



Animal-based food system in India: An analysis of production, consumption and nutritional implications

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Supplementary Table 1. Value of output livestock and fishery sectors (2020-21) and their trend growth rates (Value: Rs. Billion, real prices, Growth Rate: %/ year)

State	Milk		Fish		Egg		Meat		Livestock	
	Rs	(%)	Rs	(%)	Rs	%	Rs	%	Rs	%
Andhra Pradesh	358	8	636	21	52	8	200	10	634	8
Arunachal Pradesh	1	9	1	6	0	5	5	2	8	4
Assam	32	2	70	5	2	1	15	3	65	2
Bihar	280	6	71	7	11	15	62	7	383	6
Chhattisgarh	41	5	59	11	6	5	11	7	69	4
Goa	2	-1	9	1	0	6	1	7	3	1
Gujarat	396	5	45	2	7	4	39	3	457	4
Haryana	314	7	19	9	20	7	53	7	396	6
Himachal Pradesh	40	4	1	7	0	0	1	-1	44	4
Jammu & Kashmir	61	7	4	1	1	-14	10	-2	77	4
Jharkhand	67	4	16	13	3	4	17	3	114	5
Karnataka	247	7	35	2	21	9	74	9	370	7
Kerala	63	-1	46	1	7	1	64	1	139	0
Madhya Pradesh	391	10	24	13	7	15	30	13	462	9
Maharashtra	433	5	35	0	17	3	106	10	593	5
Manipur	2	0	3	3	1	-1	5	2	8	1
Meghalaya	2	1	2	17	0	1	4	2	7	2
Mizoram	1	15	0	1	0	2	3	3	5	8
Nagaland	1	-3	1	4	0	-4	3	-13	4	-10
Odisha	50	4	79	12	8	1	55	3	119	3
Punjab	307	4	11	6	13	5	42	4	371	4
Rajasthan	852	10	7	8	8	12	59	7	1029	8
Sikkim	1	7	0	2	0	-11	0	-2	2	3
Tamil Nadu	190	3	72	3	22	-2	515	16	754	10
Telangana	185	5	30	5	34	7	210	10	440	7
Tripura	5	7	9	5	1	9	7	10	13	7
Uttar Pradesh	782	4	53	7	9	9	75	-3	931	3
Uttarakhand	44	3	1	4	1	7	2	-1	50	3
West Bengal	180	3	243	3	33	10	175	5	425	4
Andaman and Nicobar islands	1	-3	3	2	1	5	1	7	2	3
Chandigarh	1	1	0	2	0	-3	0	-3	1	0
Dadra and Nagar Haveli	0	-25	4	-	0	1	0	-19	0	-13
Daman and Diu	0	-	0	-	0	-	0	-	0	-
Delhi	8	-3	0	2	0	-	5	0	14	-2
Lakshadweep	0	1	2	6	0	2	0	-1	0	1
Puducherry	1	1	3	1	0	0	3	1	4	1
All India	5340.8	6	1591	9	284	6	1851	8	7993	6

Source: Authors' calculations based on GOI, 2024 (NSO) and various issues

Note: 1. Growth in value of output of livestock and fish products (2010- 2020/ latest) (%/ year, using semi-log growth model, constant price 2011-12)

2. Value of output of production pertaining to 2020-21

3. Livestock sector includes breeding and rearing of animals and poultry (besides private veterinary services), production of milk, slaughtering, preparation and dressing of meat, production of raw hides and skins, eggs, dung, raw wool, honey, and silk worm cocoons, etc.

Supplementary Table 2. Share of households that undertake livestock farming (estimation) (2019)

State	Cattle	Buffalo	Small ruminants & Other Animals*	Poultry**	Other Livestock#
Jammu & Kashmir	44.63	18.32	17.65	14.96	0.00
Himachal Pradesh	48.13	18.68	16.40	0.16	0.01
Punjab	21.91	28.66	1.72	0.87	0.01
Chandigarh	0.36	1.17	0.00	0.00	0.08
Uttarakhand	45.55	30.45	11.00	1.69	0.03
Haryana	19.89	47.95	1.54	0.21	0.53
Delhi	10.59	15.60	0.00	0.00	0.00
Rajasthan	43.70	39.75	32.28	2.14	0.22
Uttar Pradesh	26.79	34.58	13.87	1.85	0.03
Bihar	28.73	10.17	19.09	4.77	0.12
Sikkim	38.50	0.69	17.62	31.40	0.48
Arunachal Pradesh	33.70	0.63	54.41	70.99	6.44
Nagaland	2.24	0.39	55.45	77.76	4.16
Manipur	5.74	4.81	15.81	49.98	5.61
Mizoram	1.79	1.01	39.53	43.99	0.32
Tripura	29.01	1.35	14.89	48.74	1.18
Meghalaya	8.84	0.25	24.58	56.38	0.48
Assam	39.34	1.70	20.77	49.45	0.00
West Bengal	28.73	0.90	15.64	17.23	0.22
Jharkhand	50.60	4.78	42.50	32.66	0.13
Odisha	37.88	1.17	13.95	21.07	0.23
Chhattisgarh	44.76	7.65	12.79	13.66	0.01
Madhya Pradesh	47.88	22.34	14.95	4.26	0.37
Gujarat	32.54	36.56	7.84	5.46	0.00
Dadra and Nagar Haveli and Daman and Diu	37.39	10.77	8.84	36.54	0.37
Maharashtra	53.04	12.14	12.63	8.14	0.03
Andhra Pradesh & Telangana	9.20	10.78	3.61	12.33	0.02
Karnataka	27.42	11.89	10.75	5.75	0.00
Goa	5.69	5.98	0.45	1.72	0.00
Lakshadweep	1.28	0.00	31.76	6.93	0.00
Kerala	6.71	0.96	4.82	17.67	0.28
Tamil Nadu	16.94	0.58	11.14	9.30	0.01
Puducherry	12.72	0.00	11.03	59.15	0.00
Andaman and Nicobar	14.89	2.96	38.25	63.66	0.00
All-India	29.45	16.44	14.64	10.68	0.16

Source: Authors calculation based on NSO,2021

Note: *- Sheep, goat, pig, rabbits, etc. **- hen, cock, chicken, duck, duckling, other poultry birds, etc. # fishing, aquaculture, etc.

@Estimates after using the multiplier for projection

Supplementary Table 3. Summary table of the share of farmers having livestock and descriptive statistics of other variables

Variable	Mean
Size of holding (Mean values) *	
Cattle	0.38
Buffalo	0.20
Small ruminants	0.18
Poultry	0.17
Others (including aquaculture)	0.004
Mean household size (No)	4.76 (2.32)
Mean monthly consumption expenditure (Rs)	9097 (5601)
Mean size of land holding (ha)	0.23 (3.35)
Religions (%)	
Hindu	80.11
Christian	9.48
Muslim	6.23
Others	4.18
Social Groups (%)	
Scheduled Tribe	19.09
Scheduled castes	16.19
Other Backward Classes	40.54
Others	24.17
Total observations (No)	58040

Source: Authors' calculations based on NSO data

Note: Figures in the parentheses indicate standard deviation

*Indicates the mean values from the sample used for regression