323	5.601	5.840	5.959	6.197	6.432	6.504	6.466
Karauli	3.889	3.766	3.901	4.541	4.734	4.831	5.024	3.567	3.638	4.134
Kota	2.949	3.151	2.257	3.442	3.589	3.662	3.809	4.634	4.599	4.728
Nagaur	3.630	3.548	3.948	4.056	4.228	4.315	4.487	5.323	5.402	5.560
Pali	4.601	4.501	4.502	5.012	5.225	5.332	5.545	5.684	5.658	5.924
Pratapgarh										
Rajsamand	3.494	3.007	2.877	4.290	4.473	4.564	4.746	5.262	5.222	5.286
Sawai Madhopur	4.270	4.255	4.721	5.382	5.611	5.725	5.954	5.453	5.489	5.768
Sikar	4.380	4.866	5.133	5.700	5.943	6.064	6.306	6.489	6.516	6.653
Sirohi	4.234	4.230	4.638	4.752	4.955	5.056	5.258	6.004	6.012	5.834
Tonk	3.522	4.783	4.041	3.599	3.752	3.828	3.982	4.748	4.777	4.802
Udaipur	3.522	3.073	2.891	3.748	3.907	3.987	4.146	5.841	5.838	5.850

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.

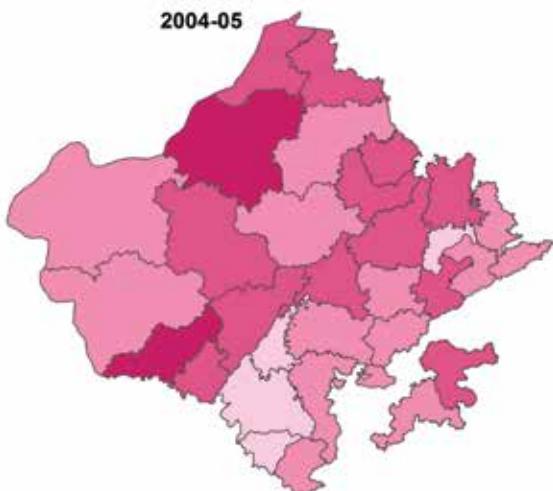


District-wise Buffalo Milk Yield

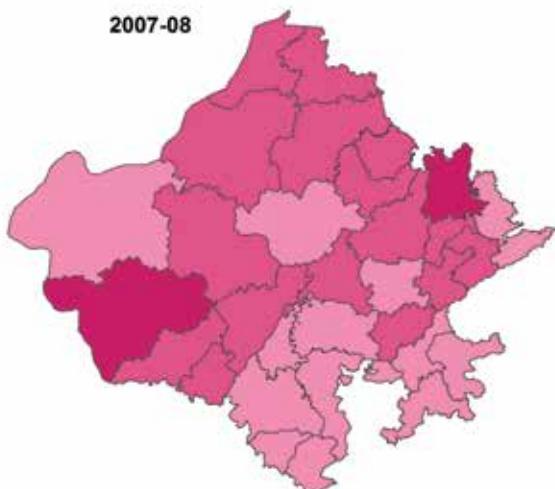
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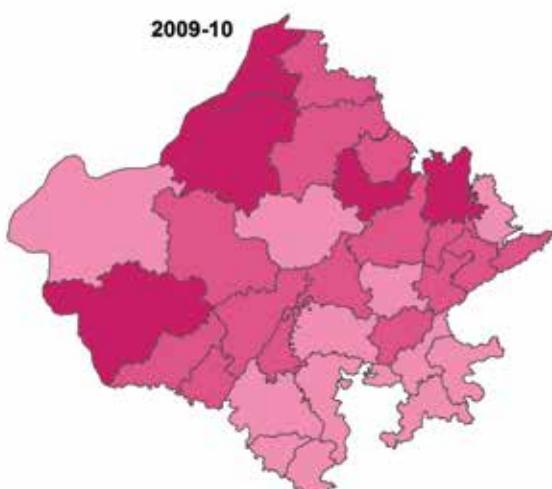
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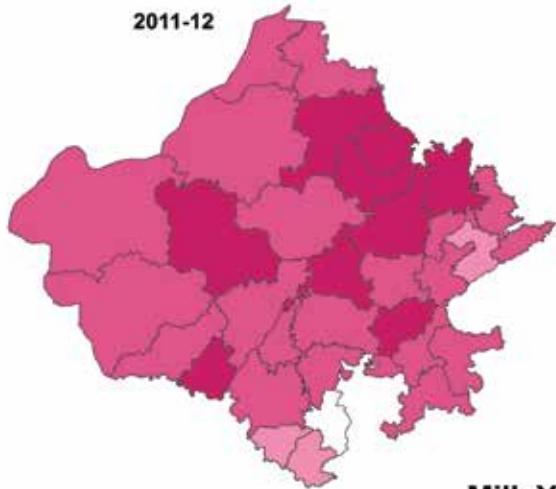
2007-08



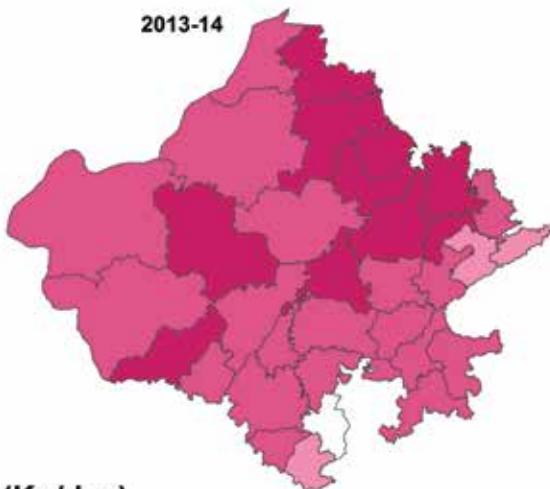
2009-10



2011-12



2013-14

**Milk Yield (Kg/day)**

< 3.0	3.1 - 4.5	4.6 - 6.0	> 6.0
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Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.3. Production Performance: Milk Production

TABLE IV.3.1: Year & District-wise Total Milk Production (Bovine & Goat)

Districts	Total Milk Production ('000 MT)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	7,597	7,897	8,122	11,378	11,933	12,330	13,234	13,512	13,930	14,565
Ajmer	327	314	412	460	488	506	542	593	613	679
Alwar	542	545	610	827	843	854	925	990	1,011	1,116
Banswara	113	143	146	176	186	192	206	230	241	296
Baran	88	308	290	212	217	221	239	228	240	245
Barmer	250	267	308	416	443	445	478	624	615	596
Bharatpur	310	377	357	430	440	447	484	300	335	345
Bhilwara	290	251	258	378	401	431	457	489	486	487
Bikaner	355	371	378	530	584	626	662	419	473	487
Bundi	113	144	120	235	247	254	273	411	397	388
Chittaurgarh	181	181	179	315	332	345	370	326	347	455
Churu	193	220	204	339	360	365	391	327	360	358
Dausa	227	92	85	240	249	253	273	410	412	425
Dhaulpur	135	147	162	202	206	208	226	195	198	188
Dungarpur	67	87	82	155	164	168	180	214	210	248
Ganganagar	374	374	334	518	555	590	628	513	554	549
Hanumangarh	335	310	315	377	401	418	447	383	415	426
Jaipur	713	749	675	986	1,024	1,070	1,148	941	1,036	1,084
Jaisalmer	98	81	86	142	159	164	174	231	236	255
Jalor	242	302	330	336	352	359	387	323	349	371
Jhalawar	109	123	129	186	195	199	214	291	295	313
Jhunjhunun	261	294	309	378	388	404	433	517	534	548
Jodhpur	398	309	344	646	689	719	767	779	768	785
Karauli	183	182	191	250	255	258	280	219	242	273
Kota	88	88	77	140	146	151	161	203	210	226
Nagaur	292	282	330	403	424	432	465	556	561	569
Pali	249	246	256	342	358	365	394	587	557	614
Pratapgarh	0	0	0	0	0	0	0	0	0	0
Rajsamand	117	92	101	222	231	240	257	236	252	263
Sawai Madhopur	172	161	192	228	235	237	256	294	294	320
Sikar	271	333	345	580	598	617	664	772	739	715
Sirohi	100	109	123	171	180	183	198	206	212	205
Tonk	173	170	153	171	178	181	196	329	325	304
Udaipur	231	245	241	391	410	429	459	379	420	430

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.





IV.3. Production Performance: Milk Production

TABLE IV.3.2: Year & District-wise Bovine Milk Production

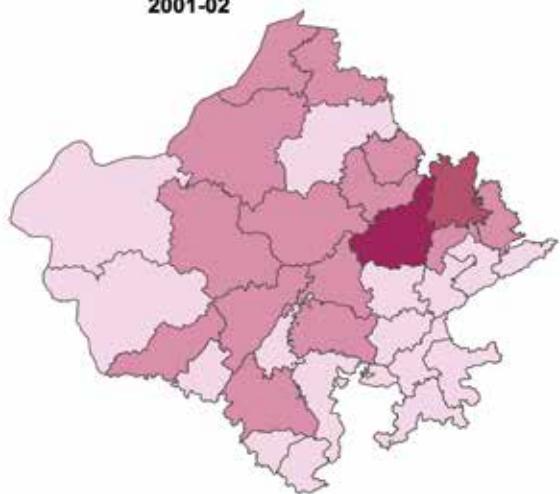
Districts	Bovine Milk Production ('000 MT)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	6,808	7,033	7,213	9,855	10,361	10,882	11,644	11,842	12,238	12,793
Ajmer	277	265	350	392	418	442	471	503	526	588
Alwar	510	525	583	793	807	821	889	913	937	1,015
Banswara	108	137	141	167	176	183	196	211	220	263
Baran	84	290	279	199	204	209	226	210	222	225
Barmer	158	207	207	246	268	284	301	489	469	454
Bharatpur	296	367	340	418	427	435	471	288	321	328
Bhilwara	261	226	222	340	362	395	418	435	434	433
Bikaner	334	342	350	485	538	584	615	353	410	420
Bundi	106	131	109	211	222	231	248	384	371	365
Chittaurgarh	164	164	160	280	295	311	333	288	310	415
Churu	163	161	157	236	254	267	284	264	284	278
Dausa	216	86	79	216	224	230	248	375	376	384
Dhaulpur	126	140	157	194	197	200	217	185	188	176
Dungarpur	61	81	70	141	149	154	165	191	188	217
Ganganagar	353	351	311	490	526	564	599	485	526	519
Hanumangarh	325	297	298	359	382	401	428	358	390	399
Jaipur	663	675	616	884	918	973	1,041	870	956	1,009
Jaisalmer	56	56	56	97	112	121	127	143	148	148
Jalor	216	272	306	293	308	318	342	283	307	331
Jhalawar	99	111	117	163	171	177	190	260	264	278
Jhunjhunun	213	242	261	316	324	345	369	450	464	478
Jodhpur	285	237	276	454	491	537	567	665	642	669
Karauli	172	171	176	231	235	240	260	187	208	236
Kota	81	81	67	122	128	134	143	187	192	206
Nagaur	259	229	275	326	345	359	385	429	431	447
Pali	247	212	219	295	310	321	345	519	495	544
Pratapgarh										
Rajsamand	109	85	91	208	216	226	242	204	220	232
Sawai Madhopur	155	146	171	204	210	214	231	269	267	293
Sikar	249	275	304	464	478	507	543	655	629	628
Sirohi	88	90	102	134	142	148	159	170	174	167
Tonk	156	151	138	144	151	156	168	292	289	267
Udaipur	218	230	225	356	373	395	422	329	367	371

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.

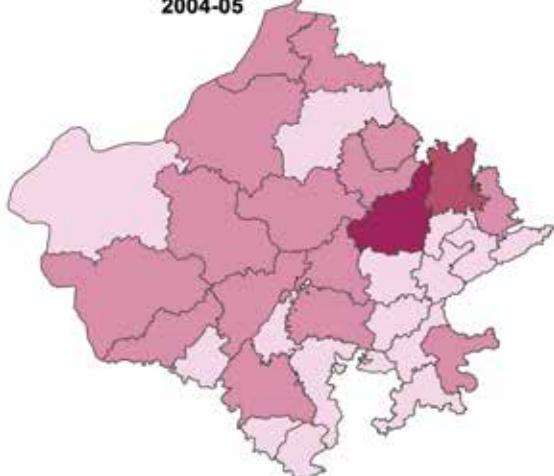


District-wise Bovine Milk Production

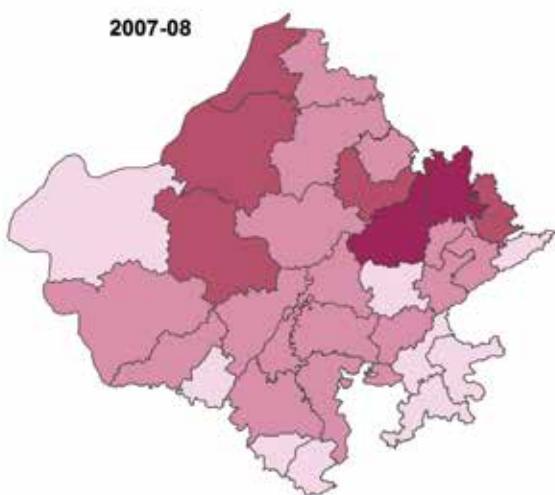
2001-02



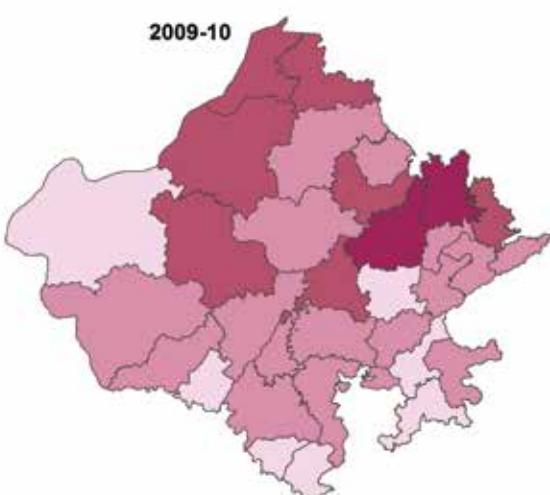
2004-05



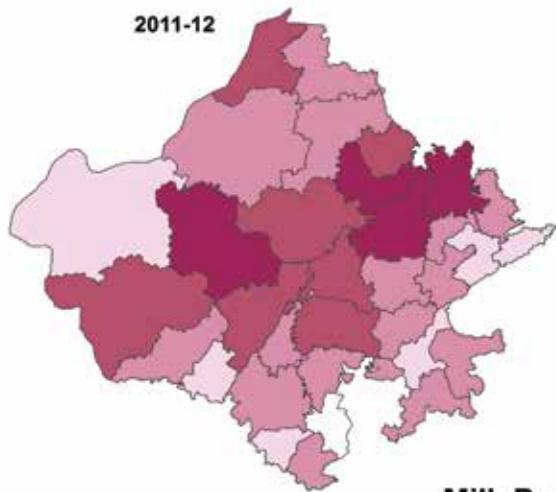
2007-08



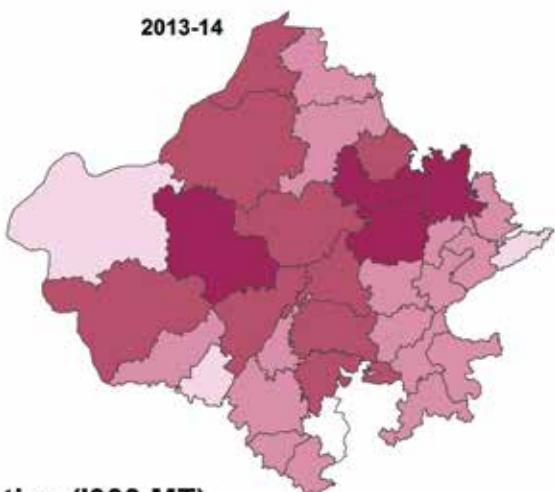
2009-10



2011-12



2013-14

**Milk Production ('000 MT)**

< 200	201 - 400	401 - 600	> 600
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Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.3. Production Performance: Milk Production

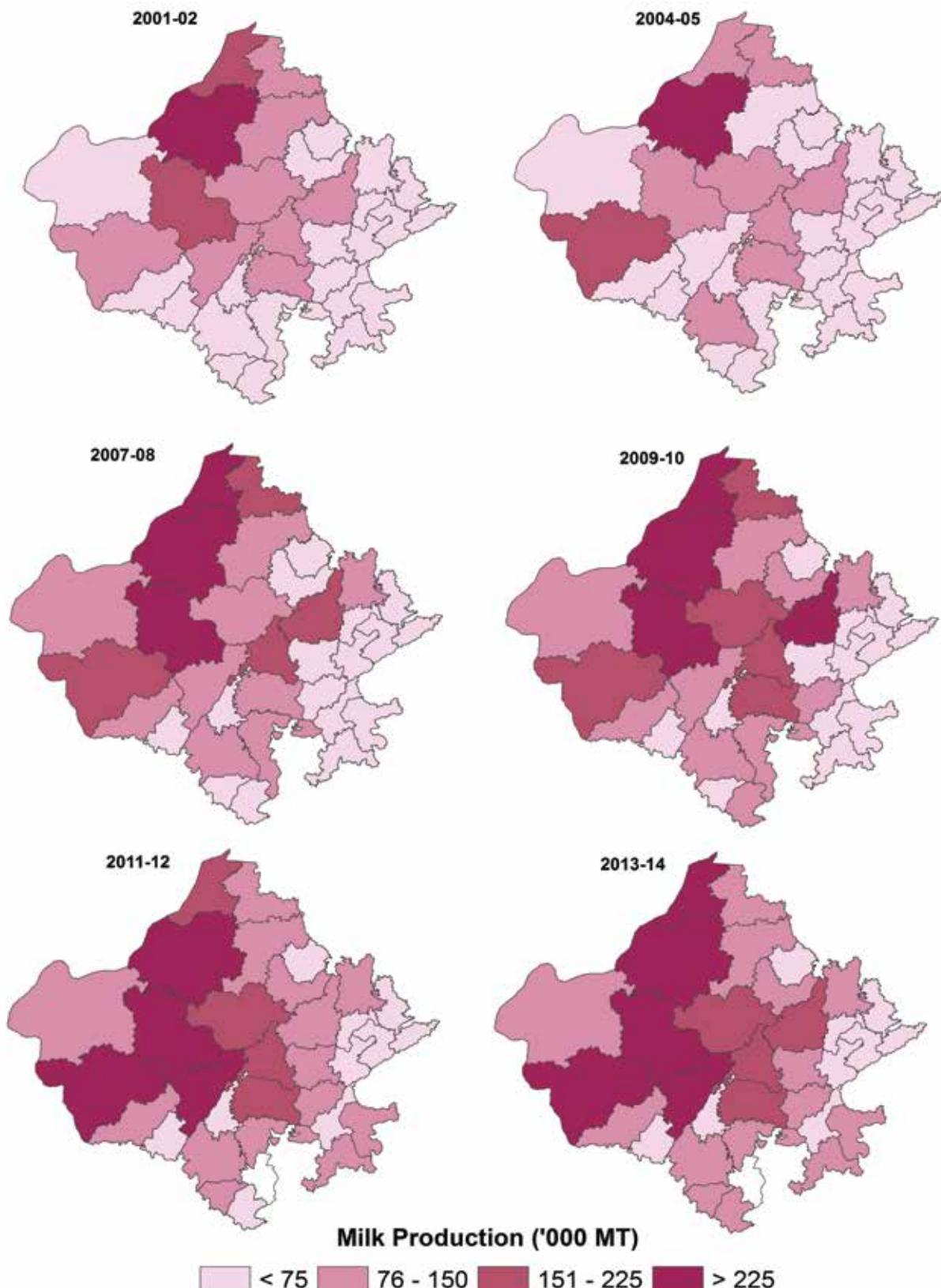
TABLE IV.3.3: Year & District-wise Indigenous Cattle Milk Production

Districts	Indigenous Cattle Milk Production ('000 MT)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	2,324	2,134	2,148	3,161	3,625	3,927	4,120	3,822	4,085	4,172
Ajmer	106	100	132	167	191	207	218	172	189	212
Alwar	56	61	69	79	90	98	103	96	103	108
Banswara	31	35	41	62	71	77	81	61	69	82
Baran	34	27	54	32	37	40	42	80	87	92
Barmer	120	147	161	154	176	191	200	390	360	345
Bharatpur	25	30	26	50	58	62	65	44	54	57
Bhilwara	142	109	81	133	153	165	174	161	167	176
Bikaner	284	281	278	357	409	443	465	237	283	270
Bundi	29	34	22	72	83	90	94	113	106	130
Chittaurgarh	43	48	43	94	108	117	123	90	111	130
Churu	83	78	70	121	139	150	158	112	126	111
Dausa	30	25	30	47	54	58	61	35	51	45
Dhaulpur	13	11	13	19	22	24	25	32	30	35
Dungarpur	19	21	17	49	56	60	63	77	72	81
Ganganagar	180	177	136	230	264	286	300	223	246	242
Hanumangarh	124	118	76	154	177	192	201	141	160	150
Jaipur	140	116	129	191	220	238	250	125	158	159
Jaisalmer	56	48	48	97	111	120	126	141	146	146
Jalor	52	66	72	96	110	119	124	97	117	111
Jhalawar	30	29	30	55	63	68	71	83	85	83
Jhunjhunun	40	35	34	39	45	49	51	46	50	66
Jodhpur	180	139	145	231	265	287	301	283	302	306
Karauli	23	20	24	29	33	36	37	33	36	36
Kota	29	21	23	39	44	48	51	55	58	63
Nagaur	104	76	93	122	140	152	159	172	166	171
Pali	79	48	50	96	110	119	125	262	239	272
Pratapgarh										
Rajsamand	31	23	28	36	41	45	47	43	51	53
Sawai Madhopur	30	23	29	35	40	43	45	50	54	57
Sikar	56	51	43	74	85	92	96	114	110	124
Sirohi	29	30	34	57	65	70	74	62	67	63
Tonk	51	33	34	45	52	56	59	102	103	85
Udaipur	75	74	83	100	114	124	130	90	117	101

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise Indigenous Cattle Milk Production



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.3. Production Performance: Milk Production

TABLE IV.3.4: Year & District-wise Crossbred Cattle Milk Production

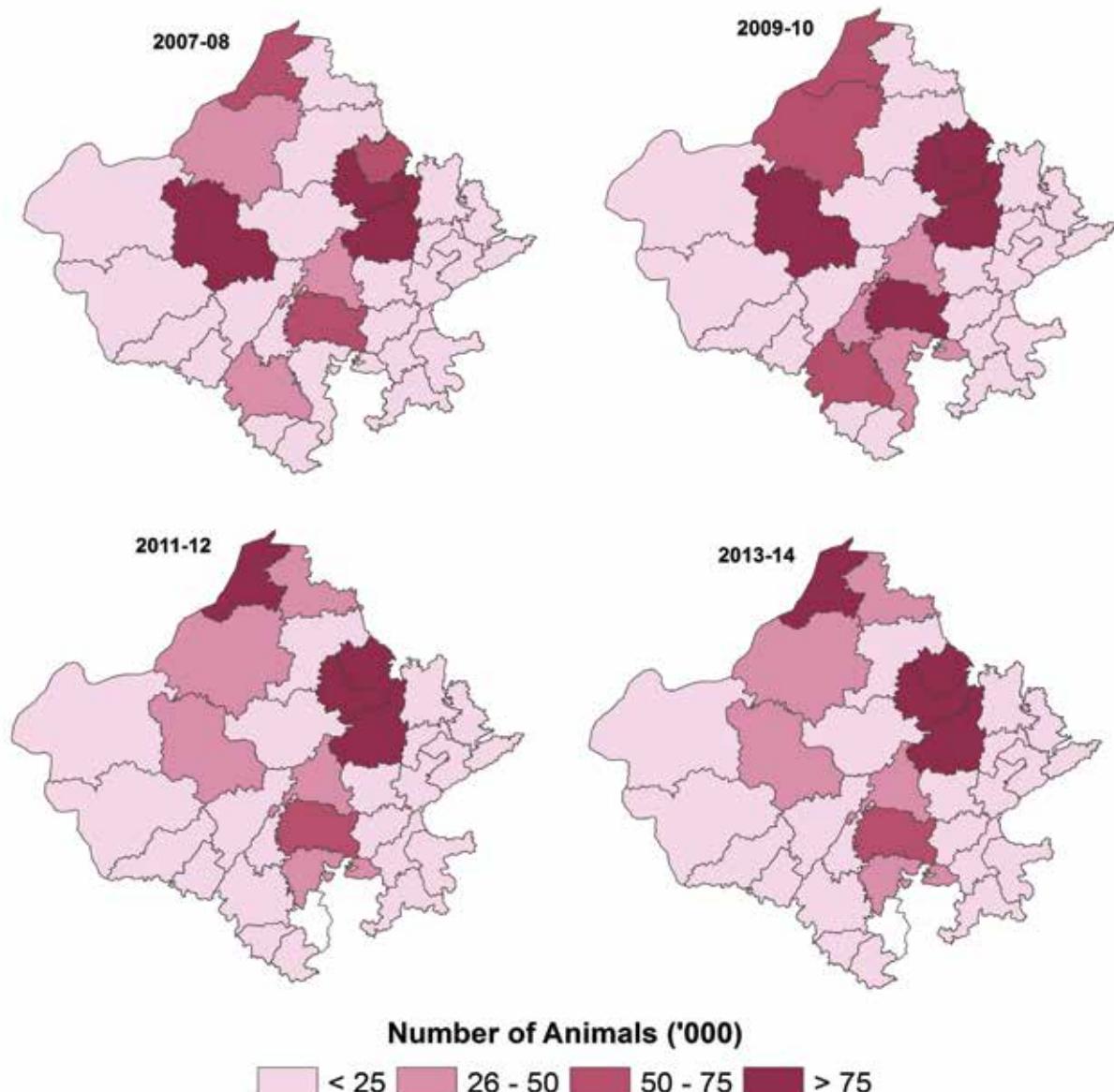
Districts	Crossbred Cattle Milk Production ('000 MT)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	606	681	703	882	913	867	914	938
Ajmer	22	26	27	34	35	30	31	34
Alwar	5	6	6	8	8	14	14	15
Banswara	1	1	1	2	2	5	5	5
Baran	1	2	2	2	2	2	2	2
Barmer	0	0	0	0	0	0	0	0
Bharatpur	2	2	2	3	3	16	17	18
Bhilwara	64	72	74	93	96	64	68	68
Bikaner	36	40	42	52	54	39	46	49
Bundi	3	3	3	4	4	4	4	5
Chittaurgarh	22	24	25	31	33	31	36	37
Churu	0	0	0	0	0	12	14	15
Dausa	1	1	1	1	1	15	17	18
Dhaulpur	0	0	0	0	0	1	1	1
Dungarpur	1	1	1	2	2	1	1	1
Ganganagar	50	56	58	73	75	122	128	128
Hanumangarh	9	10	10	13	13	46	49	48
Jaipur	112	125	129	162	167	138	141	144
Jaisalmer	0	0	0	0	0	0	1	1
Jalor	0	0	0	0	0	1	1	1
Jhalawar	0	0	0	0	0	1	1	1
Jhunjhunu	52	59	60	76	79	106	111	113
Jodhpur	80	89	92	115	119	49	52	50
Karauli	1	1	1	2	2	3	3	3
Kota	4	4	5	6	6	4	4	4
Nagaur	6	6	7	8	8	15	16	16
Pali	3	3	3	4	4	5	5	6
Pratapgarh								
Rajsamand	19	21	22	28	29	21	23	25
Sawai Madhopur	1	1	1	1	1	1	2	2
Sikar	69	77	80	100	103	98	102	104
Sirohi	1	1	1	1	1	1	1	1
Tonk	1	1	1	2	2	5	5	5
Udaipur	40	45	47	59	61	16	18	20

Zero denotes either nil or negligible.

SOURCE: Integrated Sample Survey Reports (2006-07 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.



District-wise Crossbred Cattle Milk Production



Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.3. Production Performance: Milk Production

TABLE IV.3.5: Year & District-wise Buffalo Milk Production

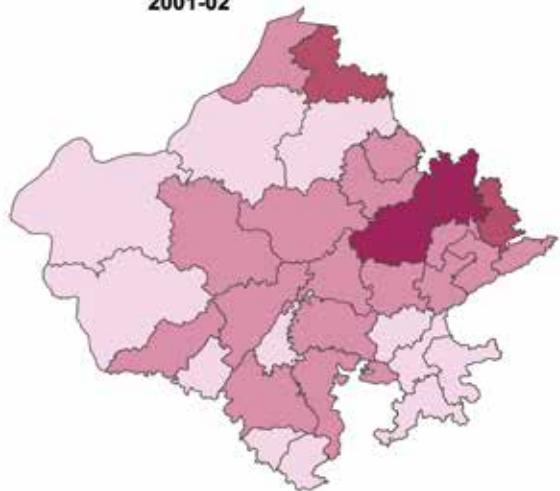
Districts	Buffalo Milk Production ('000 MT)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	4,484	4,899	5,065	6,012	6,033	6,074	6,611	7,153	7,240	7,682
Ajmer	171	165	218	198	199	200	218	301	307	341
Alwar	454	464	514	708	711	716	779	802	820	891
Banswara	77	102	100	103	103	104	113	145	146	176
Baran	50	263	225	165	166	167	181	129	134	132
Barmer	38	60	46	91	92	92	101	98	108	108
Bharatpur	271	337	314	366	367	370	402	227	250	254
Bhilwara	119	117	141	135	136	137	149	210	200	189
Bikaner	50	61	72	87	88	88	96	77	80	101
Bundi	77	97	87	135	136	137	149	267	260	229
Chittaurgarh	121	116	117	161	162	163	177	167	164	248
Churu	80	83	87	115	116	116	127	139	144	152
Dausa	186	61	49	168	169	170	185	325	308	321
Dhaulpur	113	129	144	175	175	176	192	152	157	140
Dungarpur	42	60	53	91	92	92	100	113	115	134
Ganganagar	173	174	175	203	203	205	223	140	152	149
Hanumangarh	201	179	222	195	195	197	214	171	181	201
Jaipur	523	559	487	568	570	574	624	606	657	705
Jaisalmer	0.3	8	8	1	1	1	1	2	2	2
Jalor	164	206	234	197	198	199	217	185	190	219
Jhalawar	69	82	87	108	108	109	119	176	179	194
Jhunjhunun	173	207	227	218	218	220	239	297	303	299
Jodhpur	105	98	131	134	134	135	147	332	289	313
Karauli	149	151	152	201	201	203	221	151	170	197
Kota	52	60	44	79	79	80	87	128	130	139
Nagaur	155	153	182	197	198	199	217	242	249	260
Pali	168	164	169	196	197	198	216	252	250	266
Pratapgarh										
Rajsamand	78	62	63	152	152	153	167	140	147	153
Sawai Madhopur	125	123	142	168	169	170	185	218	212	234
Sikar	193	224	261	312	313	315	343	443	418	401
Sirohi	59	60	68	76	77	77	84	107	106	103
Tonk	105	118	104	97	98	98	107	185	181	176
Udaipur	143	156	142	211	211	213	232	223	232	250

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.

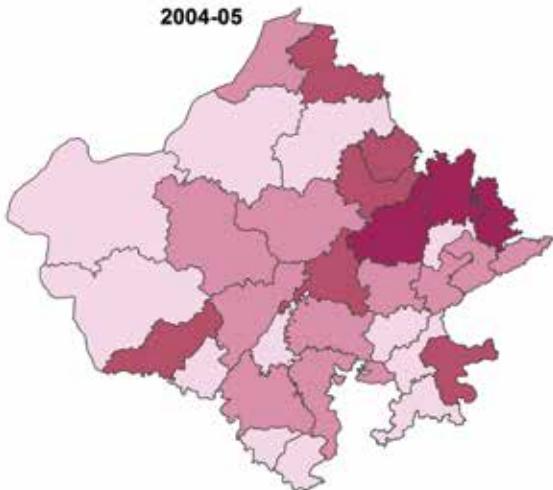


District-wise Buffalo Milk Production

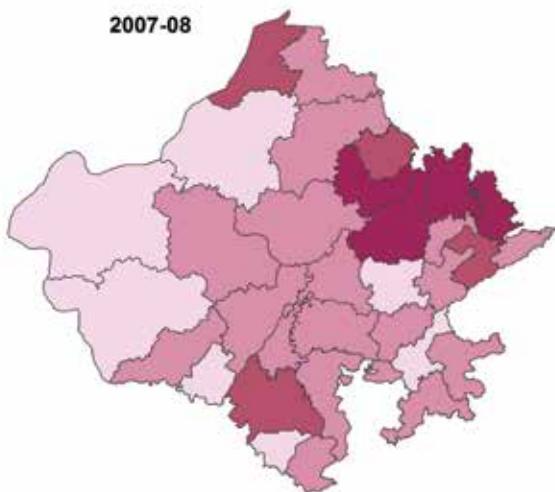
2001-02



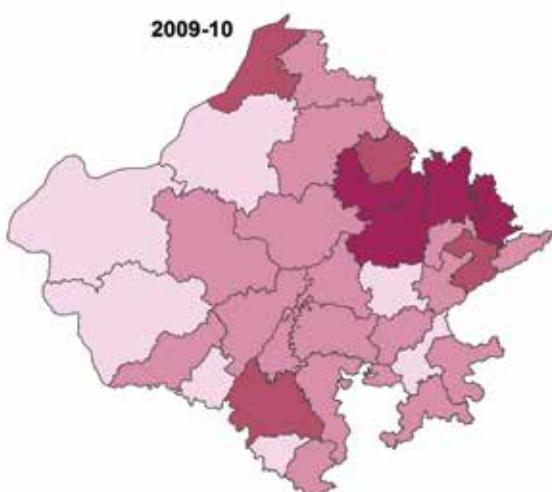
2004-05



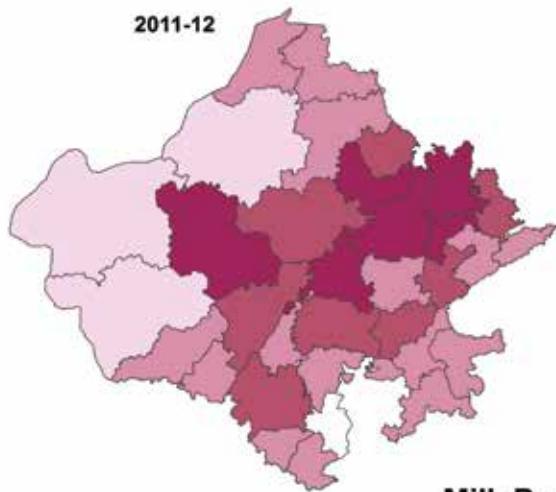
2007-08



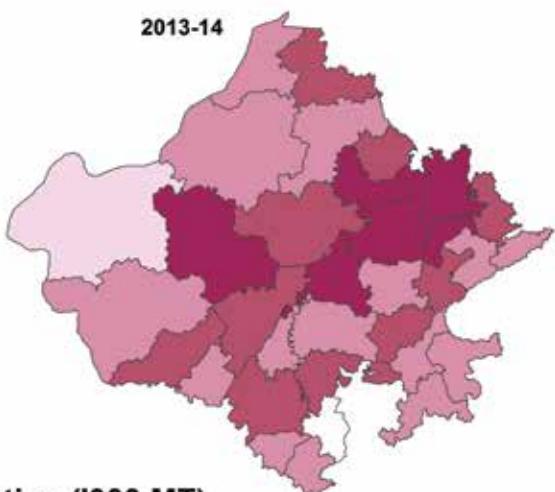
2009-10



2011-12



2013-14

**Milk Production ('000 MT)**

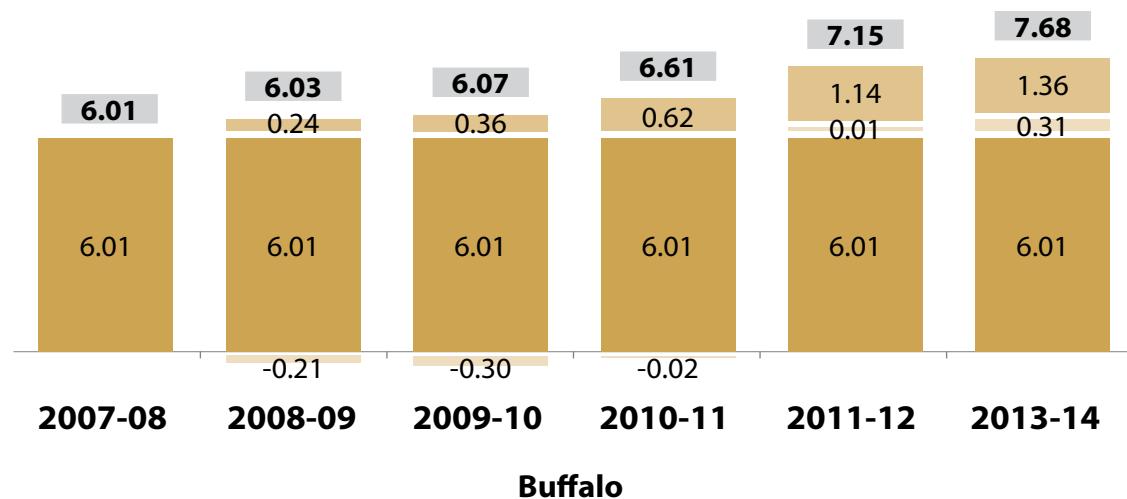
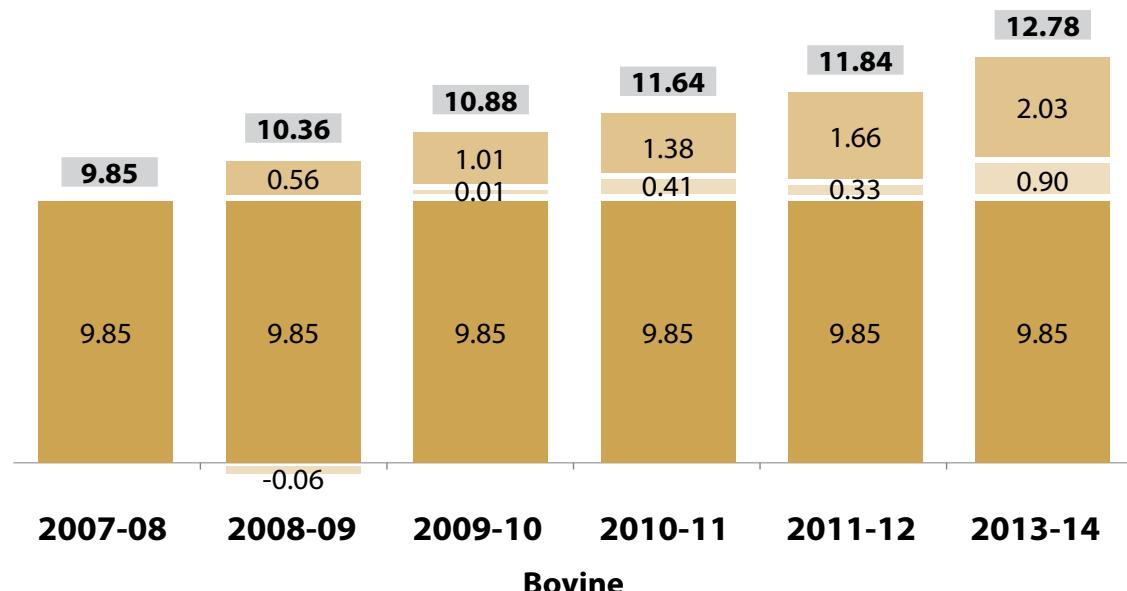
< 100	101 - 200	201 - 300	> 300
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Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



Rajasthan's Milk Production (MMT)

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



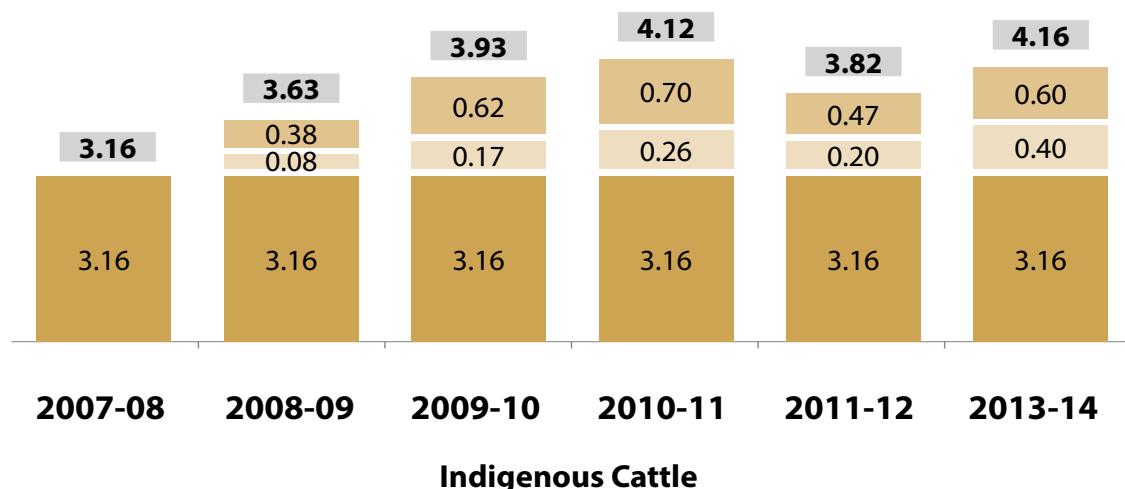
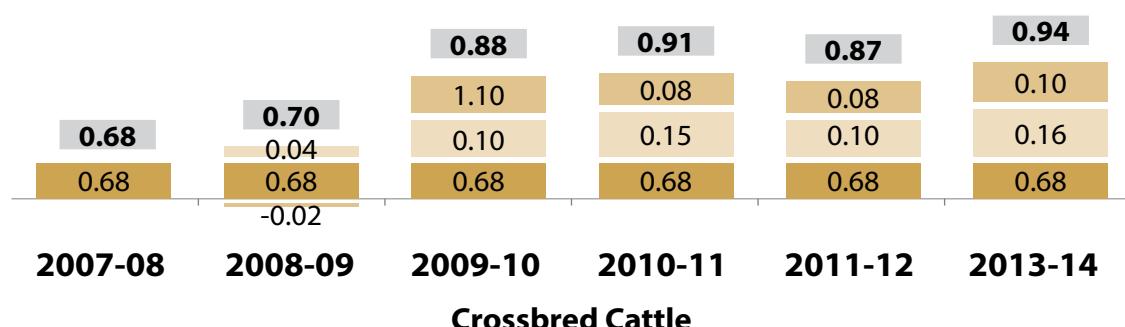
- Milk production in base year -2007-2008 - MMT
- Total milk production - MMT
- Change in total milk production due to change in average yield - kg/in-milk animal per day - MMT
- Change in total milk production due to change in numbers of in milk animals - MMT





Rajasthan's Milk Production (MMT)

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



- Milk production in base year -2007-2008 - MMT
- Total milk production - MMT
- Change in total milk production due to change in average yield - kg/in-milk animal per day - MMT
- Change in total milk production due to change in numbers of in milk animals - MMT





IV.3. Production Performance: Milk Production

TABLE IV.3.6: Year & District-wise Goat Milk Production

Districts	Goat Milk Production ('000 MT)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	789	864	909	1,523	1,572	1,448	1,590	1,670	1,703	1,781
Ajmer	50	49	62	68	70	64	71	90	87	91
Alwar	32	20	27	34	36	33	36	77	74	101
Banswara	5	6	5	9	10	9	10	19	21	33
Baran	4	18	11	13	13	12	13	18	18	20
Barmer	92	60	101	170	175	161	177	135	146	142
Bharatpur	14	10	17	12	13	12	13	12	14	17
Bhilwara	29	25	36	38	39	36	39	54	52	54
Bikaner	21	29	28	45	46	42	47	66	63	67
Bundi	7	13	11	24	25	23	25	27	26	23
Chittaurgarh	17	17	19	35	37	34	37	38	37	40
Churu	30	59	47	103	106	98	107	63	76	80
Dausa	11	6	6	24	25	23	25	35	36	41
Dhaulpur	9	7	5	8	9	8	9	10	10	12
Dungarpur	6	6	12	14	15	14	15	23	22	31
Ganganagar	21	23	23	28	29	26	29	28	28	30
Hanumangarh	10	13	17	18	19	17	19	25	25	27
Jaipur	50	74	59	102	106	97	107	71	80	75
Jaisalmer	42	25	30	45	47	43	47	88	88	107
Jalor	26	30	24	43	44	41	45	40	42	40
Jhalawar	10	12	12	23	24	22	24	31	31	35
Jhunjhunun	48	52	48	62	64	59	64	67	70	70
Jodhpur	113	72	68	192	198	182	200	114	126	116
Karauli	11	11	15	19	20	18	20	32	34	37
Kota	7	7	10	18	18	17	18	16	18	20
Nagaur	33	53	55	77	79	73	80	127	130	122
Pali	2	34	37	47	48	44	49	68	62	70
Pratapgarh										
Rajsamand	8	7	10	14	15	14	15	32	32	31
Sawai Madhopur	17	15	21	24	25	23	25	25	27	27
Sikar	22	58	41	116	120	110	121	117	110	87
Sirohi	12	19	21	37	38	35	39	36	38	38
Tonk	17	19	15	27	27	25	28	37	36	37
Udaipur	13	15	16	35	37	34	37	50	53	59

SOURCE: Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.





IV.3. Production Performance: Milk Production

TABLE IV.3.7: Year & District-wise Total Milk Production Density

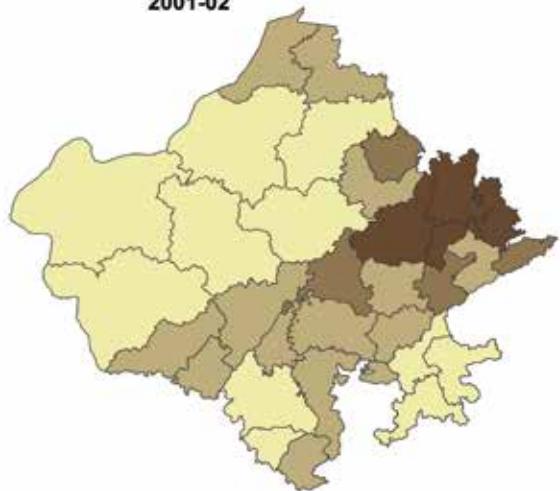
Districts	Milk Production Density (kg/day/sq km)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	61	63	65	91	96	99	106	108	112	117
Ajmer	106	101	133	148	157	163	175	192	198	219
Alwar	177	178	199	270	276	279	303	324	331	365
Banswara	52	65	67	80	85	88	94	105	110	135
Baran	35	121	114	83	85	87	93	89	94	96
Barmer	24	26	30	40	43	43	46	60	59	58
Bharatpur	168	204	193	233	238	242	262	162	181	187
Bhilwara	76	66	68	99	105	113	120	128	127	128
Bikaner	32	34	34	48	53	57	60	38	43	44
Bundi	54	68	57	111	117	120	129	195	188	184
Chittaurgarh	53	53	53	93	98	102	109	96	102	134
Churu	38	44	40	67	71	72	77	65	71	71
Dausa	181	73	68	192	199	202	218	327	329	339
Dhaulpur	122	133	146	182	186	188	204	176	179	170
Dungarpur	48	63	60	113	119	122	131	156	153	180
Ganganagar	93	93	83	129	138	147	157	128	138	137
Hanumangarh	95	88	89	107	114	119	127	109	118	121
Jaipur	175	184	166	243	252	263	282	231	255	266
Jaisalmer	7	6	6	10	11	12	12	16	17	18
Jalor	62	78	85	87	91	93	100	83	90	96
Jhalawar	48	54	57	82	86	88	94	128	130	138
Jhunjhunun	121	136	143	175	179	187	200	239	247	253
Jodhpur	48	37	41	77	83	86	92	93	92	94
Karauli	91	90	95	124	127	128	139	109	120	135
Kota	46	46	40	74	77	79	85	107	110	119
Nagaur	45	44	51	62	66	67	72	86	87	88
Pali	55	54	57	76	79	81	87	130	123	136
Pratapgarh										
Rajsamand	69	54	59	131	136	141	152	139	148	155
Sawai Madhopur	105	98	117	139	143	145	156	179	179	195
Sikar	96	118	122	205	212	219	235	274	262	253
Sirohi	53	58	66	91	96	98	105	110	113	109
Tonk	66	65	58	65	68	69	75	125	124	116
Udaipur	48	51	50	81	85	89	95	79	87	89

SOURCE: Estimated from Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.

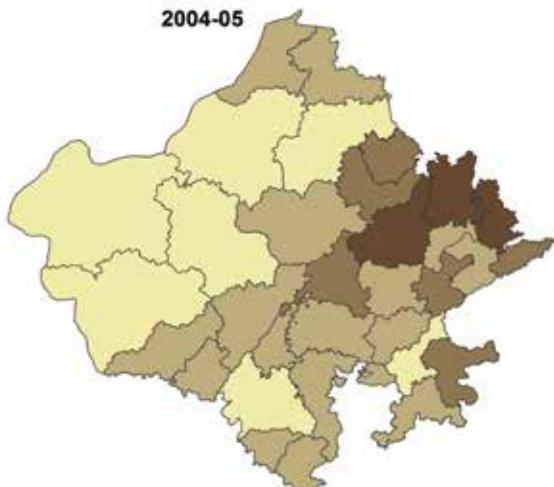


District-wise Milk Production Density

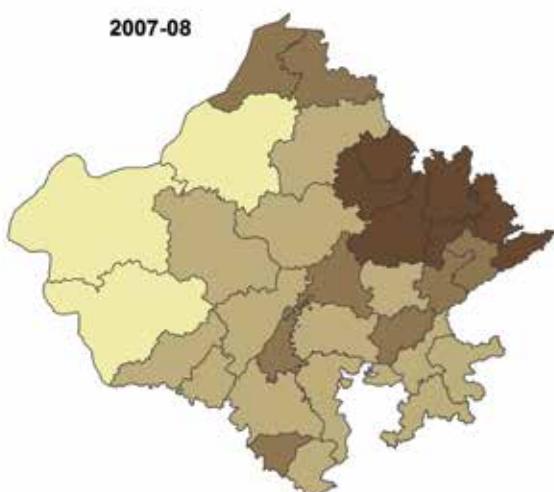
2001-02



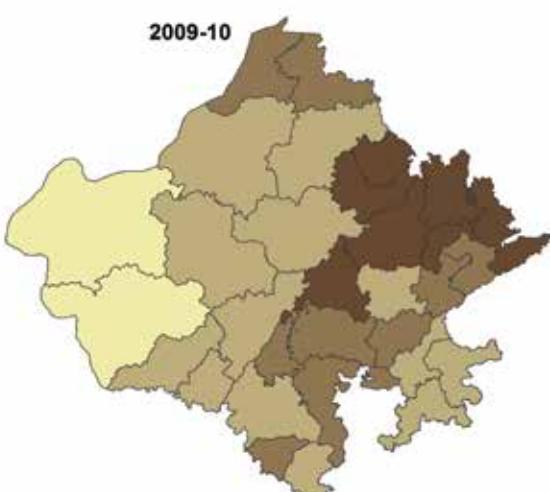
2004-05



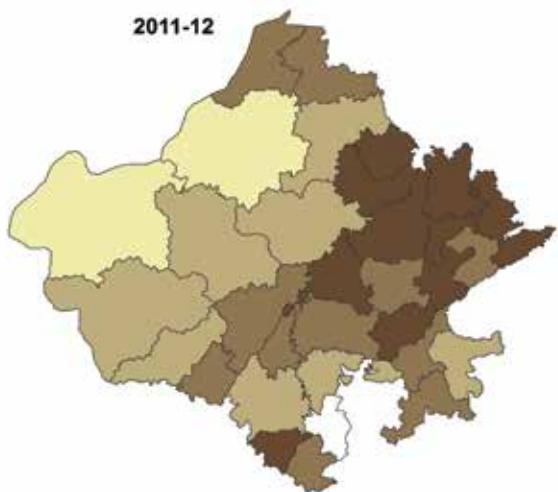
2007-08



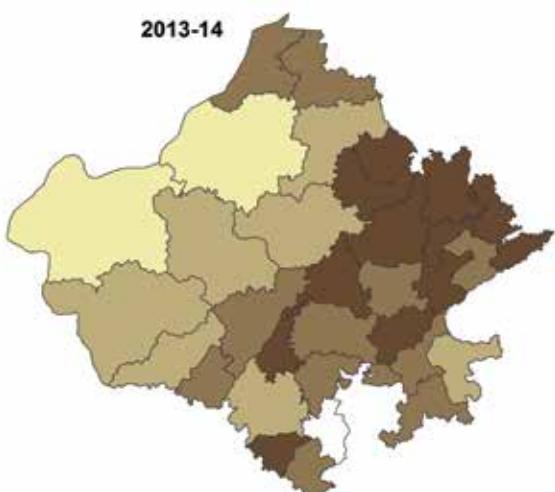
2009-10



2011-12



2013-14

**Milk Production Density (kg/day/sq km)**

< 50	50 - 100	101 - 150	> 150
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Data for 2011-12 and 2013-14 is not available for Pratapgarh district.



IV.4. Production Performance: Milk Availability

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

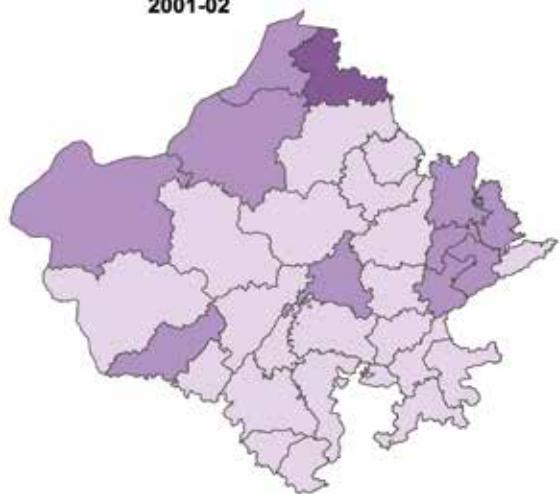
Districts	Per Capita Availability of Milk (grams/day)									
	2001-02	2003-04	2004-05	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
RAJASTHAN	368	368	372	491	505	512	539	540	546	560
Ajmer	411	381	492	521	544	555	585	629	640	696
Alwar	497	479	525	669	669	664	704	738	739	799
Banswara	206	244	241	263	270	270	280	301	306	364
Baran	237	797	737	510	513	513	544	511	529	530
Barmer	349	352	395	489	508	495	518	656	629	593
Bharatpur	404	473	439	500	501	499	530	323	353	357
Bhilwara	394	329	333	462	481	508	529	556	543	534
Bikaner	581	567	558	705	751	777	794	486	529	527
Bundi	322	398	327	614	636	644	682	1,013	964	929
Chittaurgarh	275	274	271	473	498	518	553	487	518	678
Churu	275	310	285	466	492	495	528	439	481	476
Dausa	472	183	166	439	445	442	467	688	675	683
Dhaulpur	375	393	425	498	498	493	524	443	440	410
Dungarpur	165	206	189	335	345	347	364	422	405	467
Ganganagar	573	562	497	748	794	837	882	714	763	749
Hanumangarh	605	542	542	619	649	666	701	591	630	638
Jaipur	372	373	328	448	454	464	486	389	419	428
Jaisalmer	530	413	427	651	705	708	731	945	939	988
Jalor	458	545	582	553	565	564	593	484	511	530
Jhalawar	253	276	284	388	400	401	424	564	564	586
Jhunjhunun	374	412	428	506	514	529	561	662	677	688
Jodhpur	377	279	303	530	551	561	584	579	557	556
Karauli	415	397	409	505	508	503	535	412	447	494
Kota	154	147	126	215	219	221	231	285	288	304
Nagaur	288	269	309	358	370	371	392	461	456	455
Pali	375	362	373	481	498	502	535	789	740	807
Pratapgarh										
Rajsamand	325	247	267	561	573	586	619	558	588	603
Sawai Madhopur	421	381	446	502	508	504	535	604	593	633
Sikar	324	386	394	632	641	652	691	790	744	709
Sirohi	322	337	373	488	506	504	533	544	551	521
Tonk	392	372	330	351	360	361	383	634	616	567
Udaipur	240	243	233	351	360	368	384	310	335	334

SOURCE: Estimated from Integrated Sample Survey Reports (2001-02 to 2013-14), Department of Animal Husbandry, Govt. of Rajasthan.

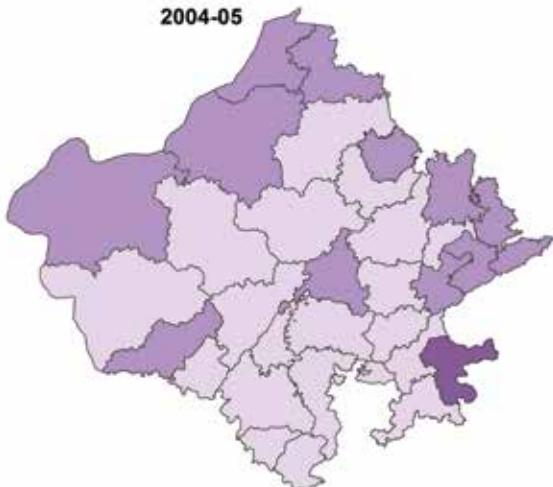


District-wise Per Capita Milk Availability

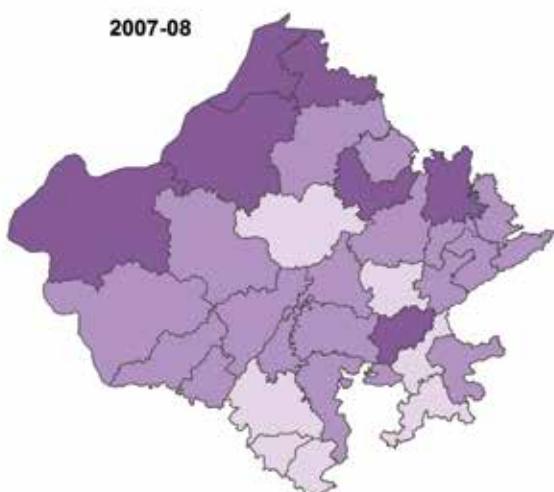
2001-02



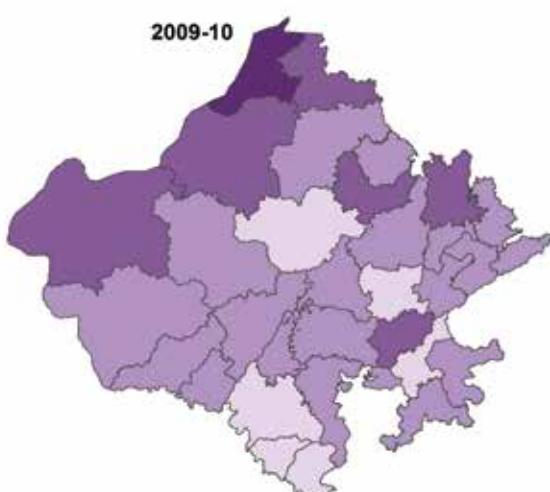
2004-05



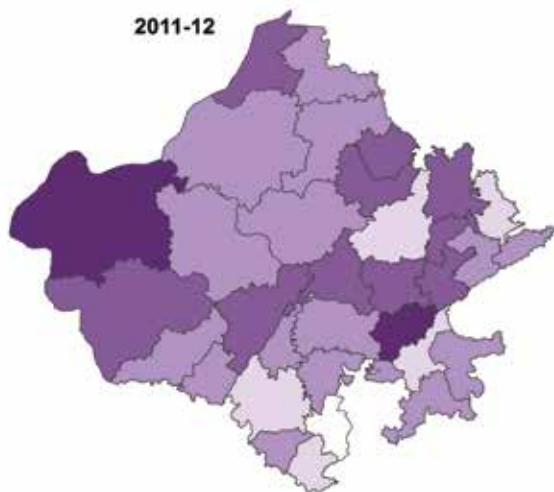
2007-08



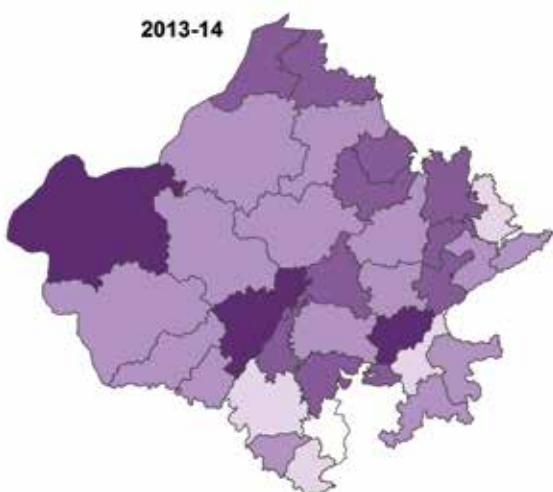
2009-10



2011-12



2013-14

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

< 400	400 - 600	601 - 800	> 800
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Data for 2011-12 and 2013-14 is not available for Pratapgarh district.

PART V : VETERINARY INFRASTRUCTURE AND SERVICE DELIVERY SYSTEM

Under rain-fed agriculture, dairying is most reliable livelihood insurance for the poor in rural areas of Rajasthan. The government manage a network of institutions for health care and service delivery which includes a Biological Product Lab (B.P.) at Jaipur, a State Disease Diagnostic Centre (SDDC) at Jaipur, six Regional Disease Diagnostic Centres (RDDC), 34 District Disease Diagnostic Lab, 1,718 Veterinary Hospitals (VH), 198 Veterinary Dispensaries (VD) and a series of Sub-centres. In addition to a Rajasthan State Livestock Management Institute (RSLMTI), Bassi, it has Livestock Assistant Training Institute for strengthening the quality of manpower involved in providing services.

The efforts of the State Government are supported by Rajasthan University of Veterinary and Animal Science (RAJUVAS), Bikaner which has three constituent colleges at Bikaner, Udaipur and Jaipur. In addition, it has six private veterinary colleges affiliated to RAJUVAS under Public Private Partnership (PPP). It has 7 Livestock Research Stations and 65 institutions to produce 3,000 para-vet per annum.





V.1. Veterinary Infrastructure

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

Districts	Number of Veterinary Institutes									
	1994-95	1997-98	2003-04	2007-08	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	2,175	2,470	3,437	3,561	3,595	3,698	3,900	4,303	4,696	4,696
Ajmer	61	63	94	100	100	104	116	133	147	147
Alwar	122	119	164	175	175	178	186	208	237	237
Banswara	56	70	117	105	105	110	113	117	120	120
Baran	23	33	62	67	67	68	72	78	84	84
Barmer	42	72	100	105	105	110	119	138	158	158
Bharatpur	71	82	140	149	149	150	154	170	180	180
Bhilwara	142	146	179	173	176	178	183	194	205	205
Bikaner	61	62	69	110	110	114	121	134	148	148
Bundi	42	45	60	64	67	67	69	71	79	79
Chittaurgarh	100	107	148	116	115	119	123	131	138	138
Churu	64	73	93	87	88	92	97	110	125	125
Dausa	63	57	69	73	75	78	83	94	102	102
Dhaulpur	20	31	38	48	49	49	50	54	58	58
Dungarpur	71	74	132	133	136	140	142	146	151	151
Ganganagar	143	165	143	128	115	118	123	135	141	141
Hanumangarh	0	0	74	76	90	95	102	119	133	133
Jaipur	152	163	219	230	231	239	253	284	318	318
Jaisalmer	27	39	50	50	48	49	52	57	60	60
Jalor	35	60	82	87	87	90	91	95	106	106
Jhalawar	39	41	69	71	71	73	73	78	78	78
Jhunjhunu	59	93	137	143	147	154	168	198	219	219
Jodhpur	102	96	135	137	138	140	144	160	174	174
Karauli	0	0	59	60	61	62	67	73	78	78
Kota	48	45	61	60	60	61	64	70	76	76
Nagaur	68	100	150	160	161	170	196	235	277	277
Pali	61	82	115	119	120	121	126	135	143	143
Pratapgarh				63	64	65	66	72	75	75
Rajsamand	76	77	103	104	103	103	108	112	115	115
Sawai Madhopur	78	79	54	54	54	59	65	76	84	84
Sikar	119	132	160	163	167	173	191	219	244	244
Sirohi	73	64	83	75	75	75	77	79	82	82
Tonk	32	39	59	76	80	83	90	98	114	114
Udaipur	125	161	219	200	206	211	216	230	247	247

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan



V.1. Veterinary Infrastructure

TABLE V.1.2: Union-wise AI Centres – Cooperatives

Milk Unions	Number of AI Centres								
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	532	528	543	543	525	514	394	373	375
Ajmer	46	46	48	48	51	59	59	53	53
Alwar	92	92	85	85	87	85	80	73	73
Bhilwara	65	65	86	44	47	49	0	0	0
Chittorgarh	0	0		34	31	26	0	0	0
Gangangar	51	51	51	44	36	31	30	28	29
Jaipur	149	149	165	185	185	185	189	189	187
Jodhpur	48	48	45	46	40	32	32	29	32
Pali	29	29	25	17	15	16	4	1	1
Udaipur	52	48	38	40	33	31	0	0	0

Zero denotes either zero or not reported.

SOURCE: NDDB





V.1. Veterinary Infrastructure

TABLE V.1.3: District-wise AI Centers – BAIF

Districts	Number of AI Centres							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
RAJASTHAN	304	325	365	422	431	411	431	405
Ajmer	41	44	47	47	51	51	50	48
Alwar	20	20	29	37	30	28	28	27
Banswara	15	10	14	26	25	24	26	26
Baran	8	2	14	14	14	14	14	6
Barmer	0	0	0	0	0	0	0	0
Bharatpur	5	5	5	5	5	5	5	5
Bhilwara	39	44	50	56	56	52	51	50
Bikaner	0	0	0	0	0	0	0	0
Bundi	6	7	7	7	7	7	7	8
Chittaurgarh	33	31	35	36	35	35	40	38
Churu	0	0	0	0	0	0	0	0
Dausa	9	9	9	19	19	22	23	26
Dhaulpur	0	0	0	0	0	0	0	0
Dungarpur	5	5	5	6	6	6	6	6
Ganganagar	0	0	0	0	0	0	0	0
Hanumangarh	0	0	0	0	0	0	0	0
Jaipur	12	12	12	12	20	21	21	24
Jaisalmer	0	0	0	0	0	0	0	0
Jalor	0	0	0	0	0	0	0	0
Jhalawar	26	20	22	30	30	16	16	15
Jhunjhunun	0	0	0	0	0	0	0	0
Jodhpur	0	0	0	0	0	0	0	0
Karauli	23	27	27	31	31	31	31	30
Kota	0	0	0	0	0	0	0	0
Nagaur	10	25	5	0	0	0	14	11
Pali	0	0	0	0	0	0	0	0
Pratapgarh	0	0	0	0	0	0	0	0
Rajsamand	8	9	14	14	14	14	14	12
Sawai Madhopur	1	1	1	11	11	11	11	5
Sikar	0	0	0	0	0	0	0	0
Sirohi	3	13	13	15	14	13	14	13
Tonk	9	8	23	23	30	29	29	27
Udaipur	31	33	33	33	33	32	31	28

SOURCE: BAIF Data Repository



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)			
	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	1,071.6	1,118.9	1,247.5	1,432.5
Ajmer	54.9	59.0	64.6	68.1
Alwar	63.3	68.5	69.7	70.4
Banswara	16.7	19.9	23.4	28.3
Baran	11.8	11.3	17.6	17.7
Barmer	4.5	5.0	6.4	7.9
Bharatpur	48.5	53.8	55.0	78.2
Bhilwara	46.8	52.4	57.6	64.5
Bikaner	40.5	37.3	51.4	48.7
Bundi	14.7	16.7	16.9	18.0
Chittaurgarh	24.2	25.3	23.5	26.8
Churu	29.7	30.0	30.1	35.5
Dausa	31.9	32.9	33.8	36.8
Dhaulpur	15.6	16.9	15.7	24.1
Dungarpur	5.8	7.6	9.2	10.1
Ganganagar	69.7	66.6	69.3	96.4
Hanumangarh	41.3	50.2	40.9	65.1
Jaipur	107.6	137.7	151.4	154.0
Jaisalmer	0.6	1.3	1.9	3.2
Jalor	6.4	5.9	6.3	6.8
Jhalawar	9.8	9.8	14.1	16.3
Jhunjhunun	89.9	31.4	89.9	113.8
Jodhpur	31.9	34.8	50.7	54.1
Karauli	6.8	7.5	8.2	11.7
Kota	11.2	12.5	17.9	17.8
Nagaur	64.8	70.3	79.7	81.4
Pali	12.9	13.6	15.6	16.8
Pratapgarh	15.5	17.3	16.8	18.7
Rajsamand	23.7	27.8	26.6	27.8
Sawai Madhopur	7.2	8.2	9.5	11.0
Sikar	97.7	116.5	103.7	126.9
Sirohi	5.0	5.1	4.7	5.5
Tonk	15.2	18.4	16.1	20.1
Udaipur	45.7	47.3	49.2	50.1

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



V.2. Service Delivery System - Artificial Insemination

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

Districts	Number of AI Performed ('000)			
	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	858.7	924.2	1,016.6	1,213.5
Ajmer	23.4	25.1	26.8	27.5
Alwar	85.3	87.9	94.8	110.5
Banswara	32.2	37.3	46.5	51.6
Baran	5.6	5.4	9.6	9.6
Barmer	6.3	6.0	7.8	11.5
Bharatpur	54.2	57.3	58.7	87.0
Bhilwara	22.6	23.2	29.1	38.4
Bikaner	5.5	4.7	8.0	7.1
Bundi	10.5	11.1	14.5	15.6
Chittaurgarh	22.4	26.4	30.6	33.3
Churu	14.6	13.4	14.9	17.9
Dausa	39.0	38.1	40.6	50.1
Dhaulpur	15.1	15.5	16.8	21.7
Dungarpur	22.3	27.3	28.2	31.1
Ganganagar	21.4	20.9	22.6	31.3
Hanumangarh	26.2	30.5	26.0	44.7
Jaipur	95.6	113.0	126.6	150.7
Jaisalmer	0.2	0.4	0.5	1.0
Jalor	20.4	19.3	25.6	24.4
Jhalawar	6.8	7.1	11.2	10.9
Jhunjhunu	45.9	44.3	43.6	53.8
Jodhpur	16.7	20.3	30.1	32.3
Karauli	17.2	20.4	24.5	34.2
Kota	6.1	5.9	12.0	11.0
Nagaur	49.9	52.9	58.3	67.0
Pali	18.1	17.9	19.1	24.0
Pratapgarh	9.3	9.5	9.5	10.6
Rajsamand	17.0	20.1	18.6	23.0
Sawai Madhopur	7.9	10.0	13.5	18.1
Sikar	86.4	96.8	87.8	98.9
Sirohi	5.7	6.3	6.1	6.4
Tonk	11.0	11.8	14.4	17.7
Udaipur	37.7	38.3	39.4	40.4

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



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)								
	2001-02	2002-03	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	638.2	702.3	1,726.0	1,851.4	1,912.7	1,930.3	2,043.1	2,264.0	2,646.0
Ajmer	31.1	30.4	58.2	62.7	70.3	78.4	84.0	91.5	95.6
Alwar	27.2	30.9	130.3	146.5	145.1	148.6	156.4	164.6	180.9
Banswara	17.0	21.2	38.9	41.7	45.0	48.9	57.1	69.9	80.0
Baran	6.3	6.5	12.1	14.0	12.9	17.4	16.7	27.2	27.3
Barmer	3.7	3.4	8.2	9.9	10.7	10.8	11.1	14.3	19.4
Bharatpur	32.5	35.5	87.0	88.5	97.0	102.7	111.1	113.7	165.2
Bhilwara	36.8	33.3	65.6	66.2	68.0	69.4	75.6	86.7	102.9
Bikaner	16.9	17.4	38.5	42.0	43.2	46.0	42.0	59.4	55.8
Bundi	9.0	9.2	19.5	21.5	22.1	25.2	27.7	31.4	33.6
Chittaurgarh	28.1	34.2	45.6	47.8	51.7	46.6	51.7	54.1	60.1
Churu	12.0	14.4	37.0	40.8	46.7	44.3	43.4	45.0	53.4
Dausa	17.0	15.8	52.9	63.5	67.6	70.9	71.0	74.4	86.9
Dhaulpur	9.3	10.5	24.5	25.6	28.2	30.8	32.4	32.4	45.8
Dungarpur	11.6	15.8	23.0	27.2	29.0	28.0	34.9	37.4	41.2
Ganganagar	35.1	44.5	85.7	88.4	86.2	91.1	87.5	91.9	127.7
Hanumangarh	20.4	23.8	63.7	64.8	67.8	67.4	80.7	67.0	109.9
Jaipur	81.1	75.4	194.5	198.5	206.3	203.2	250.7	278.0	304.7
Jaisalmer	0.7	0.8	0.7	0.9	0.8	0.8	1.7	2.4	4.2
Jalor	7.7	8.6	19.9	21.6	23.4	26.8	25.2	32.0	31.3
Jhalawar	5.9	9.5	17.4	17.9	16.8	16.6	16.9	25.3	27.2
Jhunjhunun	33.4	45.8	12.8	124.9	131.1	135.7	75.7	133.5	167.6
Jodhpur	19.2	22.9	39.5	45.2	46.8	48.6	55.1	80.7	86.4
Karauli	7.1	8.2	20.7	20.2	20.6	24.1	27.9	32.7	45.9
Kota	8.1	8.2	13.3	13.4	13.3	17.3	18.4	29.9	28.8
Nagaur	28.0	33.6	100.5	112.8	113.1	114.7	123.2	138.0	148.4
Pali	13.3	14.1	27.7	30.2	31.8	31.0	31.5	34.8	40.8
Pratapgarh			21.2	24.7	24.4	24.7	26.8	26.3	29.3
Rajsamand	17.3	19.2	38.0	38.1	35.9	40.8	47.9	45.2	50.8
Sawai Madhopur	5.4	8.1	12.3	15.2	14.5	15.1	18.2	23.1	29.1
Sikar	47.7	54.8	204.9	224.4	228.0	184.1	213.3	191.5	225.8
Sirohi	4.9	4.9	9.8	10.2	9.5	10.7	11.4	10.9	11.9
Tonk	8.3	7.9	21.2	24.1	24.8	26.2	30.2	30.4	37.8
Udaipur	35.9	37.4	72.4	77.2	79.7	83.3	85.7	88.6	90.6

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



V.2. Service Delivery System - Artificial Insemination

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

Union	Number of AI Performed ('000)								
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	194.8	196.7	240.7	257.8	280.2	289.3	252.7	185.9	189.6
Ajmer	16.5	16.5	21.5	24.9	19.5	27.8	26.6	17.5	12.6
Alwar	16.7	16.7	23.7	26.2	29.4	28.4	28.7	26.2	19.9
Bhilwara	31.2	31.2	38.1	22.4	25.9	33.5	23.1	0.0	0.0
Chittorgarh				13.5	14.9	14.9	7.9	0.0	0.0
Ganganagar	22.9	22.9	22.0	26.5	27.0	28.7	22.5	20.5	20.2
Jaipur	79.2	79.2	117.8	107.0	130.4	121.7	111.7	98.6	111.9
Jodhpur	18.6	18.6	33.5	17.5	15.4	16.2	21.2	23.0	25.0
Pali	2.3	2.3	5.4	4.7	4.3	4.4	2.8	0.0	0.0
Udaipur	7.5	9.4	11.7	15.0	13.3	13.7	8.0	0.0	0.0

Zero denotes either zero or not reported.

SOURCE: NDDB

TABLE V.2.5: Union-wise AI Performed by Cooperatives – Buffalo

Union	Number of AI Performed ('000)								
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	94.5	94.8	142.5	156.9	206.5	175.8	145.1	115.1	131.8
Ajmer	3.3	3.3	3.6	5.0	5.8	5.8	7.5	6.1	4.4
Alwar	17.3	17.3	32.0	33.1	32.9	29.9	25.4	27.3	28.9
Bhilwara	11.3	11.3	19.8	10.6	18.4	15.3	7.6	0.0	0.0
Chittorgarh				11.7	13.7	11.5	4.7	0.0	0.0
Ganganagar	8.5	8.5	8.7	10.7	12.8	9.5	8.9	7.9	7.7
Jaipur	37.1	37.1	71.1	59.6	86.0	76.6	69.6	61.4	76.5
Jodhpur	6.3	6.3	17.6	7.8	16.0	8.4	12.1	12.4	14.3
Pali	3.3	3.3	5.9	5.5	6.8	6.2	3.3	0.0	0.0
Udaipur	7.3	7.6	10.2	13.0	14.1	12.6	5.9	0.0	0.0

Zero denotes either zero or not reported.

SOURCE: NDDB

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

Union	Number of AI Performed ('000)								
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	289.3	291.5	383.2	414.7	486.7	465.1	397.8	301	321.4
Ajmer	19.8	19.8	25.1	29.9	25.3	33.6	34.1	23.6	17
Alwar	34	34	55.7	59.3	62.3	58.3	54.1	53.5	48.8
Bhilwara	42.5	42.5	57.9	33	44.3	48.8	30.7	0	0
Chittorgarh				25.2	28.6	26.4	12.6	0	0
Ganganagar	31.4	31.4	30.7	37.2	39.8	38.2	31.4	28.4	27.9
Jaipur	116.3	116.3	188.9	166.6	216.4	198.3	181.3	160	188.4
Jodhpur	24.9	24.9	51.1	25.3	31.4	24.6	33.3	35.4	39.3
Pali	5.6	5.6	11.3	10.2	11.1	10.6	6.1	0	0
Udaipur	14.8	17	21.9	28	27.4	26.3	13.9	0	0

Zero denotes either zero or not reported.

SOURCE: NDDB



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.7: District-wise AI Performed By BAIF – Cattle

Districts	Number of AI Performed ('000)							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
RAJASTHAN	120.8	131.4	176.9	208.5	231.3	230.9	254.7	247.8
Ajmer	15.4	22.2	33.7	38.1	39.8	42.6	44	39.1
Alwar	7.3	8.9	11.2	14	15.8	14.5	16.8	17.7
Banswara	1.5	2	2.5	4.5	6.7	6.9	7.4	8.8
Baran	1	0.1	0.3	1.7	2.1	2.2	2.2	1.5
Barmer	0	0	0	0	0	0	0	0
Bharatpur	2.2	2.2	2.7	3.3	3.4	3.4	4.5	4.6
Bhilwara	33.2	37.2	47.9	54.6	57.8	50.9	52.5	48.5
Bikaner	0	0	0	0	0	0	0	0
Bundi	4.2	1	3.1	5.1	5.9	5.2	5.9	5.6
Chittaurgarh	21.4	19.9	23.9	24.9	26.6	27	29.1	25.9
Churu	0	0	0	0	0	0	0	0
Dausa	2.6	4	4.7	8.5	9.5	10.3	13.2	16
Dhaulpur	0	0	0	0	0	0	0	0
Dungarpur	0.6	0.6	0.7	0.6	1.7	0.9	0.8	1.2
Ganganagar	0	0	0	0	0	0	0	0
Hanumangarh	0	0	0	0	0	0	0	0
Jaipur	2.9	4.6	8.1	8.9	10	13.8	13.9	16.6
Jaisalmer	0	0	0	0	0	0	0	0
Jalor	0	0	0	0	0	0	0	0
Jhalawar	2.3	1.6	3.8	5	6.4	4.7	4.6	5.2
Jhunjhunun	0	0	0	0	0	0	0	0
Jodhpur	0	0	0	0	0	0	0	0
Karauli	3.9	5	6.1	7	8.4	8.4	10.2	10.1
Kota	0	0	0	0	0	0	0	0
Nagaur	3.3	4.4	2.5	0.4	0	0	6.9	6.6
Pali	0	0	0	0	0	0	0	0
Pratapgarh	0	0	0	0	0	0	0	0
Rajsamand	4.5	3.3	5.3	6.6	6.5	6.9	6.2	6.5
Sawai Madhopur	0.2	0.3	0.3	0.6	1.8	1.9	2.4	2.1
Sikar	0	0	0	0	0	0	0	0
Sirohi	0.9	1.7	2.5	3.1	4.4	5.3	5.7	5.6
Tonk	3.7	2.3	6.3	9	10.6	11.9	13.7	12.1
Udaipur	9.6	10	11.2	12.6	13.9	14.2	14.6	13.9

SOURCE: BAIF Data Repository.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.8: District-wise AI Performed By BAIF – Buffalo

Districts	Number of AI Performed ('000)							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
RAJASTHAN	101.4	112.6	173.6	206.2	243.1	261.0	312.9	334.8
Ajmer	5.3	7.4	13	13.9	14.2	16.8	18.8	23.2
Alwar	11.4	13.5	19.5	23.8	24.1	26.7	31.2	33.6
Banswara	3.9	4.6	10	13.9	19.9	19.4	21.4	21.4
Baran	0.8	0	0.4	1.3	1.6	1.8	2	1.8
Barmer	0	0	0	0	0	0	0	0
Bharatpur	3	2.8	3.4	3.9	4.3	4.8	6.2	5.6
Bhilwara	13.3	16.7	26.2	27.8	31.3	31	32.8	37
Bikaner	0	0	0	0	0	0	0	0
Bundi	7	0.3	4.7	6	7.2	7.1	8.7	9.5
Chittaurgarh	16.4	16.2	25.4	28.9	31.4	36.2	43.5	40
Churu	0	0	0	0	0	0	0	0
Dausa	3.5	5.6	6.6	13.2	14.4	17	24	28.7
Dhaulpur	0	0	0	0	0	0	0	0
Dungarpur	2.5	2.9	4	3.7	7.5	4	4.2	3.6
Ganganagar	0	0	0	0	0	0	0	0
Hanumangarh	0	0	0	0	0	0	0	0
Jaipur	2.8	4.6	7.9	8.8	13.1	15.6	18.1	25.2
Jaisalmer	0	0	0	0	0	0	0	0
Jalor	0	0	0	0	0	0	0	0
Jhalawar	2.2	1.6	2.9	4.1	5.2	3.7	3.9	4.6
Jhunjhunun	0	0	0	0	0	0	0	0
Jodhpur	0	0	0	0	0	0	0	0
Karauli	9.9	13.8	17.5	22.3	26.2	27.5	33.8	35.4
Kota	0	0	0	0	0	0	0	0
Nagaur	3.7	5.9	3.2	0.3	0	0	9.5	9.6
Pali	0	0	0	0	0	0	0	0
Pratapgarh	0	0	0	0	0	0	0	0
Rajsamand	2.5	2.2	5.1	6.6	7.8	8	7.9	8.7
Sawai Madhopur	0.2	0.2	0.4	0.7	2.1	2.4	3.6	3
Sikar	0	0	0	0	0	0	0	0
Sirohi	0.9	2.9	5.7	5.8	7.4	9.4	10.1	9.8
Tonk	3.2	2.1	6	7.4	9.8	12.2	15.5	17.5
Udaipur	8.9	9.5	11.9	13.9	15.8	17.5	17.9	16.7

SOURCE: BAIF Data Repository.



V.2. Service Delivery System - Artificial Insemination

TABLE V.2.9: District-wise AI Performed By BAIF – Bovine

Districts	Number of AI Performed ('000)							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
RAJASTHAN	222.2	244.0	350.5	414.6	474.5	491.9	567.6	582.6
Ajmer	20.8	29.5	46.7	52	54	59.4	62.8	62.3
Alwar	18.8	22.4	30.8	37.9	39.9	41.2	48	51.3
Banswara	5.5	6.6	12.5	18.4	26.6	26.2	28.8	30.1
Baran	1.8	0.1	0.6	3	3.8	4	4.2	3.3
Barmer	0	0	0	0	0	0	0	0
Bharatpur	5.1	5	6	7.2	7.7	8.2	10.7	10.2
Bhilwara	46.5	53.9	74.1	82.5	89.1	81.9	85.2	85.6
Bikaner	0	0	0	0	0	0	0	0
Bundi	11.2	1.3	7.8	11	13.1	12.2	14.5	15.1
Chittaurgarh	37.8	36.1	49.3	53.8	57.9	63.1	72.6	65.9
Churu	0	0	0	0	0	0	0	0
Dausa	6.1	9.6	11.3	21.7	23.9	27.3	37.2	44.7
Dhaulpur	0	0	0	0	0	0	0	0
Dungarpur	3.2	3.5	4.6	4.3	9.3	4.9	5	4.9
Ganganagar	0	0	0	0	0	0	0	0
Hanumangarh	0	0	0	0	0	0	0	0
Jaipur	5.7	9.1	16	17.7	23.1	29.4	32	41.8
Jaisalmer	0	0	0	0	0	0	0	0
Jalor	0	0	0	0	0	0	0	0
Jhalawar	4.5	3.2	6.8	9.1	11.6	8.4	8.5	9.8
Jhunjhunun	0	0	0	0	0	0	0	0
Jodhpur	0	0	0	0	0	0	0	0
Karauli	13.7	18.7	23.6	29.2	34.6	35.9	44	45.5
Kota	0	0	0	0	0	0	0	0
Nagaur	7	10.3	5.7	0.7	0	0	16.4	16.2
Pali	0	0	0	0	0	0	0	0
Pratapgarh	0	0	0	0	0	0	0	0
Rajsamand	7	5.4	10.4	13.2	14.3	14.9	14.1	15.3
Sawai Madhopur	0.4	0.6	0.6	1.3	3.9	4.4	6	5.1
Sikar	0	0	0	0	0	0	0	0
Sirohi	1.8	4.6	8.2	8.9	11.8	14.6	15.8	15.4
Tonk	6.9	4.4	12.3	16.4	20.4	24.1	29.2	29.6
Udaipur	18.5	19.5	23.1	26.4	29.7	31.7	32.4	30.6

SOURCE: BAIF Data Repository.



V.3. Service Delivery System - Animal Health

TABLE V.3.1: District-wise Vaccination Performed for Foot-and-Mouth Disease

Districts	Foot-and-Mouth Disease Vaccination ('000)								
	2001-02	2002-03	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	505	476	846	993	906	885	1,376	1,809	6,538
Ajmer	14	16	25	23	26	28	38	59	226
Alwar	24	40	57	69	68	49	97	134	298
Banswara	9	13	31	42	20	33	32	34	165
Baran	10	8	29	32	22	28	36	28	176
Barmer	5	3	10	6	8	8	15	15	97
Bharatpur	28	22	60	55	61	64	85	78	256
Bhilwara	13	16	19	23	25	8	32	37	244
Bikaner	11	7	28	28	26	13	21	52	218
Bundi	10	7	16	20	24	30	40	30	137
Chittaurgarh	10	17	8	34	22	21	39	27	162
Churu	7	10	11	16	15	15	16	31	188
Dausa	6	5	11	18	14	21	32	31	148
Dhaulpur	2	6	15	12	16	15	37	82	159
Dungarpur	11	9	16	18	12	13	16	14	180
Ganganagar	28	58	83	113	94	96	103	90	90
Hanumangarh	25	28	48	45	49	35	58	126	418
Jaipur	94	48	53	70	75	129	103	109	287
Jaisalmer	5	4	6	11	16	11	37	91	117
Jalor	23	20	19	21	17	10	17	23	113
Jhalawar	14	12	25	20	12	19	20	17	125
Jhunjhunu	34	20	20	38	38	32	57	115	229
Jodhpur	14	13	29	28	34	44	58	64	261
Karauli	3	5	10	9	7	10	24	58	160
Kota	10	7	15	10	20	22	31	33	164
Nagaur	20	22	28	34	43	28	91	153	653
Pali	30	19	33	34	33	32	49	50	249
Pratapgarh	0	0	10	8	11	6	11	6	201
Rajsamand	8	12	18	24	12	4	22	17	170
Sawai Madhopur	10	2	16	6	3	1	7	8	152
Sikar	10	8	37	57	30	19	84	129	290
Sirohi	6	4	13	15	15	15	16	11	114
Tonk	9	7	22	25	23	14	27	41	127
Udaipur	5	9	25	29	15	12	25	16	301

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



V.3. Service Delivery System - Animal Health

TABLE V.3.2: District-wise Vaccination Preformed for Haemorrhagic Septicaemia

Districts	Haemorrhagic Septicaemia Vaccination ('000)								
	2001-02	2002-03	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	4,470	3,540	4,156	4,344	4,456	4,693	4,782	4,937	5,305
Ajmer	170	126	156	156	156	168	182	204	199
Alwar	358	211	258	276	277	308	289	393	461
Banswara	310	248	251	250	249	252	252	247	231
Baran	107	83	93	113	94	133	104	134	163
Barmer	40	23	33	38	57	38	53	55	73
Bharatpur	393	253	284	298	314	341	342	319	381
Bhilwara	127	127	114	124	123	129	120	159	145
Bikaner	0	1	2	2	4	5	4	7	10
Bundi	156	66	119	134	124	131	122	139	143
Chittaurgarh	169	211	181	148	176	185	184	148	162
Churu	15	11	10	9	13	16	17	16	23
Dausa	168	111	151	157	164	177	182	177	188
Dhaulpur	150	124	142	139	144	157	159	159	145
Dungarpur	179	109	151	148	165	165	155	153	203
Ganganagar	141	177	190	202	172	194	206	185	199
Hanumangarh	52	60	75	73	74	73	82	111	107
Jaipur	282	204	282	295	296	349	337	360	329
Jaisalmer	44	36	12	11	18	17	11	15	14
Jalor	64	72	68	78	80	76	86	77	93
Jhalawar	128	100	116	124	141	122	122	116	123
Jhunjhunun	153	141	145	143	153	162	165	147	167
Jodhpur	93	96	148	126	142	142	144	99	157
Karauli	166	86	104	102	118	132	139	143	173
Kota	108	63	62	65	61	66	68	81	83
Nagaur	114	106	97	104	107	112	111	118	148
Pali	130	107	142	149	148	153	148	148	149
Pratapgarh	0	0	62	81	58	75	83	70	118
Rajsamand	126	122	108	119	119	118	114	130	115
Sawai Madhopur	95	64	62	75	76	88	97	104	98
Sikar	107	105	77	105	105	79	159	179	163
Sirohi	34	25	56	78	69	65	59	66	57
Tonk	90	82	132	171	177	164	192	212	204
Udaipur	200	191	273	251	282	301	294	266	280

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



V.3. Service Delivery System - Animal Health

TABLE V.3.3: District-wise Vaccination Preformed for Black Quarter

Districts	Black Quarter Vaccination ('000)								
	2001-02	2002-03	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	1,027	950	1,072	1,048	1,139	1,168	1,127	1,166	1,216
Ajmer	46	32	29	39	37	35	38	45	45
Alwar	1	6	18	23	21	24	23	29	39
Banswara	63	54	40	45	51	43	43	45	50
Baran	14	10	11	17	17	18	22	22	24
Barmer	90	51	64	68	85	70	69	82	67
Bharatpur	3	2	1	1	1	2	3	2	1
Bhilwara	27	32	29	32	31	30	30	34	36
Bikaner	27	51	51	43	46	59	39	35	65
Bundi	4	1	9	12	8	12	11	9	13
Chittaurgarh	29	31	26	23	26	25	26	26	21
Churu	15	15	14	15	15	22	19	16	22
Dausa	5	7	3	3	6	3	3	5	5
Dhaulpur	3	3	0	0	1	1	1	2	2
Dungarpur	2	9	13	11	13	13	2	12	19
Ganganagar	73	89	140	105	99	108	116	107	94
Hanumangarh	60	57	75	74	82	85	86	100	93
Jaipur	11	18	27	12	26	39	17	15	18
Jaisalmer	99	82	53	57	71	71	47	67	56
Jalor	45	50	48	53	48	49	53	46	53
Jhalawar	36	23	30	25	27	28	25	27	23
Jhunjhunu	29	22	22	24	27	42	55	41	40
Jodhpur	117	98	128	116	120	101	103	91	97
Karauli	8	3	2	3	3	3	2	5	8
Kota	2	1	3	2	0	4	5	7	7
Nagaur	48	48	41	49	54	61	62	70	83
Pali	72	61	74	64	82	79	84	81	91
Pratapgarh	0	0	6	12	10	13	0	10	17
Rajsamand	38	24	27	29	29	30	30	35	30
Sawai Madhopur	3	2	0	0	1	1	0	0	0
Sikar	14	18	18	28	28	22	47	33	32
Sirohi	21	17	30	32	35	33	27	33	27
Tonk	2	2	4	4	2	3	1	3	0
Udaipur	21	33	36	27	37	39	38	31	36

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.



V.3. Service Delivery System - Animal Health

TABLE V.3.4: District-wise Bovine Vaccination

Districts	Bovine Vaccination ('000)								
	2001-02	2002-03	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	6,002	4,966	6,074	6,385	6,501	6,746	7,285	7,912	13,059
Ajmer	230	174	210	218	219	231	258	308	470
Alwar	383	257	333	368	366	381	409	556	798
Banswara	382	315	322	337	320	328	327	326	446
Baran	131	101	133	162	133	179	162	184	363
Barmer	135	77	107	112	150	116	137	152	237
Bharatpur	424	277	345	354	376	407	430	399	638
Bhilwara	167	175	162	179	179	167	182	230	425
Bikaner	38	59	81	73	76	77	64	94	293
Bundi	170	74	144	166	156	173	173	178	293
Chittaurgarh	208	259	215	205	224	231	249	201	345
Churu	37	36	35	40	43	53	52	63	233
Dausa	179	123	165	178	184	201	217	213	341
Dhaulpur	155	133	157	151	161	173	197	243	306
Dungarpur	192	127	180	177	190	191	173	179	402
Ganganagar	242	324	413	420	365	398	425	382	383
Hanumangarh	137	145	198	192	205	193	226	337	618
Jaipur	387	270	362	377	397	517	457	484	634
Jaisalmer	148	122	71	79	105	99	95	173	187
Jalor	132	142	135	152	145	135	156	146	259
Jhalawar	178	135	171	169	180	169	167	160	271
Jhunjhunun	216	183	187	205	218	236	277	303	436
Jodhpur	224	207	305	270	296	287	305	254	515
Karauli	177	94	116	114	128	145	165	206	341
Kota	120	71	80	77	81	92	104	121	254
Nagaur	182	176	166	187	204	201	264	341	884
Pali	232	187	249	247	263	264	281	279	489
Pratapgarh	0	0	78	101	79	94	94	86	336
Rajsamand	172	158	153	172	160	152	166	182	315
Sawai Madhopur	108	68	78	81	80	90	104	112	250
Sikar	131	131	132	190	163	120	290	341	485
Sirohi	61	46	99	125	119	113	102	110	198
Tonk	101	91	158	200	202	181	220	256	331
Udaipur	226	233	334	307	334	352	357	313	617

SOURCE: Administrative Reports, Directorate of Animal Husbandry, Govt. of Rajasthan.

Note: Bovine vaccination includes vaccination for BQ, HS and FMD.



PART VI : FEED RESOURCES

In Rajasthan, the livestock keepers have traditionally relied on common grazing lands "gochars", scared groves "orans" and forests. With the growth of mining industry and allocation of community wastelands for biodiesel plantation, the permanent pastures and other grazing land reduced from 1.9 million ha in 1990-91 to 1.7 million ha in 2009-10. Often layers of white marble dust choke neighbouring grazing land. Amidst shrinking grazing land, forest were open for grazing to animals. But a Supreme Court ruling in 2002 that all human use (including grazing) in sanctuaries be banned to curb the transmission of disease to resident wildlife. Now the dairy farmers are shifting from extensive open grazing system to semi-intensive and intensive stall feeding system. Dairying is the most reliable source of earning to farmers in Rajasthan but with disappearing grazing land, restricted forest and stall feeding, the bovine are facing a severe shortage of fodder.





VI.1. Feed Resources - Availability vs. Requirement

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	2010-11	2011-12	2012-13	2000-01	2003-04	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
RAJASTHAN	3,982	3,227	3,229	3,627	2,875	3,287	3,386	4,853	19,230	21,664	22,208	22,771	21,745	26,002	24,505	23,954
Ajmer	44	15	19	17	15	13	12	27	423	468	463	493	436	775	640	664
Alwar	59	47	46	50	35	34	30	55	785	829	813	809	864	859	854	853
Banswara	3	3	2	2	2	2	2	275	323	361	316	325	332	337	340	
Baran	4	5	3	2	3	2	2	2	451	449	528	550	547	574	593	629
Barmer	378	314	357	360	370	411	430	417	1,650	1,794	1,756	1,777	1,820	1,979	1,868	1,646
Bharatpur	36	30	34	30	31	27	26	35	563	573	574	562	603	597	591	587
Bhilwara	71	39	57	47	35	36	30	54	410	457	543	520	456	733	624	643
Bikaner	835	782	612	891	653	884	908	1,101	1,465	1,713	1,434	1,784	1,502	1,880	1,884	1,807
Bundi	29	27	17	15	15	18	13	14	344	372	403	413	384	444	461	464
Chittorgarh	34	22	23	21	21	22	21	27	476	562	691	492	423	520	505	518
Churu	456	328	347	350	295	248	327	608	1,141	1,304	1,449	1,459	1,283	1,575	1,528	1,355
Dausha	33	25	18	18	14	12	11	15	315	342	338	351	382	392	384	378
Dholpur	6	4	4	3	3	3	3	4	159	205	198	208	229	226	230	230
Dungarpur	4	6	4	4	5	5	5	5	128	174	193	158	186	187	200	200
Ganganagar	181	191	213	282	187	217	216	357	907	953	1,054	1,092	947	1,073	1,107	1,187
Hanumangarh	265	261	337	389	215	310	314	509	883	1,144	1,234	1,237	1,014	1,278	1,220	1,198
Jaipur	120	82	69	73	70	59	53	71	818	951	896	963	934	1,172	1,091	1,013
Jaisalmer	318	357	330	374	318	426	430	500	505	628	638	728	626	878	848	844
Jalor	95	68	76	66	63	61	50	103	700	813	855	813	824	1,126	911	895
Jhalawar	4	4	3	3	4	3	3	4	417	464	511	549	579	570	601	614
Junjhunun	80	59	74	79	67	61	66	132	632	646	648	655	614	734	668	644
Jodhpur	256	174	172	174	148	153	158	291	1,205	1,425	1,379	1,420	1,402	1,580	1,516	1,449
Karoli	11	8	5	5	5	4	3	7	271	313	295	306	348	344	340	340
Kota	9	8	5	5	5	5	4	4	426	399	421	435	439	459	462	492
Nagaur	288	151	136	135	92	78	91	217	1,340	1,478	1,464	1,460	1,411	1,859	1,469	1,453
Pali	102	54	85	66	53	46	35	65	570	627	706	645	631	887	702	721
Pratapgarh				2	2	2	2	2				272	267	272	283	291
Rajsamand	10	7	16	12	9	10	8	12	92	102	143	110	99	146	139	140
Sawai Madhopur	27	10	7	7	6	5	4	8	318	374	330	372	425	412	398	400
Sikar	128	80	87	87	76	72	80	134	673	735	740	743	715	847	777	748
Sirohi	31	27	29	23	22	22	18	32	168	202	226	192	171	241	233	230
Tonk	48	23	18	16	14	13	13	19	465	550	540	584	575	715	691	637
Udaipur	14	17	23	22	22	22	21	22	256	299	386	303	284	336	348	342

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



VI.1. Feed Resources - Availability vs. Requirement

TABLE VI.1.2: District-wise Dry Matter (DM) Availability, Requirement and Balance

Districts	Available/ Required/ Balance	Dry Matter Availability, Requirement and Balance ('000 MT)						
		1992	1997	2003	2007	2008	2009	2010
Ajmer	Available	826.9	806.4	452.7	1,070.3	949.4	949.1	967.2
	Requirement	1,619.2	2,426.3	1,911.0	2,398.0	2,508.4	2,627.9	2,756.9
	Balance	-792.3	-1,619.9	-1,458.3	-1,327.7	-1,559.0	-1,678.8	-1,789.7
Alwar	Available	410.8	539.2	1,499.7	2,457.6	2,493.3	2,493.3	2,297.6
	Requirement	2,478.8	3,195.9	3,627.3	4,073.8	4,187.2	4,310.4	4,443.6
	Balance	-2,068.0	-2,656.8	-2,127.6	-1,616.2	-1,693.9	-1,817.1	-2,146.0
Banswara	Available	1,838.3	1,937.7	871.0	1,032.1	1,182.9	1,182.9	854.3
	Requirement	1,600.8	1,956.9	2,261.2	2,383.6	2,405.6	2,433.6	2,466.0
	Balance	237.5	-19.2	-1,390.2	-1,351.5	-1,222.7	-1,250.6	-1,611.7
Baran	Available	1,035.5	1,201.4	700.5	1,256.8	1,278.9	1,278.9	1,406.5
	Requirement	1,343.6	1,523.8	1,350.8	1,643.8	1,728.8	1,825.3	1,933.5
	Balance	-308.1	-322.4	-650.3	-387.0	-449.9	-546.5	-527.0
Barmer	Available	1,243.1	1,661.6	1,404.1	1,779.8	1,688.3	1,661.6	1,411.3
	Requirement	2,352.0	2,603.1	2,464.2	2,899.8	3,013.3	3,139.8	3,280.7
	Balance	-1,108.9	-941.5	-1,060.1	-1,120.0	-1,325.0	-1,478.2	-1,869.4
Bharatpur	Available	1,623.6	1,631.4	1,046.5	1,441.2	1,545.5	1,545.5	1,706.8
	Requirement	1,841.1	2,179.4	2,711.9	2,070.1	1,978.5	1,898.0	1,828.1
	Balance	-217.5	-548.0	-1,665.5	-628.8	-432.9	-352.5	-121.3
Bhilwara	Available	801.3	1,007.6	699.4	1,970.8	1,550.7	1,550.7	1,018.9
	Requirement	2,603.2	3,085.2	2,568.8	2,590.8	2,608.5	2,633.1	2,663.8
	Balance	-1,801.9	-2,077.6	-1,869.4	-620.0	-1,057.8	-1,082.5	-1,645.0
Bikaner	Available	1,898.6	1,941.6	1,999.0	2,067.4	2,222.3	2,177.1	1,558.7
	Requirement	2,084.3	2,149.9	2,404.7	2,538.8	2,580.6	2,630.3	2,688.9
	Balance	-185.7	-208.3	-405.7	-471.4	-358.3	-453.3	-1,130.2
Bundi	Available	1,476.2	2,307.8	571.7	1,484.8	1,210.4	1,210.4	1,187.3
	Requirement	1,306.4	1,494.5	1,443.6	1,651.3	1,702.0	1,758.9	1,821.4
	Balance	169.7	813.4	-871.9	-166.5	-491.6	-548.5	-634.1
Chittaurgarh	Available	1,211.4	524.1	1,436.4	2,333.2	2,371.4	2,371.4	1,779.7
	Requirement	2,711.3	2,807.8	2,932.3	3,515.9	3,661.4	3,827.3	4,013.4
	Balance	-1,499.9	-2,283.7	-1,495.9	-1,182.7	-1,290.0	-1,456.0	-2,233.7
Churu	Available	395.6	474.3	884.1	1,555.0	2,116.8	2,026.3	1,017.5
	Requirement	1,077.3	1,944.2	1,523.3	1,754.0	1,812.0	1,875.8	1,946.3
	Balance	-681.8	-1,469.9	-639.2	-199.0	304.9	150.5	-928.8
Dausa	Available	408.7	483.7	677.5	1,081.6	1,138.4	1,138.4	1,092.9
	Requirement	1,234.4	1,567.7	1,641.1	1,878.8	1,945.8	2,020.8	2,104.5
	Balance	-825.7	-1,084.0	-963.6	-797.2	-807.5	-882.5	-1,011.6
Dhaulpur	Available	647.0	610.4	573.7	635.9	679.2	679.2	821.1
	Requirement	921.4	1,079.4	1,226.6	1,335.1	1,366.6	1,401.6	1,440.0
	Balance	-274.4	-469.0	-652.9	-699.1	-687.4	-722.4	-618.9
Dungarpur	Available	359.5	367.6	375.7	343.3	429.2	429.2	442.0
	Requirement	1,186.8	1,448.7	1,641.7	1,760.5	1,785.4	1,814.3	1,846.4
	Balance	-827.3	-1,081.1	-1,266.0	-1,417.2	-1,356.2	-1,385.1	-1,404.4
Ganganagar	Available	1,980.1	2,367.7	1,289.6	1,820.2	2,231.7	2,231.0	1,636.1
	Requirement	3,339.7	2,252.5	2,098.4	2,666.2	2,816.5	2,983.5	3,169.1
	Balance	-1,359.6	115.2	-808.8	-846.0	-584.8	-752.5	-1,533.0
Hanumangarh	Available	1,267.9	1,100.1	1,435.7	1,924.7	2,250.3	2,239.6	1,761.9
	Requirement	1,987.4	2,100.4	2,129.5	2,414.3	2,482.2	2,555.0	2,633.1
	Balance	-719.5	-1,000.3	-693.8	-489.6	-231.9	-315.4	-871.2



Districts	Available/ Required/ Balance	Dry Matter Availability, Requirement and Balance ('000 MT)							
		1992	1997	2003	2007	2008	2009	2010	2011
Jaipur	Available	874.0	1,103.2	1,639.3	2,259.9	2,816.5	2,816.4	2,033.4	2,424.9
	Requirement	3,056.1	3,870.6	4,317.8	5,012.1	5,221.2	5,462.7	5,741.7	6,064.6
	Balance	-2,182.1	-2,767.4	-2,678.6	-2,752.2	-2,404.7	-2,646.3	-3,708.3	-3,639.7
Jaisalmer	Available	1,045.4	1,092.8	1,476.3	1,871.3	1,251.1	1,251.1	1,204.2	1,125.3
	Requirement	324.4	1,206.8	1,017.4	1,399.0	1,501.2	1,619.1	1,755.4	1,913.3
	Balance	721.0	-113.9	458.9	472.3	-250.1	-368.0	-551.2	-788.0
Jalor	Available	1,009.5	1,157.6	746.7	1,517.1	1,011.5	1,001.5	705.0	1,243.2
	Requirement	1,277.2	1,941.0	1,954.4	2,277.8	2,348.5	2,423.6	2,503.0	2,586.6
	Balance	-267.7	-783.5	-1,207.7	-760.7	-1,336.9	-1,422.1	-1,797.9	-1,343.4
Jhalawar	Available	1,853.3	1,735.2	794.9	1,333.2	1,276.6	1,276.6	1,455.3	1,365.9
	Requirement	1,596.6	1,687.0	1,825.8	2,047.5	2,095.3	2,150.2	2,211.4	2,278.3
	Balance	256.8	48.2	-1,030.9	-714.3	-818.7	-873.6	-756.0	-912.4
Jhunjhunun	Available	835.8	826.2	816.6	1,454.9	1,702.8	1,702.6	1,106.4	1,404.5
	Requirement	1,102.2	1,683.0	1,823.9	2,051.2	2,123.0	2,207.8	2,307.8	2,425.6
	Balance	-266.4	-856.8	-1,007.3	-596.4	-420.2	-505.2	-1,201.4	-1,021.1
Jodhpur	Available	1,195.1	1,312.2	1,280.1	1,829.0	2,002.7	1,976.4	1,379.4	1,013.2
	Requirement	1,556.8	2,902.5	2,470.3	3,008.6	3,126.5	3,254.7	3,393.9	3,545.2
	Balance	-361.7	-1,590.3	-1,190.2	-1,179.6	-1,123.8	-1,278.3	-2,014.5	-2,532.0
Karauli	Available	794.8	1,071.1	518.4	960.9	1,074.7	1,074.7	1,224.8	1,149.8
	Requirement	1,532.8	1,552.6	1,513.0	1,738.7	1,795.2	1,857.2	1,924.7	1,998.3
	Balance	-738.0	-481.5	-994.6	-777.9	-720.5	-782.4	-699.9	-848.5
Kota	Available	1,069.9	1,227.8	558.5	960.7	993.9	993.9	1,075.3	1,034.6
	Requirement	1,034.2	1,208.8	1,196.2	1,441.9	1,503.2	1,570.7	1,644.5	1,724.5
	Balance	35.7	19.0	-637.7	-481.3	-509.3	-576.8	-569.1	-689.9
Nagaur	Available	1,556.3	1,372.4	1,336.2	2,274.6	2,800.9	2,755.9	1,671.2	2,213.6
	Requirement	2,016.8	3,075.4	2,657.3	3,027.7	3,112.8	3,203.8	3,301.1	3,405.1
	Balance	-460.5	-1,703.0	-1,321.1	-753.1	-311.9	-447.9	-1,629.9	-1,191.5
Pali	Available	1,235.4	968.1	647.1	1,178.1	925.2	924.7	647.9	562.0
	Requirement	1,642.4	2,213.9	1,940.4	2,235.9	2,309.7	2,391.2	2,480.6	2,578.1
	Balance	-407.0	-1,245.7	-1,293.3	-1,057.8	-1,384.4	-1,466.5	-1,832.6	-2,016.0
Rajsamand	Available	1,086.7	1,284.7	260.9	623.5	439.4	439.3	382.3	410.8
	Requirement	1,294.0	1,513.7	1,339.3	1,537.0	1,577.2	1,621.3	1,669.0	1,720.3
	Balance	-207.3	-229.0	-1,078.4	-913.6	-1,137.9	-1,181.9	-1,286.7	-1,309.5
Sawai Madhopur	Available	456.6	464.2	414.5	757.7	823.1	823.1	892.7	244.7
	Requirement	1,137.6	1,277.3	1,223.8	1,294.7	1,321.8	1,352.7	1,387.1	1,424.9
	Balance	-681.0	-813.0	-809.3	-537.0	-498.7	-529.6	-494.4	-1,180.2
Sikar	Available	918.9	1,011.1	1,085.8	1,790.8	2,117.5	2,115.7	1,374.2	1,744.9
	Requirement	1,562.4	2,235.6	2,432.4	2,807.1	2,909.1	3,023.9	3,153.1	3,298.4
	Balance	-643.5	-1,224.5	-1,346.6	-1,016.3	-791.6	-908.2	-1,778.9	-1,553.5
Sirohi	Available	394.3	347.6	300.9	495.9	443.5	443.4	332.8	388.1
	Requirement	696.5	865.1	1,033.7	1,145.9	1,172.8	1,202.5	1,234.7	1,269.2
	Balance	-302.2	-517.5	-732.8	-650.0	-729.4	-759.1	-901.9	-881.1
Tonk	Available	614.9	691.9	537.8	845.9	998.4	998.4	698.4	848.4
	Requirement	1,444.8	1,553.3	1,336.3	1,770.2	1,881.7	2,005.5	2,142.1	2,292.4
	Balance	-829.9	-861.4	-798.6	-924.3	-883.3	-1,007.1	-1,443.7	-1,444.0
Udaipur	Available	1,205.1	1,218.9	1,191.3	1,246.5	1,293.4	1,293.4	1,074.7	1,184.1
	Requirement	4,083.1	4,031.4	4,134.8	3,927.9	3,882.0	3,846.2	3,817.4	3,793.6
	Balance	-2,878.0	-2,812.5	-2,943.4	-2,681.4	-2,588.6	-2,552.8	-2,742.7	-2,609.5

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



VI.1. Feed Resources - Availability vs. Requirement

TABLE VI.1.3: Availability, Requirement and Surplus/Deficit of Feed Nutrient

Year	Dry Matter ('000 MT)		
	Availability	Requirement	Surplus/Deficit
1992	33,571	55,046	-21,475
1997	35,848	66,634	-30,786
2003	29,523	66,153	-36,630
2007	45,655	74,298	-28,643
2008	47,310	76,464	-29,154
2009	47,052	78,929	-31,877
2010	38,218	81,703	-43,485
2011	40,809	84,808	-43,999

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





PART VII : AGRICULTURE

The state of Rajasthan has extreme geo-climatic conditions. It had 48 drought years in 100 years for the century ending 2002. It has about 11 per cent of the country's land mass, but only 1 per cent of total surface water of the country is available in the state. Of the 14 river basins, Chambal river is perennial. Even rainfall is erratic and scanty as average rainfall is 57 cm. Out of the total 237 blocks in the state, only 30 blocks are in safe category and balance are either "over exploited" or "critical". Apart from water resource limitations, the weather is severe as the temperature ranges from as low as 3°C to as high as 49°C. Although it has 10 agro-climatic zones, about two-third is arid or semi-arid area with tropical desert climate. Weather uncertainties and unfavourable climatic conditions lead to high level of fluctuation in crop productivity as well as agricultural production which results into wide fluctuation in Gross State Domestic Product (GSDP). It is the largest producer of mustard, bajra, coriander, cumin, cluster beans, isabgul and guar. But considering high risk involved in food grain production, the grower are diverting area under oilseed cultivation and increasing reliance on animal husbandry as source of income. In order to impart stability to agriculture, the State Government has formulated State Agriculture Policy in 2012.





VII.1. Agro-Climatic Zones



TABLE VII.1.1: Rajasthan's Agro-Climatic Zones

Arid Western	Irrigated North Western Plain	Hyper Arid Irrigated Western Plain Partially
Transitional Plain of Inland Drainage	Transitional Plain of Luni Basin	Semi Arid Eastern Plain
Flood Prone Eastern Plain	Sub Humid Southern Plain	Humid Southern Plain
Humid South- Eastern Plain		

SOURCE: Water Resources Department, Govt. of Rajasthan.



VII.1. Agriculture

TABLE VII.1.2: Details of Agro-Climatic Zones

Name of Zone	Arid western	Irrigated North Western Plain	Hyper arid Irrigated Western plain Partially.	Transitional Plain of inland drainage	Transitional plain of Luni Basin
Districts Covered (Blocks)	Part of Barmer district (Barmer, Balotra, Baytod, Chohtan, Dhorimanna, Sindhari, Sheo) and Jodhpur district (Balesar, Bap, Part of Bhopalgarh, Luni, Mandore, Osian, Phalodi, Shergarh)	Ganganagar, Hanumangarh	Bikaner, Jaisalmer and Part of Churu (Ratangarh, Sardarshahar, Sujangarh)	Nagaur, Sikar, Jhunjhunun and Part of Churu (Churu, Rajgarh, Taranagar)	Jalor, Pali, Part of Sirohi (Reodhar, Sheoganj, Sirohi), Barmer (Siwana) and Jodhpur (Bilara, Part of Bhopalgarh)
Total area (Million Ha)	4.56	2.06	7.70	3.71	3.17
Net Sown Area (Million Ha)	2.34	1.60	2.44	2.68	1.93
Rainfall (mm)	216-496	183-344	192-420	266-627	139-1,273
Soil Type	Desert soils and sand dunes aeolian soil, coarse sand in Texture and some places Calcareous	Alluvial deposits calcareous, high soluble salts and exchangeable sodium	Desert soils and sand dunes aeolian soil, Loamy coarse in texture and calcareous	Sandy loam, shallow depth red soils in depressions	Red desert soils in Jodhpur, Jalor and Pali sierozems in Pali and Sirohi
Major Crops	Bajra, Mothbean, sesame, Wheat, Mustard, Cumin	Cotton, Guar, Wheat, Mustard, Gram	Bajra, Mothbean, Guar, Wheat, Mustard, Gram	Bajra, Guar, Pulses, Wheat, Mustard, Gram	Bajra, Guar, Sesame, Wheat, Mustard

SOURCE: Water Resources Department, Govt. of Rajasthan.



VII.1. Agriculture

TABLE VII.1.2: Details of Agro-Climatic Zones

Name of Zone	Semi Arid Eastern Plains	Flood Prone Eastern Plain.	Sub-humid Southern Plains	Humid Southern Plains	Humid south Eastern Plain
District Covered (Blocks)	Ajmer, Jaipur, Tonk, Part of Dausa (Bandikui, Dausa, Lalsot, Sikrai)	Alwar, Bharatpur, Dhaulpur, Karauli, Part of Dausa (Mahuwa) and Sawai Madhopur (Bamanwas, Bonli, Gangapur)	Bhilwara, Chittaurgarh, Rajsamand, Part of Sirohi (Abu Road, Pindwara), Udaipur (Bargain, Bhinder, Girwa, Gogunda, Kherwara, Kotra, Jhadol, Mavli, Sarada) and Pratapgarh (Choti Sadri, Pratapgarh)	Dungarpur, Banswara, Part of Udaipur (Salumber) and Pratapgarh (Dhariyawad, Peepalkhund, Arnod)	Baran, Bundi, Jhalawar, Kota, Part of Sawai Madhopur (Khandar, Sawai Madhopur)
Total Area (Million Ha)	2.95	2.44	3.76	1.20	2.69
Net Sown Area (Million Ha)	1.77	1.41	0.92	0.57	1.27
Rainfall (mm)	313-694	140-736	311-1,470	511-1,043	452-985
Soil	Sierozems, eastern part alluvial, west north west lithosols, foot hills, brown soils	Alluvial prone to water logging, nature of recently alluvial calcareous has been observed	Soil are lithosol at foot hills and alluvial in plains	Predominantly reddish medium texture, well drained calcareous, shallow on hills, deep soil in valleys	black, of alluvial origin, clay loam
Major Crops	Bajra, Guar, Jowar, Wheat, Mustard, Gram	Bajra, Guar, Groundnut Wheat, Barley, Mustard, Gram	Maize, Pulses, Jowar, Wheat, Mustard Gram	Maize, Paddy, Jowar, Black gram, Wheat, Mustard, Gram	Jowar, Soybean, Wheat, Mustard,

SOURCE: Water Resources Department, Govt. of Rajasthan.



VII.2. Land Use Pattern

TABLE VII.2.1: District-wise Land Use Pattern

(‘000 ha)

Districts	Reporting Area		Forest Area		Permanent Pastures and Grazing Land		Fallow Land		Net sown area	
	2000-01	2012-13	2000-01	2012-13	2000-01	2012-13	2000-01	2012-13	2000-01	2012-13
RAJASTHAN	34,265	34,267	2,606	2,750	1,707	1,695	4,859	3,894	15,865	17,479
Ajmer	842	843	51	58	80	78	130	48	363	454
Alwar	783	783	71	84	24	24	34	38	508	504
Banswara	506	454	111	91	13	12	49	35	227	228
Baran	700	699	215	217	37	35	44	23	312	345
Barmer	2,817	2,817	29	32	204	204	600	684	1,552	1,492
Bharatpur	507	507	29	34	9	8	22	15	389	396
Bhilwara	1,047	1,051	74	76	120	121	144	96	332	429
Bikaner	3,036	3,042	81	94	52	51	418	387	1,379	1,542
Bundi	582	582	141	144	24	25	58	35	235	262
Chittaurgarh	1,036	751	189	120	76	74	60	35	385	312
Churu	1,386	1,386	6	7	39	38	180	107	1,087	1,153
Dausa	340	341	24	26	26	26	31	17	212	229
Dhaulpur	301	301	27	27	18	18	38	15	130	158
Dungarpur	386	386	61	62	35	35	48	40	115	134
Ganganagar	1,093	1,093	59	61	0	0	256	141	666	786
Hanumangarh	970	970	13	19	5	5	237	62	647	824
Jaipur	1,106	1,106	82	82	78	74	200	105	584	662
Jaisalmer	3,839	3,839	22	45	101	103	153	239	425	667
Jalor	1,057	1,057	20	24	46	47	212	178	622	662
Jhalawar	632	632	120	126	52	47	33	20	309	334
Jhunjhunun	592	592	40	40	40	39	44	60	426	408
Jodhpur	2,256	2,256	7	7	126	122	703	623	1,162	1,256
Karauli	505	504	168	173	31	31	29	15	188	202
Kota	521	518	123	126	14	14	42	17	251	273
Nagaur	1,764	1,764	18	19	72	72	306	311	1,209	1,203
Pali	1,233	1,233	80	87	90	91	280	204	529	606
Pratapgarh		412		121		23		12		178
Rajsamand	455	453	24	26	58	56	36	31	86	92
Sawai Madhopur	499	497	78	81	25	26	60	22	251	292
Sikar	774	774	61	61	41	40	101	89	510	521
Sirohi	518	518	152	155	33	33	86	55	135	163
Tonk	718	718	26	27	46	41	124	56	405	472
Udaipur	1,462	1,388	405	397	91	83	100	77	232	239

SOURCE: Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Govt. of India and Department of Agriculture, Govt. of Rajasthan.



VII.3. Area and Production

TABLE VII.3.1: District-wise Area and Production – Cereals

Districts	Cereals											
	Area ('000 ha)						Production ('000 MT)					
	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	9,587	10,907	9,991	9,124	9,583	9,473	14,262	20,322	19,572	18,062	18,218	17,670
Ajmer	294	397	287	327	317	321	263	607	418	509	459	373
Alwar	467	519	503	493	492	511	1,157	1,406	1,367	1,391	1,345	1,341
Banswara	261	264	267	262	259	245	359	497	394	413	412	353
Baran	122	179	165	183	176	198	377	589	587	771	575	733
Barmer	977	975	894	725	870	760	166	561	593	314	391	222
Bharatpur	306	338	330	294	308	324	733	985	960	811	914	857
Bhilwara	317	411	343	341	339	351	606	794	698	828	818	669
Bikaner	269	336	295	162	240	216	214	378	420	253	357	305
Bundi	174	228	222	219	222	244	541	745	858	853	743	540
Chittaurgarh	240	301	280	270	267	271	700	844	820	869	817	738
Churu	447	438	434	313	367	340	281	326	327	229	272	263
Dausa	211	251	240	239	241	253	460	562	585	619	609	648
Dhaulpur	123	147	143	142	143	153	295	366	435	408	403	413
Dungarpur	144	149	157	155	153	140	153	205	152	176	192	190
Ganganagar	259	282	294	292	319	349	873	1,169	1,137	1,115	1,290	1,218
Hanumangarh	339	355	358	306	324	340	928	1,082	1,113	1,053	1,088	1,122
Jaipur	519	598	556	545	552	558	911	1,310	1,144	1,135	1,143	1,202
Jaisalmer	142	209	159	73	105	84	25	145	93	31	27	15
Jalor	360	420	361	321	353	331	273	451	556	407	229	309
Jhalawar	112	117	125	118	132	154	282	319	399	347	357	436
Jhunjhunu	365	378	362	321	338	328	531	788	774	599	676	701
Jodhpur	652	752	676	557	606	559	349	812	835	383	411	661
Karauli	182	222	206	204	208	212	406	624	553	538	565	570
Kota	118	151	134	146	153	160	384	487	507	580	582	329
Nagaur	609	657	586	555	565	555	641	1,031	817	368	614	613
Pali	276	337	249	262	235	230	240	375	272	291	240	225
Pratapgarh	100	110	115	114	119	116	218	211	283	337	352	306
Rajsamand	100	113	110	108	104	103	195	211	228	272	231	217
Sawai Madhopur	121	178	146	139	142	144	250	467	362	350	325	380
Sikar	412	465	441	418	424	414	624	870	854	784	826	867
Sirohi	88	102	92	79	74	66	135	203	158	161	129	109
Tonk	205	271	187	172	173	174	269	502	354	326	296	254
Udaipur	277	256	274	271	266	268	437	401	521	538	529	490

SOURCE: Various Issues of Rajasthan Agricultural Statistics at a Glance, Commissionerate of Agriculture, Govt. of Rajasthan.



VII.3. Area and Production

TABLE VII.3.2: District-wise Area and Production – Pulses

Districts	Pulses											
	Area ('000 ha)						Production ('000 MT)					
	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	3,583	4,752	4,449	3,246	4,198	3,362	1,620	3,252	2,353	1,957	2,471	1,952
Ajmer	102	207	247	206	270	191	39	163	114	139	224	82
Alwar	15	19	16	15	18	14	17	26	19	19	24	15
Banswara	42	34	33	33	34	31	26	20	24	27	23	23
Baran	6	11	12	15	11	14	6	14	11	17	10	11
Barmer	251	327	290	237	282	223	38	173	101	95	89	63
Bharatpur	7	9	7	5	6	7	7	13	9	9	8	8
Bhilwara	81	115	120	107	113	104	39	94	67	79	83	56
Bikaner	436	495	481	351	420	391	170	364	215	182	226	238
Bundi	25	43	62	54	48	61	22	42	56	48	32	47
Chittaurgarh	12	14	14	14	13	12	14	12	10	12	12	11
Churu	589	817	685	343	642	487	212	373	136	154	167	180
Dausa	4	11	12	13	19	19	4	12	13	17	29	24
Dhaulpur	3	4	3	3	2	2	3	4	3	3	3	2
Dungarpur	30	28	31	32	33	28	20	21	24	23	28	27
Ganganagar	130	162	126	123	95	77	106	137	95	131	94	76
Hanumangarh	245	325	228	96	122	102	126	179	111	66	74	78
Jaipur	103	200	236	175	255	214	60	255	152	178	269	147
Jaisalmer	58	93	110	137	150	116	32	60	85	83	129	50
Jalor	134	131	153	107	133	97	55	82	82	68	40	46
Jhalawar	38	53	35	36	41	33	30	42	32	35	30	30
Jhunjhunu	116	185	124	95	150	99	86	162	105	102	157	103
Jodhpur	260	296	291	195	239	218	64	178	166	43	78	157
Karauli	8	17	19	17	17	11	9	23	20	21	22	12
Kota	11	15	24	18	9	11	9	13	20	15	7	8
Nagaur	492	588	541	394	573	394	218	369	307	75	261	184
Pali	107	167	160	126	170	144	46	102	81	68	84	70
Pratapgarh	34	32	30	30	33	31	19	28	26	27	30	32
Rajsamand	4	4	3	4	4	3	2	3	2	2	2	2
Sawai Madhopur	11	23	22	22	19	13	10	30	23	25	21	15
Sikar	118	164	122	88	108	83	71	136	109	72	99	71
Sirohi	10	18	16	11	14	8	8	13	9	7	8	3
Tonk	69	124	170	122	135	106	30	85	108	99	91	64
Udaipur	29	23	24	20	23	21	23	23	19	16	19	16

SOURCE: Various Issues of Rajasthan Agricultural Statistics at a Glance, Commissionerate of Agriculture, Govt. of Rajasthan.





VII.3. Area and Production

TABLE VII.3.3: District-wise Area and Production – Food Grains

Districts	Food Grains											
	Area ('000 ha)						Production ('000 MT)					
	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15	2006-07-2008-09	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	13,170	15,659	14,440	12,370	13,781	12,835	15,882	23,574	21,925	20,019	20,689	19,622
Ajmer	396	604	534	533	587	512	302	770	532	648	683	455
Alwar	482	538	519	508	510	525	1,174	1,432	1,386	1,410	1,369	1,356
Banswara	303	298	300	295	293	276	385	517	418	440	435	376
Baran	128	190	177	198	187	212	383	603	598	788	585	744
Barmer	1,228	1,302	1,184	962	1,152	983	204	734	694	409	480	285
Bharatpur	313	347	337	299	314	331	740	998	969	820	922	865
Bhilwara	398	526	463	448	452	455	645	888	765	907	901	725
Bikaner	705	831	776	513	660	607	384	742	635	435	583	543
Bundi	199	271	284	273	270	305	563	787	914	901	775	587
Chittaurgarh	252	315	294	284	280	283	714	856	830	881	829	749
Churu	1,036	1,255	1,119	656	1,009	827	493	699	463	383	439	443
Dausa	215	262	252	252	260	272	464	574	598	636	638	672
Dhaulpur	126	151	146	145	145	155	298	370	438	411	406	415
Dungarpur	174	177	188	187	186	168	173	226	176	199	220	217
Ganganagar	389	444	420	415	414	426	979	1,306	1,232	1,246	1,384	1,294
Hanumangarh	584	680	586	402	446	442	1,054	1,261	1,224	1,119	1,162	1,200
Jaipur	622	798	792	720	807	772	971	1,565	1,296	1,313	1,412	1,349
Jaisalmer	200	302	269	210	255	200	57	205	178	114	156	65
Jalor	494	551	514	428	486	428	328	533	638	475	269	355
Jhalawar	150	170	160	154	173	187	312	361	431	382	387	466
Jhunjhunu	481	563	486	416	488	427	617	950	879	701	833	804
Jodhpur	912	1,048	967	752	845	777	413	990	1,001	426	489	818
Karauli	190	239	225	221	225	223	415	647	573	559	587	582
Kota	129	166	158	164	162	171	393	500	527	595	589	337
Nagaur	1,101	1,245	1,127	949	1,138	949	859	1,400	1,124	443	875	797
Pali	383	504	409	388	405	374	286	477	353	359	324	295
Pratapgarh	134	142	145	144	152	147	237	239	309	364	382	338
Rajsamand	104	117	113	112	108	106	197	214	230	274	233	219
Sawai Madhopur	132	201	168	161	161	157	260	497	385	375	346	395
Sikar	530	629	563	506	532	497	695	1,006	963	856	925	938
Sirohi	98	120	108	90	88	74	143	216	167	168	137	112
Tonk	274	395	357	294	308	280	299	587	462	425	387	318
Udaipur	306	279	298	291	289	289	460	424	540	554	548	506

SOURCE: Various Issues of Rajasthan Agricultural Statistics at a Glance, Commissionerate of Agriculture, Govt. of Rajasthan.



VII.3. Area and Production

TABLE VII.3.4: District-wise Area and Production – Oilseeds

Districts	Oilseeds											
	Area ('000 ha)						Production ('000 MT)					
	2006-07- 2008-09	2010-11	2011-12	2012-13	2013-14	2014-15	2006-07- 2008-09	2010-11	2011-12	2012-13	2013-14	2014-15
RAJASTHAN	4,384	5,509	4,623	4,912	5,274	4,457	4,848	6,642	5,765	6,364	6,034	5,314
Ajmer	43	140	59	64	76	60	22	104	40	67	88	39
Alwar	259	260	271	250	243	235	367	431	344	387	354	322
Banswara	22	20	21	23	28	40	19	19	16	23	33	34
Baran	304	311	308	371	404	199	391	499	551	588	322	228
Barmer	49	99	62	59	70	59	37	83	44	41	79	46
Bharatpur	211	206	211	234	213	200	298	376	343	377	309	275
Bhilwara	90	153	80	81	100	74	64	95	55	72	104	60
Bikaner	116	138	163	167	196	230	146	287	299	278	368	472
Bundi	168	144	152	169	165	143	188	149	194	217	174	132
Chittaurgarh	142	141	118	145	175	167	178	162	160	203	181	194
Churu	41	57	61	75	78	89	54	82	79	94	126	132
Dausa	104	111	111	107	98	87	125	150	123	146	133	112
Dhaulpur	66	65	72	74	73	63	92	114	110	94	89	72
Dungarpur	2	4	5	7	10	21	2	4	5	8	8	21
Ganganagar	280	302	285	271	220	198	319	579	300	388	344	277
Hanumangarh	121	128	102	112	106	104	140	244	123	152	172	160
Jaipur	184	276	207	183	190	167	204	304	239	218	234	192
Jaisalmer	95	107	91	77	76	68	53	81	57	38	62	49
Jalor	158	384	193	187	221	185	181	370	309	301	294	286
Jhalawar	272	289	289	354	363	284	321	364	449	503	259	292
Jhunjhunu	93	97	101	86	84	81	111	131	77	122	119	121
Jodhpur	166	224	211	222	306	289	162	203	240	188	373	355
Karauli	100	98	109	110	98	98	122	138	126	144	132	133
Kota	223	224	223	275	286	193	301	265	330	381	296	185
Nagaur	129	400	78	146	264	91	132	240	74	121	209	79
Pali	166	278	188	196	256	176	87	117	94	112	118	97
Pratapgarh	126	111	113	123	133	131	124	148	136	150	153	147
Rajsamand	9	14	8	6	6	5	7	11	5	4	5	4
Sawai Madhopur	198	198	214	226	219	211	183	245	221	266	223	251
Sikar	109	118	101	87	93	81	125	155	111	116	128	119
Sirohi	68	88	93	89	90	87	81	118	139	135	87	115
Tonk	237	294	300	312	315	319	187	337	354	409	436	293
Udaipur	30	30	22	22	23	23	25	35	21	19	23	21

SOURCE: Various Issues of Rajasthan Agricultural Statistics at a Glance, Commissionerate of Agriculture, Govt. of Rajasthan.



VII.4. Land Holding and Water Resources

TABLE VII.4.1: Operational Holdings in Rajasthan

Size of Holding (ha)	Total Holdings		Average Size of Holding (ha)
	Number ('000)	Area ('000 ha)	
Marginal (<1 ha)	2,511.5	1,237.6	0.49
Small (1-2 ha)	1,511.1	2,161.9	1.43
Semi-medium (2-4 ha)	1,335.1	3,774.4	2.83
Medium (4-10 ha)	1,127.1	6,918.4	6.14
Large (<10 ha)	403.6	7,044.1	17.45
All Classes	6,888.4	21,136.2	3.07

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

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

('000 ha)

Particulars	1997-98	2000-01	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Net Irrigated Area	5,421	4,907	5,239	5,880	6,294	6,496	6,444	6,245	5,850	6,661	7,122	7,499
Gross Irrigated Area	6,676	6,135	6,393	7,093	7,818	7,958	8,088	7,910	7,309	8,322	8,903	9,455
Net Sown Area	17,075	15,865	17,394	16,549	16,836	16,764	17,096	17,551	16,974	18,349	18,034	17,479
Gross Sown Area	22,325	19,230	21,664	21,062	21,699	21,534	22,208	22,771	21,745	26,002	24,505	23,954

Sources (net irrigated area)

Canals	1,525	1,354	1,314	1,457	1,706	1,703	1,688	1,583	1,424	1,629	1,844	1,901
Tanks	182	38	60	82	77	131	102	31	17	56	69	92
Wells and Tube Wells	3,657	3,473	3,810	4,267	4,427	4,581	4,572	4,559	4,338	4,897	5,111	5,382
Other Sources	57	42	55	73	85	81	83	73	71	79	98	125

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





VII.4. Land Holding and Water Resources

TABLE VII.4.3: Major River Basins of Rajasthan

Name of the River	Origin	Length (km)	Catchment Area (sq km)	States Falling in the Catchment Area
Indus	Mansarovar (Tibet)	1,114 +	321,289 +	J&K, Punjab, Himachal Pradesh, Rajasthan and Chandigarh UT
Ganga	Gangotri	2,525 +	861,452 +	Uttaranchal, Uttar Pradesh, Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh, Bihar, West Bengal and Delhi UT
Sabarmati	Aravalli Hills (Rajasthan)	371	21,674	Rajasthan and Gujarat
Mahi	Dhar (Madhya Pradesh)	583	34,842	Rajasthan, MP and Gujarat

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



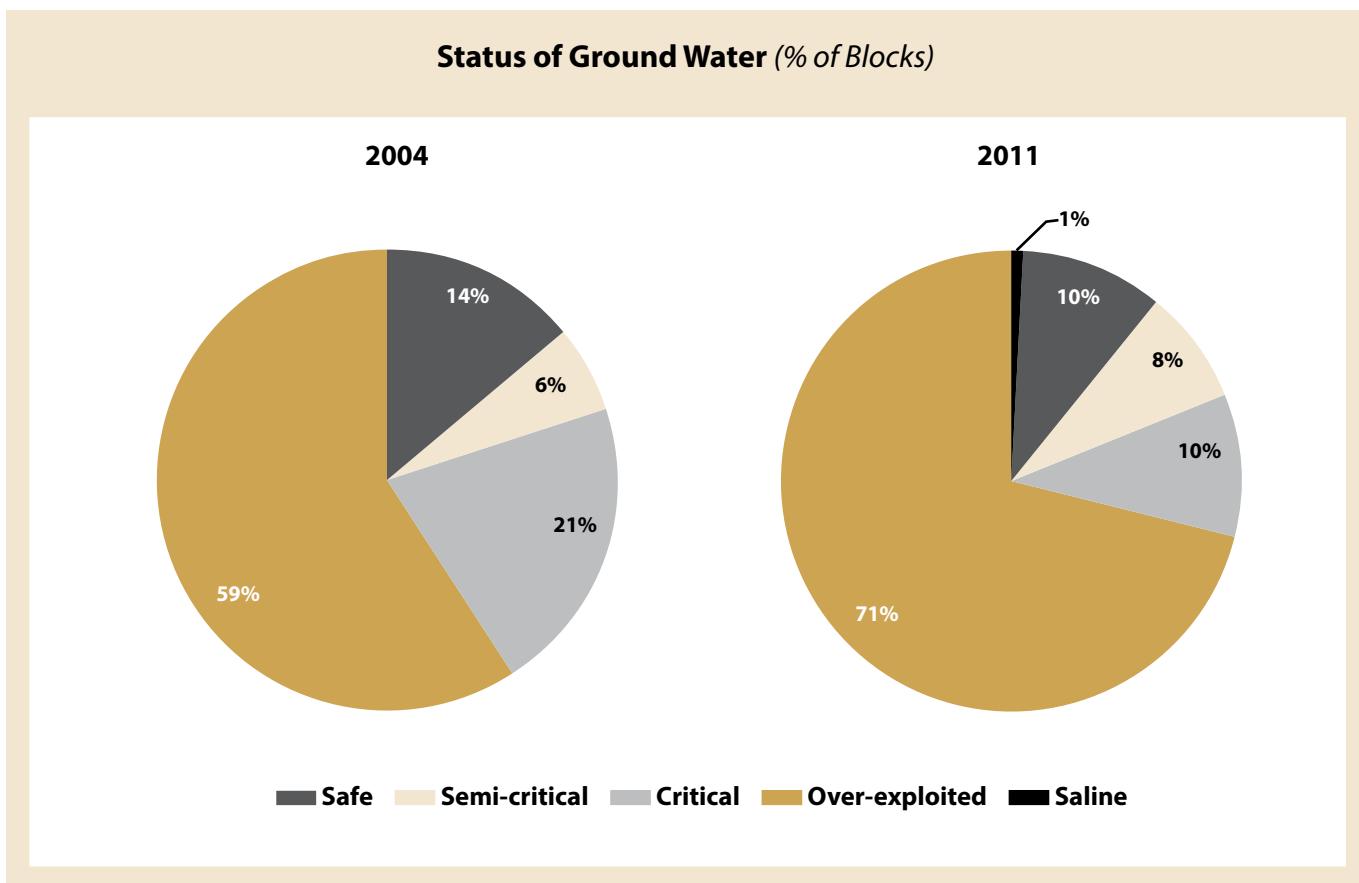


VII.5. Rainfall

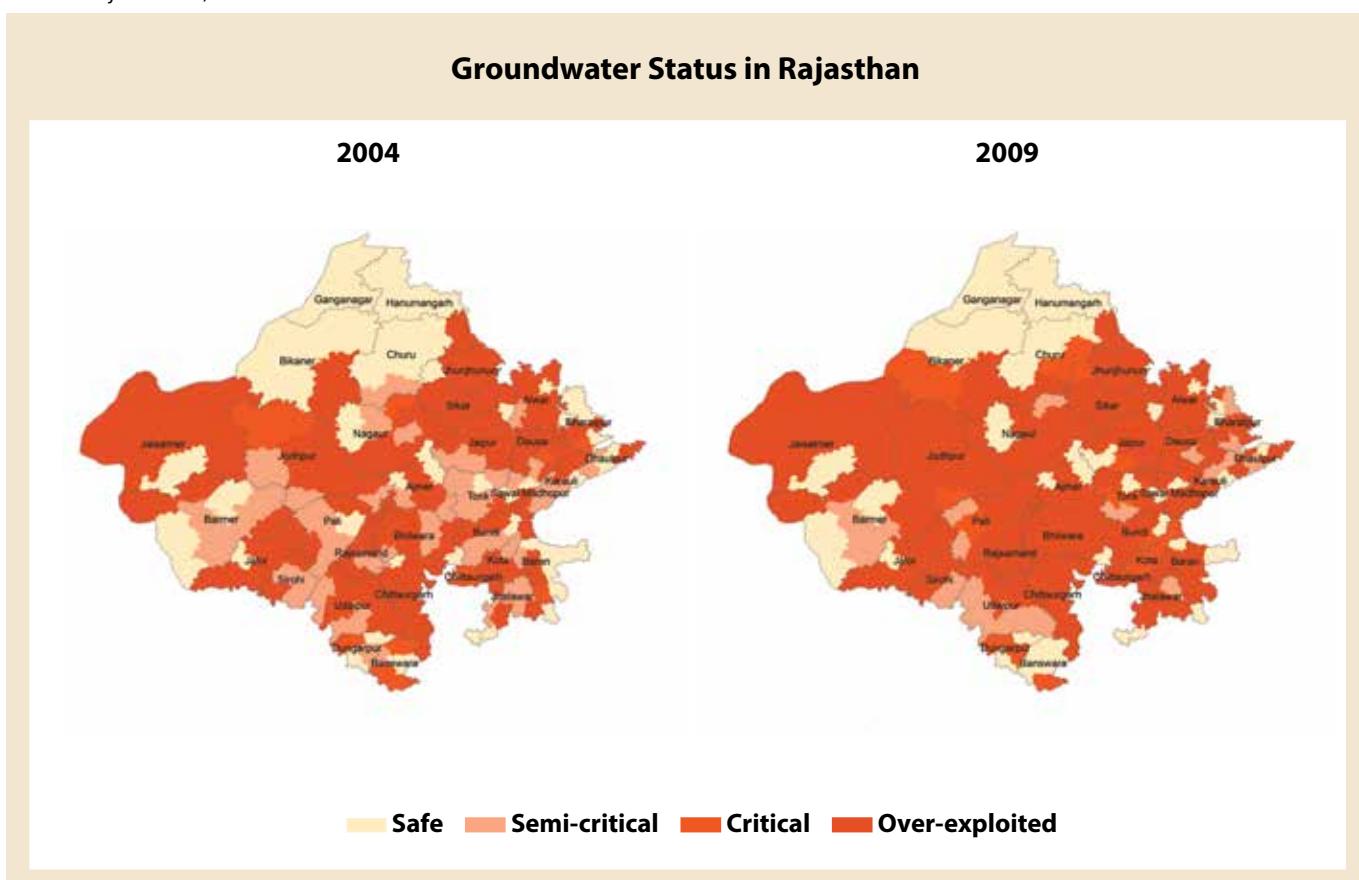
TABLE VII.5.1: District- wise Average Annual Rainfall

Districts	Average Annual Rainfall (mm)				
	2004 - 2010	2011	2012	2013	2014
RAJASTHAN	525	745	605	734	592
Ajmer	456	651	612	556	561
Alwar	617	635	595	661	432
Banswara	957	1,101	1,087	1,058	720
Baran	688	1,476	737	1,502	1,120
Barmer	325	452	223	405	220
Bharatpur	583	740	725	550	486
Bhilwara	615	720	642	690	748
Bikaner	267	351	318	301	272
Bundi	536	798	596	895	753
Chittaurgarh	796	849	760	925	839
Churu	351	650	428	465	477
Dausa	545	791	793	827	653
Dhaulpur	616	629	776	1,011	550
Dungarpur	785	956	930	955	646
Ganganagar	238	253	314	213	346
Hanumangarh	254	388	247	349	352
Jaipur	501	682	636	644	574
Jaisalmer	221	308	225	237	112
Jalor	438	626	283	608	355
Jhalawar	742	1,233	689	1,437	878
Jhunjhunun	427	652	457	484	463
Jodhpur	267	398	348	493	338
Karauli	603	667	749	832	584
Kota	723	1,197	637	1,189	815
Nagaur	321	406	497	499	444
Pali	404	638	505	537	538
Pratapgarh	542	1,264	1,038	1,271	763
Rajsamand	577	722	602	691	558
Sawai Madhopur	392	829	699	938	729
Sikar	862	588	639	515	511
Sirohi	453	1,304	799	953	720
Tonk	710	811	667	790	1,254
Udaipur	456	848	702	746	737

SOURCE: Hydromet Division, India Meteorological Department, Govt. of India and Integrated Sample Survey Reports, Department of Animal Husbandry, Govt. of Rajasthan.



SOURCE: Dynamic Ground Water Resources of India (2004-2011), Central Ground Water Board, Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India.





VII.5. Rainfall

TABLE VII.5.2: Distribution of blocks according to ground water status

Districts	Number of Blocks under									Saline 2011	
	Semi-critical			Critical			Over-exploited				
	2004	2009	2011	2004	2009	2011	2004	2009	2011		
RAJASTHAN	14	16	20	50	25	24	140	166	172	2	
Ajmer				2			6	8	8		
Alwar				1			13	14	14		
Banswara	6	1	1	1							
Baran	1	1	1	1	1		2	2	5		
Barmer				2	2	2	5	5	5		
Bharatpur	1	1			2	4	3	4	5		
Bhilwara				3	2		8	11	11		
Bikaner			1	1			2	3	3	1	
Bundi			1	2	1		2	3	3		
Chittaurgarh	1						13	11	11		
Churu			2	1			1	2	2	1	
Dausa							5	5	5		
Dhaulpur				1		1	2	4	3		
Dungarpur	2	4	4	2							
Ganganagar											
Hanumangarh											
Jaipur			1	2	1		11	12	12		
Jaisalmer						1	2	2	2		
Jalor							7	7	8		
Jhalawar				4	1	1	2	5	5		
Jhunjhunu							7	8	8		
Jodhpur	1		1	2	1		5	7	8		
Karauli	1			1	1	2	3	4	3		
Kota		3	3	1			4	2	2		
Nagaur	1	1		2	1	2	7	9	9		
Pail			1	5	3	2	5	7	7		
Pratapgarh					1	1		3	3		
Rajsamand				2			5	7	7		
Sawai Madhopur				3	1		2	4	5		
Sikar			1				7	7	7		
Sirohi		3		3		2	2	2	3		
Tonk			2	5	3	1	1	3	3		
Udaipur		2	1	3	4	5	8	5	5		

SOURCE: Dynamic Ground Water Resources of India (2004-2011), Central Ground Water Board, Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India.

PART VIII : POLICIES AND SCHEMES FOR DAIRY DEVELOPMENT IN RAJASTHAN

Rajasthan is the largest State of the country with extreme geo-climatic variation. The Aravali range of mountains splits the state into two geographical zones – desert on the west and forest belt on the other. The Thar desert in the far west encompasses about 60 per cent of the total land mass with thorny bushes, shrubs and xerophilous grass and is inhabited by various species of lizards and snakes. In order to counter frequent draughts, many rural household in Rajasthan keep animals and the State ranks second in milk production in the country.

Old, unproductive, infirm bovine are often deserted by their owners and to manage them numerous Gaushalas have been established in Rajasthan. Under the "The Rajasthan Gaushala Act" enacted as early as 1960, the Central as well as the State government are assisting these Gaushalas. To date, about 1,300 Gaushala have been registered under this act.





To facilitate organised cattle trading, "The Rajasthan State Cattle Fair Act & Rules" was enacted in 1963 recognising 11 state level cattle fairs. The College of Veterinary and Animal Science was established in Bikaner in 1954 to provide veterinary care and animal health support which, in turn, culminated into the Rajasthan University of Veterinary and Animal Science (RAJUVAS) in 2010. Dairy development was initiated by the state government in the early seventies under the auspices of Rajasthan State Dairy Development Corporation (RSDDC) registered in 1975. Two years later, the Rajasthan Cooperative Dairy Federation (RCDF) was set up to assume responsibility for many of the functions of RSDDC. RCDF became the nodal agency for implementation of Operation Flood and other dairy development programmes in Rajasthan. The State has enacted "Rajasthan Go-Seva Ayog Act" and has a separate ministry for the protection of cow.

The main programmes and schemes for dairy development in Rajasthan can be classified into two categories viz.

- I. Central Schemes;
- II. States Schemes;

ANIMAL HUSBANDRY & DAIRY DEVELOPMENT

I. CENTRAL SCHEMES FOR ANIMAL HUSBANDRY DEVELOPMENT (BUDGET HEAD 2403 – AH)

National Livestock Health and Disease Control Programme (LH & DC)		
A.1	Assistance to States for Control of animal disease (ASCAD)	This Centrally Sponsored Scheme aimed to control livestock diseases through mass vaccination and by creating awareness on diseases. Under the scheme, assistance is provided to State for the control of economically important diseases of livestock and poultry by way of immunization, strengthening of existing State Veterinary Biological Production Units, strengthening of existing State Disease Diagnostic Laboratories, holding workshops/seminars and in-service training to Veterinarians and Para-veterinarians. The programme is being implemented on 60:40 sharing basis. 100 per cent assistance is provided to States for training and seminar/workshops. Besides this, the programme monitor and compile information on incidence of various livestock diseases.
A.2	National Project on Rinderpest Surveillance & Monitoring (NPRSM)	It is a 100 per cent centrally sponsored project launched w.e.f. May, 1992 to combat highly infection viral "Rinderpest" disease of Cloven footed Animals (generally called cattle plague). Although OIE has declared India free from the Rinderpest disease as well as infection, continuous sero/monitoring and sero-surveillance is done to maintain country's disease/infection free status.
A.3	Professional Efficiency Development (PED)	For improvement in the efficiency of Veterinary professionals, 50 per cent Central Assistance is provided to the States. Funds are provided to State Veterinary councils for imparting training on latest technical knowledge through Continuing Veterinary Education (CVE).



A.4	Foot & Mouth Control Programme (FMD-CP)	To prevent economic losses due to Foot and Mouth Disease and to develop herd immunity in cloven-footed animals, a 'Foot and Mouth Disease Control Programme (FMD-CP)' was initiated in the country to create several FMD-free zones. During 2014-15, the funding has been revised to 60:40 from 100 per cent central assistance in the previous years.
A.5	Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD)	Under this programme, Gol funds were used for establishment of 85 new veterinary hospitals in Rajasthan and repair and renovation of 150 existing hospitals or dispensaries. The expenses were shared between Gol and States in 50:50 ratio.
A.6	National Animal Disease Reporting System (NADRS)	The Gol has put in place an information technology based pan-India animal disease monitoring system using National Informatics Centre (NIC). The Gol provides 100 per cent support to the States for meeting expenditure on monitoring animal diseases and dissemination of information. In Rajasthan, even Animal Disease Diagnostic Laboratories are linked with NADRS to initiate preventive and curative action in a timely and speedy manner.
A.7	Brucellosis Control Programme (Brucellosis-CP)	Brucellosis is a critical diseases affecting reproductive system of livestock. It induces infertility and abortions, resulting in interrupted lactation and reduced production of milk. Bovine brucellosis is endemic in all states of India. It can be prevented over a period of time by one time vaccination of all eligible female calves. Gol is providing 60 per cent assistance to Rajasthan for mass screening of cattle & buffaloes to ascertain exact incidence of the disease in specific location and to vaccinate all female calves between 6-8 months in these specific areas.
National Livestock Management Programme (earlier National Livestock Mission)		
B.1	Sub-Mission on Livestock Development	Gol's "Risk Management & Insurance" scheme under this sub-mission wherein it subsidizes dairy animal insurance premium upto 5 animals per household by 25 per cent, state pay 25 per cent and balance is borne by the beneficiary (50 per cent). This scheme is implemented across Rajasthan to protect farmers against any loss of their animal due to death.
B.2	Sub- Mission: Fodder and Feed Development	Under "National Fodder Production Programme", the State Government runs a programme of distribution of fodder seed minikit with 75 per cent Central Government Assistance so as to promote the green fodder production. In addition, the State Government has established a Regional Station for Forage Production and Demonstration at Dudli-Bassi (Jaipur). This Station liaisons with regional Agricultural Universities, National Agriculture Research Institutes and the farmers for quickly transferring the findings of research from lab to land.
B.3	Sub- Mission: Skill Development Technology Transfer & Extension	It strengthens regional and district training centers to deliver a range of trainings with appropriate modules, manuals, training materials, reference materials, posters, leaflets, documentary films etc. It also envisages to disseminate the information through various means like Electronic/ Print Media, Melas etc



Animal Husbandry Statistics		
C.1	Integrated Sample Survey (ISS)	As per the guidelines of IASRI, it estimates the production of major livestock products in Rajasthan and study animal husbandry practices. The Central Government provides grant-in-aid on 50:50 basis towards salaries and allowance of the staff employed under the scheme.
Livestock Census		
D.1	Livestock Census	Since 1919, Livestock Census is conducted every five year to generate data required for planning and research activities in livestock sector. In Rajasthan, the Board of Revenue implement this scheme with 100 per cent central assistance. The 19 th Livestock Census was completed in 2012 and the data was compiled at the Central level by setting up data entry centers at selected States considering the volume of work.
National Programme for Bovine Breeding & Dairy Development (NPBBDD)		
E.1	National Programme for Bovine Breeding (NPBB)	The scheme aims to bring all breedable females under organized breeding through Artificial Insemination (AI) or Natural Service using germplasm of high genetic merits. In Rajasthan, the Rajasthan Livestock Development Board is implementing this scheme. Under its "Indigenous Breed Improvement Programme", frozen semen of the selected bulls of specific breeds is provided for AI of selective breeding / upgradation of the animals in the respective breed tract. The breeds identified are : Gir (Ajmer), Tharparkar (Barmer), Rathi (Bikaner), Kankrej (Jalor) and Nagauri (Nagaur district).
E.2	National Programme for Dairy Development (NPDD)	The "Assistance to Cooperative" component of NPDD provides grant-in-aid on 50:50 basis to bring more farmers under the dairy co-operative sector and enable them to comply with FSSAI Act, 2006, improve the facilities for testing the chemicals and microbials of milk and strengthening and modernization of infrastructure of DCS to improve procurement/marketing etc.
E.3	National Dairy Plan Phase-I (NDP-I)	The scheme provides 100 per cent grant-in-aid for animal nutrition & breeding activities, and 50 per cent grant on cost of capital items for village milk procurement system.

II. STATES SCHEMES FOR ANIMAL HUSBANDRY

ANIMAL HUSBANDRY		
A	Bovine Breeding	Considering extreme geo-climatic conditions and uncertainty of rains, the State Government has developed region specific bovine breeding policy for various agencies involved in breeding. It highlights as to which indigenous breed should be promoted for selective breeding in particular district, spells blood level of exotic breed, use of exotic semen etc.
Under Rashtriya Krishi Vikas Yojana (RKVY)		
B	Free Medicine Scheme	This scheme was started in August, 2012 with the aim to ensure availability of all necessary medicines at the veterinary institutes free of cost. Presently under this scheme 79 types of medicine are available at Veterinary Hospital level and 35 types of medicine are available at Sub-center/ Dispensary level.



State funded schemes		
C	District Level Mobile Veterinary Unit	The aim of the programme is to establish 33 mobile veterinary units in all district headquarters. These mobile veterinary units provide health care facilities, breed improvement and disease control facilities to dairy animals in remote rural areas.
D	Combat Infertility Camp Scheme	The aim of this scheme is mainly to treat infertile animals by the subject matter specialist and to provide information regarding infertility in animals to the livestock owner.
E	Mobile Veterinary Clinic Services via Call Centers	Mobile Veterinary Clinic Services via call centers has been started to provide health care facilities to animals in case of emergency so that economic losses due to death of animals can be reduced. In 2014-15, a Pilot Project was started in two tehsils (Uniyara and Deoli) of Tonk district and if successful, it would be extended to other districts.
F	Training Camps for Livestock Owners	The aim of this scheme is to provide knowledge regarding Scientific / better management of livestock, breed improvement, Artificial insemination, balanced ration feeding, timely vaccination to livestock owners under different departmental schemes.
G	Veterinary Health Care Programme	There has been continuous increase in the number of Veterinary Institutions in the State to take health care of the dairy animals in Rajasthan. To date, 3,698 veterinary institutions comprising of 14 Polyclinics (VPC), 249 1 st grade Veterinary Hospitals (VHF), 1,570 Veterinary Hospitals (VH), 7 Private Veterinary Hospitals, 285 Veterinary Dispensaries, 1,580 Sub-Centers (SC) have been established and many of these institutions are situated in far flung areas of the state.
H	Disease Control Programme	The programme envisages to regularly vaccinate dairy animals against many fatal diseases at a nominal cost of say ₹ 1-2 per dose. The vaccines are provided mainly by Departmental Biological Product Laboratory, and shortage are met by procuring additionally from IVRI, Izatnagar. The diseases covered are : Haemorrhagic Septicemia (HS), Black Quarter (BQ), Enterotoxaemia (ET), Sheep Pox, Foot & Mouth Disease (FMD) etc.
I	Biological Production Unit	A "State Biological Product Laboratory" has been established at Agra Road, Jamdoli, Jaipur for producing various types of vaccines so as to effectively control of diseases in the state.
J	Disease Diagnostic Centers	The State Government is providing animal disease diagnostic facilities in Rajasthan through a State Disease Diagnostic Centre, 6 Regional Disease Diagnostic Centres and 25 Disease Diagnostic Laboratories at District headquarters.
K	Epidemiological Unit	An Epidemiological Unit is monitoring outbreak of diseases across the state to determine the disease endemic areas, control of outbreaks of animal diseases and its containment. Simultaneously it also helps in containment of zoonotic diseases of public health importance.
L	Livestock Marketing	With a view to encourage the livestock farming and to maintain important famous breeds of the livestock, 10 state level cattle fairs are organized every year by the State Government in different parts of the State. During the fair, the Government arranges for free water, electricity, cultural events, fair price shops, transportation of animals, buses, temporary police stands and communication facilities etc.



M	Fodder Development	Regional Station for Forage Production and Demonstration has been established by State Government at Dudli-Bassi (Jaipur) for seed production. This Station liaisons with regional Agricultural Universities, National Agriculture Research Institutes so that the finding are implemented quickly.
N	Gaushala Development Programme	About 1,100 Gaushalas of various public trusts are registered in Rajasthan for maintaining old, infirm, unproductive cows and their progenies. These Gaushalas are also used to preserve and conserve indigenous breeds. The central government as well as state government is also assisting these Gaushalas for cattle development.
O	Training Programmes	In order to upgrade skills, regular AI training programmes are arranged at KVS, Jaipur and Jodhpur. In addition, Refresher Courses for Veterinarians are organized at RSLMTI, Jaipur.





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 to dry animals.



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