

Agriculture and Allied Activities



7. AGRICULTURE AND ALLIED ACTIVITIES

7.1 Agriculture and allied activities sector plays an important role in employment generation and overall economic development. More than 50 per cent of the State population is dependent on this sector for livelihood. The average share of the Agriculture and allied activities sector in the State economy is 12 per cent.

AGRICULTURE

7.2 On an average net sown area of the State is about 54 per cent of the State's total geographical area. About one-third area of the State falls under the rain-shadow area of low rainfall. Erratic rains, climate change, reduction in size of operational holdings, high input cost, market uncertainties, etc. leading to non-profitability are the challenges posed on this sector for decades. Government is implementing various schemes for optimal & sustainable use of resources, providing credit facilities, crop diversification, etc.

Monsoon 2023

7.3 Monsoon rains arrived in the State on 11th June, 2023. As against the normal rainfall the State received 53.6 per cent rainfall in June, 138.7 per cent in July, 37.7 per cent in August, 128.8 per cent in September and 27.1 per cent in October. During monsoon 2023 upto October the State received 86.4 per cent rainfall as against normal rainfall. Out of total 355 talukas (excluding Mumbai city and Mumbai suburban districts) of the State, 19 talukas received excess rainfall, 190 talukas received average rainfall and 146 talukas received deficient rainfall. Classification of talukas according to rainfall received is given in Table 7.1. Regionwise normal rainfall and actual rainfall received is given in Table 7.2.

Table 7.1 Classification of talukas according to rainfall received

Rainfall class (per centage to normal)	No. of talukas [#]											
	June		July		August		September		October		Monsoon June-October	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
120 & above	42	11	279	226	99	0	250	212	301	4	203	19
100 – 120	44	11	43	55	52	2	51	67	27	8	98	64
80 – 100	70	23	25	47	61	6	37	38	13	4	48	126
60 – 80	75	54	6	20	52	29	14	30	7	18	5	112
40 – 60	76	109	2	7	56	85	3	8	4	39	1	33
20 – 40	44	133	0	0	32	172	0	0	3	61	0	1
0 – 20	4	14	0	0	3	61	0	0	0	221	0	0

Source: Commissionerate of Agriculture, GoM

[#] Excluding talukas in Mumbai City & Mumbai Suburban districts

Table 7.2 Regionwise normal rainfall and actual rainfall received

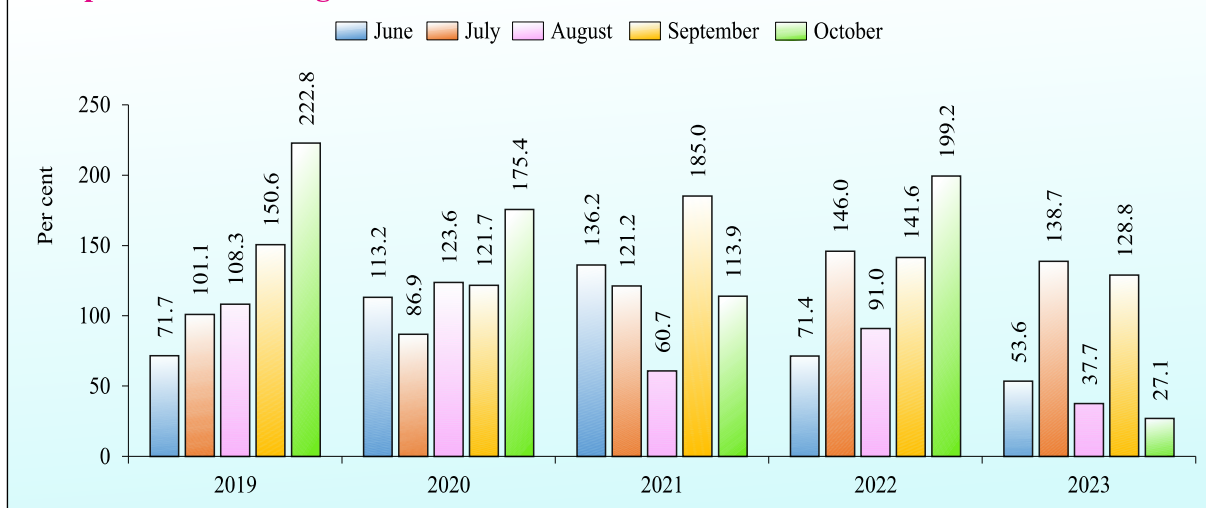
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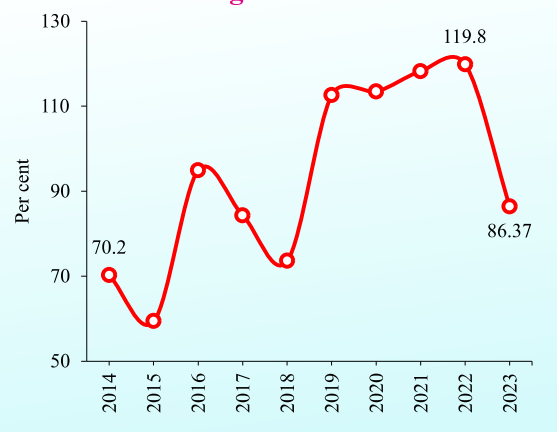
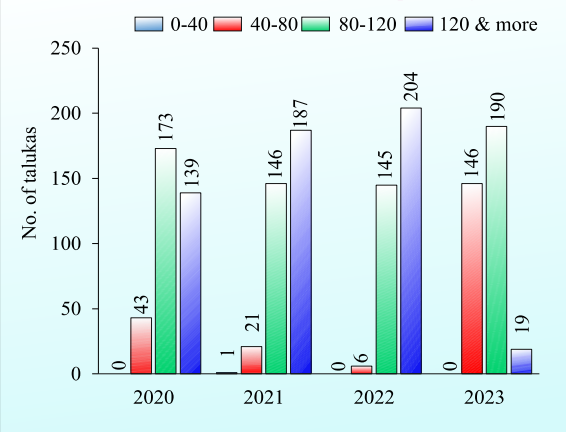
Rainfall during			Region						Maharashtra
			Konkan [#]	Nashik	Pune	Chhatrapati Sambhajanagar	Amravati	Nagpur	
		Normal	662.5	139.7	198.6	134.0	147.6	187.1	207.6
June	2022	Actual	451.0	110.9	84.9	137.1	106.8	125.3	148.2 (71.4)
	2023	Actual	464.6	68.5	68.4	55.5	48.6	126.6	111.3 (53.6)
		Normal	1,063.8	218.5	327.2	186.2	239.6	362.3	330.9
July	2022	Actual	1,218.0	282.1	345.3	352.9	393.9	680.8	483.2 (146.0)
	2023	Actual	1,687.8	199.5	304.3	272.5	370.9	468.3	458.8 (138.7)
		Normal	766.3	197.4	247.5	193.3	231.7	347.8	286.0
August	2022	Actual	737.7	158.3	239	90.1	179	419.4	260.4 (91.0)
	2023	Actual	314.8	49.9	70.4	54.3	74.8	203.6	107.9 (37.7)
		Normal	375.5	151.5	171.7	166.0	130.9	175.3	179.7
September	2022	Actual	515.2	234.9	215.2	191.8	200.7	301.8	254.5 (141.6)
	2023	Actual	478.3	226.7	144.3	199	186.3	287.7	231.4 (128.8)
		Normal	108.6	53.1	96.5	71.3	57.5	53.4	71.1
October	2022	Actual	194.1	113.5	206.5	142.7	105.7	84.6	141.6 (199.2)
	2023	Actual	77.7	5.2	36.8	8.3	2.8	7.8	19.3 (27.1)
		Normal	2,976.7	760.2	1,041.5	750.8	807.3	1,125.9	1,075.3
June to October	2022	Actual	3,116.0	899.7	1,090.9	914.6	986.1	1,611.9	1,287.9 (119.8)
	2023	Actual	3,023.2	549.8	624.2	589.6	683.4	1,094	928.7 (86.4)

Excluding Mumbai City & Mumbai Suburban districts

Note: Figures in bracket indicate percentage of actual rainfall to normal rainfall

Source: Commissionerate of Agriculture, GoM

Graph 7.1 : Percentage of rainfall received to normal rainfall in the State

Graph 7.2 : Percentage of actual rainfall to average rainfall in the State**Graph 7.3 : No. of talukas according to rainfall received (percentage to normal)**

Operational holdings

7.4 The first Agricultural Census was conducted in 1970-71. The latest one was conducted in 2015-16.

- Number of operational holdings increased from 0.50 crore in 1970-71 to 1.53 crore in 2015-16
- Total area of operational holdings decreased to 2.05 crore ha in 2015-16 as compared to 2.12 crore in 1970-71
- Average size of operational holding decreased from 4.28 ha in 1970-71 to 1.34 ha in 2015-16
- Average size of operational holding of Scheduled Castes declined to 1.24 ha in 2015-16 as compared to 1.47 ha as in 1995-96
- Average size of operational holding of Scheduled Tribes declined to 1.76 ha in 2015-16 as compared to 2.15 ha as in 1995-96
- The proportion of women land holders increased from 12.9 per cent in 1995-96 to 15.5 per cent in 2015-16. Similarly, the average size of operational holding has changed from 1.58 ha to 1.22 ha during the same period

7.4.1 A time series of operational holding statistics in the State is given in Annexure 7.1. Number and area of operational holdings in the State are given in Table 7.3. Number and area of operational holdings in selected states is given in Table 7.4.

Table 7.3 Number and area of operational holdings in the State

Size class (ha)	No. of operational holdings ('000)			Area of operational holdings ('000 ha)		
	1970-71	2010-11	2015-16	1970-71	2010-11	2015-16
Marginal (upto 1.0)	1,242	6,709	7,816	578	3,186	3,449
Small (1.0 - 2.0)	878	4,052	4,339	1,284	5,739	5,771
Semi-Medium (2.0 - 4.0)	1,087	2,159	2,327	3,131	5,765	6,025
Medium (4.0 - 10.0)	1,229	711	734	7,717	3,993	4,099
Large (10.0 & above)	514	68	69	8,470	1,084	1,162
All size class	4,950	13,699	15,285	21,180	19,767	20,506

Source: Commissionerate of Agriculture, GoM

Table 7.4 Number and area of operational holdings in selected states

State	No. of operational holdings ('000)		Area of operational holdings ('000 ha)		Average size of operational holdings (ha)	
	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16
Andhra Pradesh	7,621	8,524	8,096	8,004	1.06	0.94
Gujarat	4,886	5,320	9,898	9,978	2.03	1.88
Haryana	1,617	1,628	3,646	3,609	2.25	2.22
Karnataka	7,832	8,677	12,161	11,724	1.55	1.35
Madhya Pradesh	8,872	10,004	15,836	15,671	1.78	1.57
Maharashtra	13,699	15,285	19,767	20,506	1.44	1.34
Punjab	1,053	1,092	3,967	3,953	3.77	3.62
Rajasthan	6,888	7,654	21,136	20,874	3.07	2.73
Tamil Nadu	8,118	7,938	6,488	5,971	0.80	0.75
Telangana	5,554	5,948	6,197	5,973	1.12	1.00
Uttar Pradesh	23,325	23,822	17,622	17,451	0.76	0.73
All India	1,38,348	1,46,454	1,59,592	1,57,817	1.15	1.08

Source: Agriculture Census, GoI

Compensation for Natural Disasters

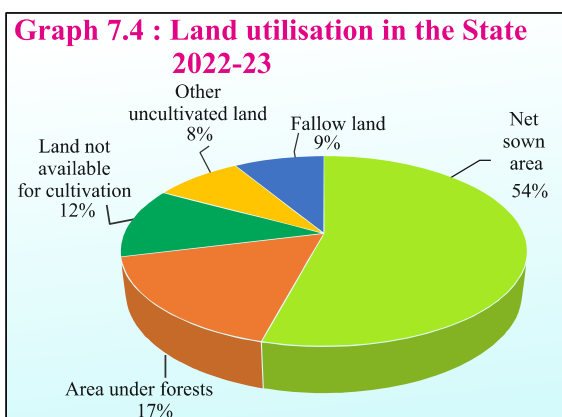
7.5.1 Due to untimely/heavy rains during January to October, 2023 agriculture land under crops/fruit crops in the State was severely affected. Compensation for maximum two ha affected area under agriculture crops was sanctioned during 2023-24. In all compensation of ₹ 1,700.50 crore was sanctioned to 22.74 lakh farmers for about 16.55 lakh ha affected area.

7.5.2 Scarcity situation during Kharif-2023 affected 40 talukas in 15 districts of the State. Of these 40 talukas, severe drought was declared in 24 talukas and moderate drought was declared in 16 talukas. In all 22.66 lakh ha agricultural land under crops/fruit crops was affected due to drought and compensation of ₹ 2,443.23 crore was sanctioned by GoM.

7.5.3 Compensation at revised rates for loss due to untimely rains and hailstorms during November, 2023 to January, 2024 was sanctioned for maximum three ha area. Compensation of ₹ 36,000 per ha for perennial crops, ₹ 13,600 per ha for *jirayat* crops and ₹ 27,000 per ha for irrigated crops was sanctioned during 2023-24. In all compensation of ₹ 2,277.90 crore was sanctioned to 23.96 lakh farmers for about 12.89 lakh ha affected area.

Land Utilisation

7.6 According to the land use statistics of the year 2022-23, out of total geographical area of the State (307.58 lakh ha), the gross cropped area was 244.15 lakh ha (79.4 per cent) and net cropped area was 164.90 lakh ha (53.6 per cent). Time series of Land use statistics of the State is given in Annexure 7.2.



Agricultural Production

7.7.1 Kharif crops: During *kharif* season of 2023-24, sowing was completed on 155.64 lakh ha which was about two per cent less as against 158.60 lakh ha during the previous year. As compared to the previous year, an increase in the area under oilseed crops is expected, while a decrease in the area under cereals, pulses, sugarcane and cotton crops is expected. Area and production of principal crops are given in Table 7.5.

Table 7.5 Area and production of principal *kharif* crops

Crop	Area ('000 ha)			Production ('000 MT)		
	2022-23	2023-24 (tentative)	Per cent change [#]	2022-23	2023-24 (tentative)	Per cent change [#]
Rice	1,522.93	1,529.02	0	3,496.43	3,471.02	(-)1
Jowar	150.54	111.93	(-)26	140.58	89.15	(-)37
Bajra	491.32	366.68	(-)25	536.26	201.66	(-)62
Ragi	77.41	70.04	(-)10	109.51	90.15	(-)18
Maize	838.64	913.62	9	2,613.83	1,439.18	(-)45
Other Cereals	40.66	45.21	11	20.91	22.34	7
Total Cereals	3,121.50	3,036.50	(-)3	6,917.52	5,313.50	(-)23
Tur	1,191.37	1,111.33	(-)7	859.11	982.83	14
Moong	285.96	181.40	(-)37	178.48	70.78	(-)60
Udid	367.25	256.21	(-)30	233.42	108.11	(-)54
Other Pulses	80.69	62.10	(-)23	75.14	47.2	(-)37
Total Pulses	1,925.27	1,611.04	(-)16	1,346.15	1,208.92	(-)10
Total Foodgrains	5,046.77	4,647.54	(-)8	8,263.67	6,522.42	(-)21
Soyabean	4,892.70	5,085.59	4	6,679.91	6,607.12	(-)1
Groundnut	165.46	143.65	(-)13	205.16	145.24	(-)29
Sesamum	6.40	4.67	(-)27	1.64	1.1	(-)33
Nigerseed	5.51	4.81	(-)13	2.13	0.9	(-)58
Sunflower	11.80	2.76	(-)77	4.88	0.63	(-)87
Other Oilseeds	3.08	3.57	16	1.06	1.07	2
Total Oilseeds	5,084.95	5,245.05	3	6,894.78	6,756.06	(-)2
Cotton (Lint) [@]	4,240.01	4,234.47	0.1	8,590.95	8,844.18	3
Sugarcane ^{**}	1,487.84	1,437.01	(-)3	1,35,754.26	1,12,626.68	(-)17
All crops	15,859.57	15,564.08	(-)2	-	-	-

[@] Production of cotton in '000 bales of 170 kg each ^{**} Harvested area [#] Calculated on the basis of actual figures

Note: i) Figures for 2022-23 are based on final estimates & for 2023-24 are based on third advance estimates

ii) Figures may not add up due to rounding

Source: Commissionerate of Agriculture, GoM

7.7.2 Rabi crops: During *rabi* season of 2023-24 about 58.60 lakh ha area has been sown which is about four per cent less (61.09 lakh ha) than the previous year. Compared to the previous year, an increase in the area of pulses & oilseeds and a decrease in the area of cereals & pulses is expected. Area and production of major *rabi* crops are given in Table 7.6.

Table 7.6 Area and production of principal *rabi* crops

Crop	Area ('000 ha)			Production ('000 MT)		
	2022-23	2023-24 (tentative)	Per cent change [#]	2022-23	2023-24 (tentative)	Per cent change [#]
Jowar	1,338.21	1,617.99	21	1,395.35	1,777.25	27
Wheat	1,203.62	1040.31	(-)14	2,301.02	1,942.43	(-)16
Maize	400.26	340.81	(-)15	1,143.83	874.49	(-)24
Other cereals	12.06	10.41	(-)14	5.73	4.2	(-)27
Total cereals	2,954.15	3,009.52	2	4,845.93	4,598.37	(-)5
Gram	2,934.82	2,668.76	(-)9	2,974.15	2,860.05	(-)4
Other pulses	147.25	108.73	(-)26	73.73	52.08	(-)29
Total pulses	3,082.07	2,777.50	(-)10	3,047.88	2,912.13	(-)4
Total foodgrains	6,036.22	5,787.02	(-)4	7,893.81	7,510.51	(-)5
Sesame	1.54	1.5	(-)3	0.52	0.48	(-)8
Safflower	31.28	44.47	42	23.98	32.52	36
Sunflower	4.44	2.36	(-)47	3.50	1.3	(-)63
Linseed	5.42	7.16	32	1.89	3.4	80
Rapeseed & mustard	29.79	17.65	(-)41	9.39	6.66	(-)29
Total oilseeds	72.47	73.15	1	39.28	44.37	13
Total	6,108.69	5,860.17	(-)4	-	-	-

[#] Calculated on the basis of actual figures

Note: i) Figures for 2022-23 are based on final estimates and for 2023-24 are based on third advance estimates

ii) Figures may not add up due to rounding

Source: Commissionerate of Agriculture, GoM

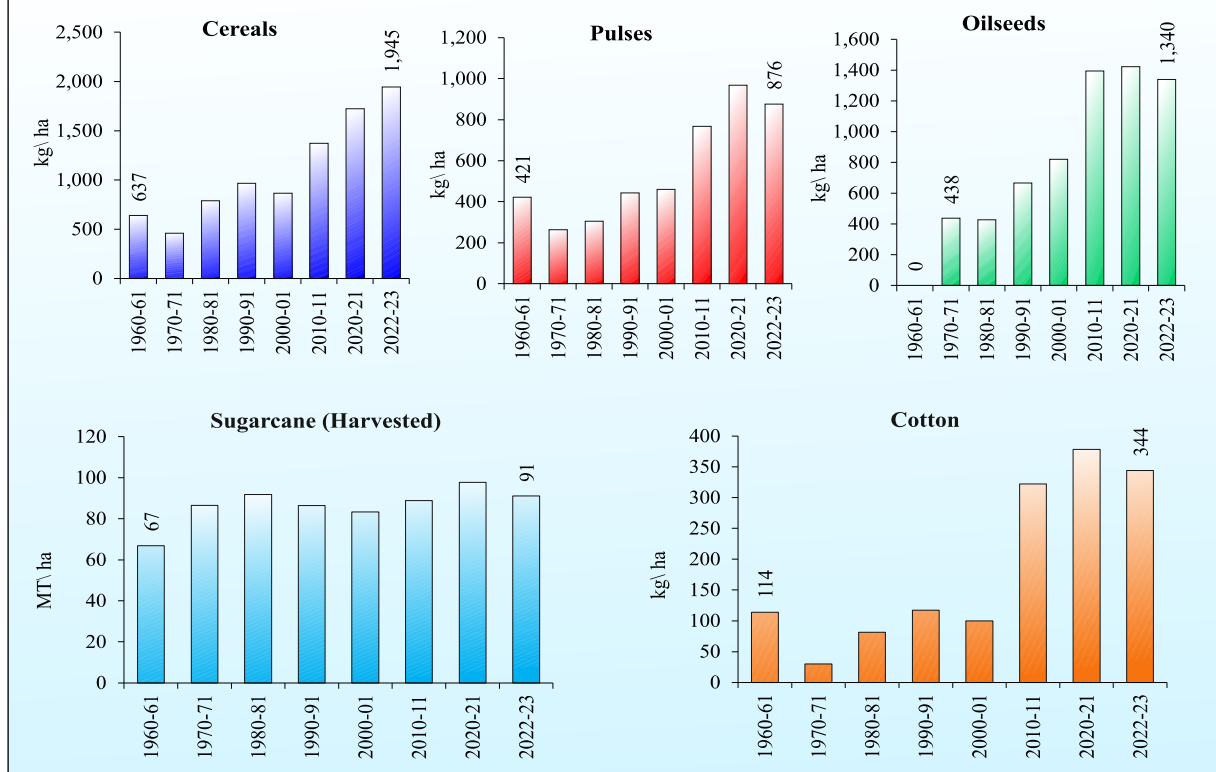
7.7.3 Summer Crops: During summer season of 2023-24, an area of 3.89 lakh ha was sown as against 4.57 lakh ha sown area during 2022-23.

7.7.4 There has been a significant increase in crop production in the State during the last six decades. Time series of area under major crops, production and productivity per ha in the State is given in Annexure 7.3. The cropwise index numbers of agricultural production in the State (Base: Triennial 1979-82) are given in Annexure 7.4. The Triennial average productivity of selected crops in selected states is given in Table 7.7.

Table 7.7 Triennial average yield for selected commodities for selected states

State	Triennial average yield (2020-21 to 2022-23)				
	Cereals (kg/ha)	Pulses (kg/ha)	Oilseeds (kg/ha)	Cotton (kg/ha)	Sugarcane (MT/ha)
Andhra Pradesh	3,796	390	590	448	76
Gujarat	2,625	878	2,088	567	77
Haryana	3,975	618	936	356	83
Karnataka	2,479	625	988	478	94
Madhya Pradesh	2,904	542	891	409	62
Maharashtra	1,793	952	1,315	341	94
Punjab	4,459	827	944	477	83
Rajasthan	2,124	432	1,357	604	81
Tamil Nadu	3,563	840	1,946	343	108
Telangana	3,525	776	1,520	451	96
Uttar Pradesh	3,131	699	468	371	81
All India	2,887	618	1,224	441	84

Source: Directorate of Economics and Statistics, Department of Agriculture, Co-operation and Farmers Welfare, GoI

Graph 7.5 : Yield per hectare in the State

7.8 Horticulture: Estimated area under horticulture crops in the State was 21.17 lakh ha in 2023-24 showing decrease of 5.4 per cent as compared to the previous year (22.39 lakh ha). According to the second advance estimates for the year 2023-24, the area under various fruit crops in the State was 8.60 lakh ha, of which area under mango fruit was highest (1.69 lakh ha) followed by pomegranate (1.15 lakh ha), orange/mandarin (1.35 lakh ha), grapes (1.23 lakh ha), banana (1.11 lakh ha) and *mosambi* (0.68 lakh ha). During 2023-24, area under vegetable crops was 9.03 lakh ha, of which area under onion crop was the highest (6.67 lakh ha) followed by tomato (0.55 lakh ha) and green chilly (0.33 lakh ha) crops. Information on area of horticulture crops and their production is given in Table 7.8.

Table 7.8 Area and production of horticulture crops

Crop	Area ('000 ha)			Production ('000 MT)		
	2022-23	2023-24	Per cent change	2022-23	2023-24	Per cent change
Fruits	839.25	860.01	2.5	14095.48	15,174.55	7.7
Vegetables	1,045.27	903.03	(-)13.7	16,280.45	14,705.90	(-)9.7
Plantation crops	226.47	226.58	0.1	404.35	406.52	(-)0.5
Spices	117.26	115.69	(-)1.3	1840.00	1,847.02	(-)0.4
Flowers@	10.56	11.06	(-)4.8	155.08	155.11	0.0
Aromatic & Medicinal Plants	1.12	0.81	(-)27.4	4.21	3.22	(-)23.5
Total Horticulture Crops	2,239.93	2,117.18	(-)5.5	32,779.58	32,292.33	(-)1.5

@ includes cut and loose flowers

Note: Figures for 2022-23 are based on final estimates and for 2023-24 are based on second advance estimates.

Source: Horticulture Area Production Information System (HAPIS), GoI

7.9 Organic Farming: The demand for organic crop products is increasing from domestic and international markets. Various schemes are being implemented to promote organic farming in the State. The State ranks second with 27 per cent share in organic farm production in all India after Madhya Pradesh. The area and production under organic farming is given in Table 7.9.

Table 7.9 Area and production under organic farming

Year	Area ('000 ha)		Production ('000 MT)	
	Maharashtra	All India	Maharashtra	All India
2020-21	371.80	433.92	776	3,497
2021-22	1,133.67	9,119.87	691	3,410
2022-23	1,284.31	5,391.79	790	2,953

Source: Commissionerate of Agriculture, GoM

Improved seeds

7.10 Maharashtra State Seeds Corporation (*Mahabeej*) and National Seeds Corporation (*Rashtriya Beej Nigam*) are major public sector organisations involved in the production and distribution of quality seeds. Improved seeds distributed for *Kharif* and *Rabi* seasons is given in Table 7.10.

Table 7.10 Improved seeds distributed for *kharif* & *rabi* seasons

('000 quintal)					
Distribution Agency	Season	2021	2022	2023 [#]	Per cent change in 2023 over 2022
Public	<i>Kharif</i>	222	114	238	108.8
	<i>Rabi</i>	247	338	324 [#]	(-)4.1
	Total	469	452	562	24.3
Private	<i>Kharif</i>	1,517	1,657	1,660	0.2
	<i>Rabi</i>	832	817	726 [#]	(-)11.1
	Total	2,349	2,474	2,386	(-)3.6
Total	<i>Kharif</i>	1,739	1,771	1,898	7.2
	<i>Rabi</i>	1,079	1,155	1,050 [#]	(-)9.1
	Total	2,818	2,926	2,948	0.8

Source: Commissionerate of Agriculture, GoM

[#] Expected availability of seeds

Fertilisers and Pesticides

7.11 Use of chemical fertilisers is given in Table 7.11 and use of pesticides is given in Table 7.12. Regionwise use of nitrogenous (N), phosphatic (P) and potassic(K) chemical fertilisers is given in Table 7.13.

Table 7.11 Use of chemical fertilisers

(Lakh MT)

Year	Chemical fertiliser consumption		
	<i>Kharif</i>	<i>Rabi</i>	Total
2021-22	43.52	27.15	70.67
2022-23	37.67	27.06	64.73
2023-24 [#]	44.56	20.01	64.57

Source: Commissionerate of Agriculture, GoM [#] anticipated

Graph 7.6 : Per hectare consumption of chemical fertilisers

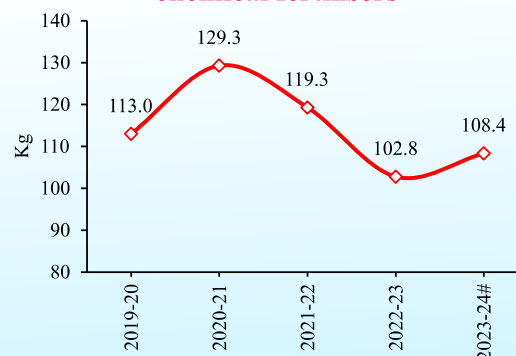


Table 7.12 Use of pesticides

Year	Pesticides							(MT)
	Chemical			Per ha consumption (kg)	Bio			Per ha consumption (kg)
	Kharif	Rabi	Total		Kharif	Rabi	Total	
2021-22	9,207	3,968	13,175	2.05	654	280	934	3.93
2022-23	10,819	4,637	15,456	3.96	1,748	749	2,497	10.51
2023-24 [#]	6,103	2,615	8,718	1.32	1,720	891	2,611	11.71

Source: Commissionerate of Agriculture, GoM

anticipated

Table 7.13 Regionwise use of Nitrogenous (N), Phosphatic (P) and Potassic (K) chemical fertilisers

Region	2022-23				2023-24 [#]				('00 MT)
	Nitrogen (N)	Phosphate (P)	Potash (K)	Total	Nitrogen (N)	Phosphate (P)	Potash (K)	Total	
Konkan	284	60	44	389	297	59	42	399	
Nashik	3,849	2,104	992	6,944	3,729	2,049	1,162	6,940	
Pune	3,675	1,831	769	6,274	3,537	1,749	876	6,162	
Chhatrapati Sambhajnagar	4,322	2,842	698	7,862	4,021	2,959	834	7,813	
Amravati	1,970	1,410	292	3,672	2,099	1,754	456	4,309	
Nagpur	1,871	1,053	167	3,092	2,077	1,297	190	3,565	
Maharashtra	15,970	9,301	2,962	28,233	15,760	9,867	3,560	29,187	

Source: Commissionerate of Agriculture, GoM

anticipated

Irrigation

7.12 The irrigated area in command area under the jurisdiction of Water Resources Department, GoM is 42.33 lakh ha in 2022-23. Number of irrigation projects and irrigation potential created & utilised are given in Table 7.14. Number of minor irrigation projects (local sector) and irrigation potential created & utilised are given in Table 7.15.

Table 7.14 Number of irrigation projects and irrigation potential created & utilised

Particulars	Projects of Water Resources Department		
	Major & Medium	Minor	Total
No. of projects completed & ongoing as on 30 th June, 2023*	406 [@]	3,230 ^{\$\$}	3,636
Irrigation potential (lakh ha)			
(i) Irrigation potential created upto 30 th June, 2022	41.94	13.66	55.60
(ii) Area under irrigation by canal & river during 2022-23*	20.85	7.71	28.56
(iii) Area under irrigation by wells in command area during 2022-23*	11.50	2.27	13.77
(iv) Total area under irrigation during 2022-23 (ii+iii)*	32.35	9.98	42.33

\$ Includes lift irrigation schemes implemented through Irrigation Development Corporation of Maharashtra

* Provisional

@ 61 minor projects have been transferred to Soil & Water Conservation Department.

Source: Chief Auditor, Water and Irrigation, under Water Resources Department, GoM, Chhatrapati Sambhajnagar

Table 7.15 Number of minor irrigation projects (local sector) and irrigation potential created & utilised

Particulars	K.T. Weirs	Lift Irrigation schemes	Other important types			Total
			M.I. Tanks	Percolation tanks	Others ^{\$}	
No. of projects as on 30 th June, 2023						
a) Completed	13,971	2,911	2,993	24,302	70,462	1,14,639
b) Ongoing	1,860	119	610	961	4,889	8,439
Irrigation potential (Lakh ha)						
i) Created upto June, 2022	3.81	0.43	2.84	7.01	5.89	19.98
ii) Created upto June, 2023	3.98	0.43	3.19	7.03	6.20	20.83
iii) Utilised in 2022-23	1.39	0.15	1.11	3.52	3.10	9.27

^{\$} Includes diversion weir, storage *bandhara*, *maji mal gujari* tank, village tank, cement *nalla bunds*, etc.

Note: Irrigation potential utilised is assumed to be 35 per cent of the irrigation potential created

Source: Office of the Additional Commissioner, Water Conservation, Pune, GoM

7.12.1 Reservoir storage: The total live storage as on 15th October, 2022 in the major, medium and minor irrigation (State sector) reservoirs taken together was 34,485 million cubic meters, which was nearly 79.3 per cent of the storage capacity as per the project design. Live storage of water, irrigation potential and actual irrigated area are given in Table 7.16.

Table 7.16 Live storage of water, irrigation potential and actual irrigated area

Year	Storage capacity as per project design (MCM)	Live storage as on 15 th October (MCM)	Percentage of live storage	Irrigation potential created (as on 30 th June) (Lakh ha)	Actual irrigated area (1 st July to 30 th June) (Lakh ha)	Percentage of actual irrigated area to irrigation potential created
2020-21	43,934	34,236	77.9	54.15	41.59	76.8
2021-22	43,469	34,443	79.2	54.95	42.11	76.6
2022-23*	43,478	34,485	79.3	55.60	42.33	76.1

MCM: Million Cubic meters

Source: Chief Auditor, Water and Irrigation, GoM, Chhatrapati Sambhajinagar

* Provisional

7.12.2 Water Users Associations: Upto January, 2024 in all 12,556 Water Users Associations (WUAs) with Cultivable Command Area (CCA) of 55.92 lakh ha are formed under Water Resources Department for management of irrigation systems by farmers. Out of these WUAs, 2,143 WUAs covering 8.80 lakh ha CCA are registered under the Maharashtra Management of Irrigation Systems by Farmers Act, 2005 and 318 WUAs covering 1.18 lakh ha area are constituted under Maharashtra Co-operative Societies Act, 1960. Details of irrigation and non-irrigation water charges are given in Annexure 7.6.

Electrification of Agricultural Pumps

7.13.1 In the State, in all 48.69 lakh agricultural pumps were energised upto March, 2024 and during 2023-24 in all 1,12,942 agricultural pumps were energised.

7.13.2 Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan: *Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan* (PM-KUSUM) is being implemented in the State since 2019-20 and two lakh off-grid independent solar agricultural pumps have been sanctioned for the State. Under this scheme, farmers can install 3 HP, 5 HP and 7.5 HP off-grid independent solar agricultural pumps. Since inception of the scheme in all 90,613 solar agricultural pumps have been installed upto March, 2024.

7.13.3 Upto March, 2024 in all 2,04,163 Solar Agricultural Pumps have been installed in the State under the central & state governments Solar Agricultural Pump schemes, including *Atal* Solar Agricultural Pump scheme phase –I (6,550), phase –II (7,000), CM Solar Agricultural Pump scheme phase –I (25,000), phase –II & phase –III (75,000) and PM KUSUM component B scheme (90,613).

Agricultural Finance

7.14 Financial assistance is provided to farmers by way of short-term loans, credit, etc. by government through various banks and co-operative institutions. The National Bank for Agriculture and Rural Development (NABARD) provides agricultural short term & medium-term loans through Maharashtra State Co-operative Banks (MSCB), District Central Co-operative Banks (DCCB), Regional Rural Banks (RRB) and Scheduled Commercial Banks. Annual Credit Plan for priority sector of the State for 2023-24 is of ₹ 6.51 lakh crore. Share of Agricultural and allied activities sector in Annual Credit Plan is 25.9 per cent. Details of loans disbursed by Scheduled Commercial Banks, RRBs and MSCB & DCCBs are given in Table 7.17.

Table 7.17 Loans disbursed by Scheduled Commercial banks, RRBs and MSCB & DCCBs

Type of loan	(₹ Crore)							
	Scheduled Commercial Banks		RRBs		MSCB & DCCBs		Total	
	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24	2022-23	2023-24
Crop loan	35,538	32,124	4,736	4,617	22,495	23,454	62,769	60,195
Agriculture term loan	79,844	90,730	423	672	2,004	2,524	82,271	93,926
Total	1,15,382	1,22,855	5,159	5,288	24,499	25,978	1,45,040	1,54,121

Note: Figures may not add up to totals due to rounding

Source: State Level Bankers' Committee, Maharashtra State

7.15.1 The institutions directly associated with agricultural finance at grass root level in the State are Primary Agricultural Credit Co-operative Societies (PACS) which provide short-term crop loans to their cultivator members. During 2022-23, loans of ₹ 22,431 crore were disbursed to 32.16 lakh member farmers through PACS. The crop loan disbursement target for 2023-24 has been set to ₹ 25,967 crore, of which PACS have disbursed crop loans of ₹ 18,495 crore to 25.89 lakh member farmers during *khari*f season by the end of September 2023 and ₹ 8,970 crore to 5.31 lakh member farmers during *rabi* season upto March, 2024.

7.15.2 **Kisan Credit Card Scheme:** Maharashtra State Co-operative Bank has newly issued 34.53 lakh Kisan Credit Cards (KCC) in the State during 2022-23. The amount of loans sanctioned to the new KCC holders during 2022-23 was ₹ 22,379 crore. Details of KCC linked agriculture loans disbursed to farmers by DCCB are given in Table 7.18.

Table 7.18 Agriculture loans to farmers by DCCBs linked to KCC

Year	Short term loans		Long term loans		Total KCC	
	No of farmers ('000)	Amount (₹ Crore)	No of farmers ('000)	Amount (₹ Crore)	No of farmers ('000)	Amount (₹ Crore)
2021-22	2,965	18,449	24	308	2,989	18,757
2022-23	3,432	22,149	21	230	3,453	22,379
2023-24	3,120	23,465	14	273	3,134	23,738

Source: Maharashtra State Co-op. Bank Ltd.

Crop Insurance and Financial Assistance

7.16.1 **Pradhan Mantri Fasal Bima Yojana:** This scheme is being implemented in the State from 2016 to provide financial support to farmers in case of financial loss occurred because of damage to crops due to natural calamities, pests or diseases. Under the scheme, depending on the notified crop, farmers have to pay a maximum of five per cent of the sum insured as insurance premium & remaining amount of the premium is paid by government. GoM is implementing comprehensive Crop Insurance Scheme from 2023-24 in which farmers can participate in the scheme

by registering on the portal and paying only ₹ one as premium. Progress of *Pradhan Mantri Fasal Bima Yojana* are given in Table 7.19.

Table 7.19 Progress of Pradhan Mantri Fasal Bima Yojana

Year	No. of farmers participated (Lakh)	Area (lakh ha)	Sum insured (₹ Crore)	Gross premium (₹ Crore)	No. of farmers proposed for Compensation (Lakh)	Compensation proposed (₹ Crore)
2021-22	96.38	57.10	21,862.28	5,179.61	64.45	3,484.32
2022-23	104.06	62.99	29,867.98	4,691.51	76.03	3,877.70
2023-24	242.22	162.84	74,812.24	10,119.51	67.19	3,244.81

Source: Commissionerate of Agriculture, GoM

7.16.2 Weather Based Crop Insurance Scheme for Fruit Crops: Weather based Fruit Crop Insurance Scheme is being implemented in the State for the fruit crops viz. grapes, mango, pomegranate, banana, orange, *mosambi*, guava, sapota, lemon, cashew, custurd apple and strawberry (on a pilot basis). Details of Weather based Fruit Crop Insurance Scheme are given in Table 7.20.

Table 7.20 Details of Weather Based Crop Insurance Scheme for Fruit Crops

Year	No. of farmers participated (Lakh)	Area (lakh ha)	Sum insured (₹ Crore)	Gross premium (₹ Crore)	No. of farmers proposed for Compensation (Lakh)	Compensation proposed (₹ Crore)
2021-22	2.85	2.09	2,579.24	730.55	2.32	940.30
2022-23	3.38	2.46	3,106.87	948.64	2.29	996.41
2023-24	3.02	2.25	2,815.60	922.97	0.12	23.18

Source: Commissionerate of Agriculture, GoM

7.16.3 Dr. Babasaheb Ambedkar Krishi Swavalamban Yojana: Under this scheme, financial assistance in the form of 100 per cent subsidy is provided to Scheduled Caste & Neo-Buddhist farmers having land area between 0.20 to 6.00 ha and annual income upto ₹ 1.50 lakh. Under the scheme financial assistance is provided for sustainable irrigation facilities viz. new dug well, repair of old wells, plastic lining of farms, bore wells, farm pumps, electricity meter connection charges, micro irrigation, etc. with an objective of increasing productivity of land. During 2022-23, expenditure of ₹ 196.92 crore was incurred for 11,487 beneficiaries. During 2023-24, proposals of 9,141 beneficiaries are being processed and expenditure of ₹ 158.55 crore has been incurred.

7.16.4 Birsa Munda Krishi Kranti Yojana: Under this scheme, financial assistance in the form of 100 per cent subsidy is provided to Scheduled Tribe farmers having land area between 0.20 to 6.00 ha and annual income upto ₹ 1.50 lakh. Under the scheme, financial assistance is provided for sustainable irrigation facilities viz. new dug well, repair of old wells, plastic lining of farms, bore wells, farm pumps, electricity meter connection charges, HDPE/PVC pipes, micro irrigation sets, kitchen gardens, etc. with an objective of increasing productivity of land. During 2022-23, grant of ₹ 91.12 crore has been spent for 5,110 beneficiaries. During 2023-24, expenditure of ₹ 88.21 crore is incurred for 5,305 beneficiaries.

7.16.5 Mahatma Jyotirao Phule Shetkari Karjamukti Yojana 2019: GoM has launched this scheme during 2019-20 with an objective to waive off crop loans borrowed by farmers during 1st April, 2015 to 31st March, 2019 from one or more institutions and have become overdue as on 30th September, 2019. Since inception of the scheme upto March, 2024 benefit of ₹ 20,497 crore has been given to 32.27 lakh beneficiary farmers.

7.16.5.1 Protsahanpar Labha Yojana under Mahatma Jyotirao Phule Shetkari Karjamukti Yojana 2019: This scheme is being implemented in the State from July, 2022 to encourage the farmers repaying crop loan regularly. Under this scheme, depending on crop loan amount, benefit of maximum ₹ 50,000 is being given to the farmers who borrowed crop loans in any of the two years from 2017-18 to 2019-20 and timely repaid full loan amount. Since inception upto March, 2024 benefit of ₹ 5,207 crore was given to 14.38 lakh beneficiary farmers.

7.16.6 Dr. Punjabrao Deshmukh interest rebate scheme: The scheme is being implemented in the State to motivate farmers for regular repayment of the short-term crop loan. Under the scheme, from April, 2021 onwards, interest subsidy of three per cent for the loan amount upto ₹ three lakhs is given to the farmers repaying full loan amount every year upto 30th June. During 2022-23, interest subsidy of ₹ 430.24 crore was given to 27.35 lakh farmers whereas during 2023-24, interest subsidy of ₹ 368 crore was given to 11.25 lakh farmers.

7.16.7 Pradhan Mantri Kisan Samman Nidhi: To Augment the income of small and marginal farmers, GoI is implementing *Pradhan Mantri Kisan Samman Nidhi* Scheme (PM-KISAN) since 2018-19. Under this scheme, annual subsidy of ₹ 6,000 is given to eligible farmer families through DBT. Since inception upto March, 2024 total amount of ₹ 29,630.24 crore has been deposited in the bank accounts of 115.42 lakh farmers of the State.

7.16.8 Namo Shetkari Mahasanman Nidhi Yojana: GoM is implementing this scheme from 2023-24 to augment the income of small and marginal farmers by giving financial assistance in addition to financial assistance given under PM-KISAN *Yojana*. Under this scheme, farmer families eligible under PM- KISAN scheme get ₹ 6,000 per year through DBT. Upto March, 2024, amount of ₹ 5,285.21 crore has been credited to bank accounts of 92.43 lakh beneficiary farmers in the State.

7.16.9 Pradhan Mantri Kisan Mandhan Yojana: This voluntary and contribution-based pension scheme is being implemented in the State with the aim of providing old age protection and social security to small and marginal farmers. Under this scheme, eligible small and marginal farmers will be given a pension of ₹ 3,000 per month. Farmers in the age group of 18 to 40 years as on 1st August, 2019 are eligible to participate in this scheme and have to deposit ₹ 55 to ₹ 200 per month in the pension fund till they reach 60 years of age. GoI deposits an amount equal to the farmers' contribution in the pension fund. Upto March, 2024, in all 80,016 farmers from the State have participated in this scheme.

Agricultural Marketing

7.17 Agricultural Produce Market Committees (APMCs) have been established in the State under Maharashtra Agricultural Produce Marketing (Development and Regulation) Act, 1963. In order to ensure fair price for the agricultural produce of the farmers and to protect the farmers from exploitation done by the traders and middlemen by paying low prices for the agricultural produce, the facilities of selling the agricultural produce are made available in the APMCs. There are 304 APMCs and 626 Sub-Market Committees functioning in the State. Upto March 2024, in all 1,712 direct marketing licenses have been issued. Apart from this, 88 private markets have been issued licenses. The quantity and value of arrivals in all APMCs of the State are given in Table 7.21.

Table 7.21 Quantity & value of arrivals in all APMCs of the State

Year	Quantity (Lakh MT)	Value (₹ Crore)
2021-22	197.50	56,422
2022-23	110.37	40,993
2023-24	241.00	57,937

Source: Maharashtra State Agriculture Marketing Board

7.18 Minimum Support Price Scheme:

To make the agricultural activity viable as well as to protect the farmers from financial losses due to natural calamities and low prices offered by traders, GoI declares Minimum Support Prices (MSP) for selected crops before sowing season. Under the scheme, procurement in the State is undertaken by Maharashtra State Co-operative Tribal Development Corporation, National Agricultural Co-operative Marketing Federation and Maharashtra State Co-operative Cotton Growers Federation. The MSP declared for selected crops by GoI are given in Table 7.22.

Table 7.22 MSP declared for selected crops by GoI

Crop	(₹/quintal)		
	MSP		
	2021-22	2022-23	2023-24
Paddy (FAQ)	1,940	2,040	2,183
Paddy (Grade A)	1,960	2,060	2,203
Jowar (Hybrid)	2,738	2,970	3,180
Jowar (Maldandi)	2,758	2,990	3,225
Wheat	2,015	2,125	2,125
Maize	1,870	1,962	2,090
Bajra	2,250	2,350	2,500
Gram	5,230	5,335	5,335
Tur	6,300	6,600	7,000
Moong	7,275	7,555	8,558
Udid	6,300	6,600	6,950
Sunflower	6,015	6,400	6,760
Soyabean	3,950	4,300	4,600
Groundnut-in-shell	5,550	5,850	6,377
Cotton (Medium Staple)	5,726	6,080	6,620
Cotton (Long Staple)	6,025	6,380	7,020
Safflower	5,441	5,450	5,650
Ragi	3,377	3,578	3,846

FAQ: Fair Average Quality

Source: Directorate of Marketing, GoM

Information & Communication Technology

7.19.1 Electronic National Agricultural Market (e-NAM): e-NAM is a nationwide electronic trading portal launched in 2016. Through e-NAM, markets in the APMCs have been connected electronically and the facility of online buying and selling has been made available. e-NAM has provided a single window facility for all information and services related to the APMCs, including inputs and prices of agricultural produce, purchase and sale orders, provision for responding to trade opportunities. In all 133 APMCs of the State are operating under e-NAM. Online gate entry, e-auction have been started in 118 APMCs and e-payment has been started in 78 APMCs. Upto March 2024, about 632 lakh MT of agricultural produce worth ₹ 15,329 crore was e-auctioned and e-payments of ₹ 411 crore were made. Quality assaying laboratories have been established in 118 APMCs for quality inspection & certification of agricultural commodities.

7.19.2 MahaAGRITECH Project: The main objective of MahaAGRITECH project is to create an integrated web portal and mobile application system that provides accurate advice and guidance to farmers. Facilities such as satellite imaging & use of drone technology for accurate calculation under various crops, health survey of cultivated crops, estimation of post-harvest yield of crops and integration of information through interconnection of various computerised systems are made available under this project.

7.19.3 MahaDBT Farmer Portal: To transfer subsidies & financial benefits under more than 25 agricultural schemes directly bank accounts of the eligible farmers, an integrated computerised system 'Shetkari Yojana Portal' has been developed. More than 37.27 lakh farmers from the State have been registered on this portal upto March, 2024 and amount of ₹ 4,660.53 crore has been credited to beneficiaries' bank accounts.

7.19.4 mKisan portal: The mobile based portal, mKisan facilitates farmers and all other stakeholders to seek free advice and information on agro-weather advisory, cyclones, crop & pest infestation, crop insurance, market prices, etc. from experts at various levels & government agencies. In all 66.69 lakh farmers have been registered on this portal. During 2023-24 in all 651 advisories and about 3.10 crore messages were sent to farmers.

Various Agricultural Development Schemes implemented in the State

7.20 Rashtriya Krishi Vikas Yojana - Cafeteria: *Rashtriya Krishi Vikas Yojana* was launched in 2007-08 with the aim of holistic development of agriculture and allied sectors. Since 2017-18 this scheme is being implemented as RKVY-RAFTAAR with an objective of making farming a remunerative economic activity through strengthening farmers' efforts, risk mitigation & promoting agri-business entrepreneurship. This Scheme is being implemented from the year 2022-23 as RVKY-Cafeteria. It includes Annual Action Plan (AAP) and Detailed Project Report (DPR). Under AAP based stream components like (i) Per Drop More Crop (Micro irrigation), (ii) Sub Mission on Agriculture Mechanisation, (iii) Rainfed Area Development, (iv) Soil Health Card & Management, (v) Organic Farming (*Paramparagat Krishi Vikas Yojana*) are included. Under DPR stream, 70 per cent grant is reserved for growth in production, infrastructure & assets, 20 per cent for special sub-schemes of national priority under RKVY-Cafeteria and 10 per cent for innovation & agri-entrepreneurship development projects. During 2022-23, expenditure incurred was ₹ 95.76 crore, during 2023-24, expenditure of ₹ 105.5 crore has been incurred.

7.20.1 Pradhan Mantri Krishi Sinchai Yojana - Per Drop More Crop: This micro irrigation scheme is being implemented in the State from the year 2015-16 with the aim of more efficient use of water and maximum yield per drop of water. From 2022-23 Per Drop More Crop component is implemented under RKVY. Under this scheme, the criterion for subsidy is 55 per cent for small and marginal farmers and 45 per cent for other farmers limited to five ha area. From 2020-21 subsidy under this scheme is distributed through MahaDBT portal. Since inception upto 2022-23 in all 10.76 lakh ha area has been newly brought under micro-irrigation. 12,95,395 farmers have been benefitted under this scheme. During 2023-24, subsidy of ₹ 19.60 crore has been distributed to 6,602 farmers.

7.20.2 Chief Minister Sustainable Agriculture Irrigation Scheme - Micro Irrigation: In order to provide sustainable irrigation facilities to the farmers, this scheme is being implemented in the State. Under this scheme, apart from the admissible subsidy under Rashtriya Krishi Vikas Yojana - per drop more crop scheme, 25 per cent top up subsidy is being given to small & marginal farmers and 30 per cent top up subsidy is being given to other farmers. Since inception (2019-20) of the scheme in all 3,95,433 farmers have received top up subsidy of ₹ 593.15 crore upto March, 2024. Details of sprinkler & drip irrigation sets and subsidy distributed under *Pradhan Mantri Krishi Sinchai Yojana* and Chief Minister Sustainable Agriculture Irrigation Scheme- Micro Irrigation are given in Table 7.23.

Table 7.23 Details of sprinkler & drip irrigation sets and subsidy distributed

Year	Sprinkler irrigation sets		Drip irrigation sets		Subsidy (₹ Crore)
	No. of sets	Area (ha)	No. of sets	Area (ha)	
2021-22	1,01,899	66,277	1,11,980	85,534	532.88
2022-23	79,974	58,651	93,069	92,111	511.98
2023-24*	3,284	2,704	3,318	3,483	19.60

Source: Commissionerate of Agriculture, GoM

* provisional

7.20.3 Sub-Mission on Agricultural Mechanisation: To tackle the challenges posed due to short duration of kharif season, diversity in crop cultivation, declining size of land holding, reduction in number of bullocks, non-availability of labour, increasing rate of wages, etc. the sub-mission on agricultural mechanisation is being implemented in the State since 2014-15. Subsidies to farmers for purchase of improved agricultural implements and establishment of agricultural implement banks are components of this sub-mission. Details of beneficiaries and subsidy given under Agricultural Mechanisation sub-mission is given in Table 7.24.

Table 7.24 Beneficiaries and subsidy given under Agricultural Mechanisation sub-mission

Year	Agricultural Implements		Agricultural Implements Banks		Total subsidy (₹ Crore)
	Number	Subsidy (₹ Crore)	Number	Subsidy (₹ Crore)	
2021-22	14,642	91.42	272	12.78	104.20
2022-23	29,741	176.98	290	15.35	192.33
2023-24	23,206	163.78	79	4.31	168.09

Source: Commissionerate of Agriculture, GoM

7.20.4 Rainfed Area Development Programme: The objective of Rainfed Area Development Programme is to minimise risk by providing agriculture-based income generating opportunities and sustaining the rainfed agriculture through optimum utilisation of potential of natural resources and resources created through various interventions. During 2022-23, expenditure of ₹ 25.17 crore was incurred on 7,967 beneficiaries. During 2023-24, expenditure of ₹ 17.97 crore is incurred for 8,732 beneficiaries.

7.20.5 Soil Health Management and Distribution of Soil Health Cards: Two sub-campaigns, Soil Health Management and Distribution of Soil Health Cards are being implemented to promote integrated nutrient management to maintain soil health and improve soil productivity. To facilitate testing of soil and water samples in all 32 soils testing laboratories & five manure sample testing laboratories have been set up in the State. Soil health cards are being distributed to farmers once in every three years to create awareness about soil health status and to suggest measures to improve soil health. During 2022-23, in all 2.06 lakh soil health cards were distributed and during 2023-24 in all 1.91 lakh soil health cards were distributed.

7.20.6 Paramparagat Krishi Vikas Yojana: The objectives of the scheme are: (i) to improve soil fertility and soil health by increasing organic practices instead of using chemical fertilisers, pesticides, etc., (ii) to produce chemical-free, safe, healthy and nutritious organic produce, (iii) to develop natural and organic produce value chains and (iv) establishment of Biological Input Resource Centre at farmer group and farmer producer company level. Under this scheme, a group of farmers with total area of 20 ha is formed and for three consecutive years, benefits are given to the group. Under the scheme, during 2023-24, an expenditure of ₹ 27.77 crore was incurred as against ₹ 10.90 crore during 2022-23.

7.21 Punyasloka Ahilya Devi Holkar Nursery Scheme: Since 2020-21, this scheme is being implemented in the State under RKVY to motivate farmers for production of chemical free export quality vegetables & their export. Farmers having minimum 0.40 ha land and having permanent source of water for establishment of nursery are eligible under the scheme. Female agriculture graduates & their groups and vegetable producing small & marginal farmers and their groups are given priority for selection. During 2020-21, expenditure of ₹ 8.32 crore was incurred on 391 nurseries. During 2021-22 & 2022-23 grant of ₹ 23.23 crore was sanctioned for 822 nurseries. During 2023-24, grant of ₹ 46.76 lakh has been spent on 23 nurseries.

7.22 Support to State Extension Programs for Extension Reforms: The scheme aims at making the extension system to be farmer driven and farmer accountable by disseminating technology to farmers through Agricultural Technical Management Agency (ATMA). The components of the scheme are trainings, demonstrations, farmers' exposure visits, formation & capacity building of farmers' groups, farm school, *kisan goshtie*, agriculture exhibitions, *kisan mela*, farmers' friends, etc. During 2022-23, expenditure incurred was ₹ 63.35 crore. During 2023-24, expenditure of ₹ 53.48 crore has been incurred.

7.23 Food and Nutrition

Security-FNS: The main objectives of Food and Nutrition Security (FNS), the erstwhile National Food Security Mission (NFSM) are to sustainably increase the production of rice, wheat, pulses, cereals, nutri-cereals, cash-crops and oilseeds by expanding area and productivity, re-establishing the fertility & productivity of individual farm lands. The componentwise expenditure under the FNS is given in Table 7.25.

Table 7.25 Componentwise expenditure incurred under FNS

Component	Expenditure incurred (₹ Crore)		
	2021-22	2022-23	2023-24
Rice	6.68	2.41	6.06
Wheat	1.87	0.81	1.52
Pulses	104.94	58.50	109.29
TRFA Pulses	6.91	5.35	11.09
Coarse Cereals (Maize)	4.27	2.31	3.76
Nutri Cereals	47.08	55.52	105.76
Commercial Crops (Sugarcane & Cotton)	5.18	3.62	7.41
Oilseeds & Oil palm	27.84	39.40	63.44
All components	204.77	167.92	308.33

TRFA- Targetting Rice Fallow Areas

Source: Commissionerate of Agriculture, GoM

7.24 Krishi Unnati Yojana - Seed Village Programme: Under *Krishi Unnati Yojana* - Seed Village Programme is being implemented in the State to provide quality and certified seeds at affordable prices and to increase production. Under this scheme, certified seeds are supplied upto one-acre area per farmer. Under the scheme, during 2022-23 expenditure of ₹ 32.25 crore has been incurred. During 2023-24, expenditure of ₹ 35.76 crore has been incurred.

7.25 Crop Pest Survey Advisory Project (CROPSAP): This online project aims at (i) to create awareness and provide information to farmers about pest and disease management through training and visits, (ii) to provide early warning so that measures can be taken before pest and disease outbreak and (iii) to provide information and scientific advice through free SMS. The project covers Paddy, Soyabean, Cotton, Tur, Gram, Maize, Sunflower & Sugarcane. During 2022-23, expenditure of ₹ 17.36 crore was incurred while during 2023-24, expenditure of ₹ 24.25 crore has been incurred.

7.26 National Horticulture Mission: The National Horticulture Mission (NHM) is being implemented in the State since 2005-06 with the main objective of increasing the area under horticulture, productivity and its post-harvest management. Since 2015-16, Mission for Integrated Development of Horticulture (MIDH) is being implemented in 34 districts of the State. Physical & financial progress under MIDH since inception is given in Table 7.26.

Table 7.26 Physical & financial progress under MIDH since inception upto March, 2024

Component	Unit	Physical	Financial (₹ Crore) ⁺
Establishment of high-tech nurseries & tissue culture laboratories for production of quality planting material and seed production	no	1,920	38.43
Area expansion for high density plantation of mango, guava, oranges & plantation of grapes, banana, papaya, spices & flower crops	ha	3,08,546	484.14
Establishment of 36 Mushroom projects	no	37	3.19
Rejuvenation of old orchards	ha	48,540	53.00
Construction of community tanks & farm ponds lining	no	28,191	552.72
Establishment of Green house, shed net house, plastic mulching, anti-bird/ anti-hail net etc. under protected cultivation	no	9,156	403.44
Construction of pack house, ripening chamber, onion storage structure, cold storage, pre-cooling unit etc. to promote post-harvest management	no	18,100	357.61
Promotion of Integrated pest/ nutrient management	no	70	20.86
	ha	44,453	
Promotion of organic farming	ha	15,529	21.25
Promotion of bee-keeping	no	10,908	1.41
Promotion of horticulture mechanisation	no	33,536	155.86
Farmers training/ study tours under human resource development	no	3,05,570	42.61
Indo-Israel/ Indo-Dutch projects-6	no	6	40.47
Innovative components	no	10,562	19.52
Others	-	-	80.73
Mission management	-	-	95.59
All components			2,370.83

Note: Figures may not add up due to rounding

Source: Director, NHM, Commissionerate of Agriculture, GoM

7.27 Orchard Plantation Scheme under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): This scheme is being implemented in 34 districts of the State since 2011-12. The objectives of the scheme are to enhance income of MGNREGA job card holder farmers and employment generation through orchard plantation in their own productive or fallow land upto two ha. The subsidy amount is deposited directly in bank account of the farmer on the basis of percentage survival of plants. During 2022-23, farmers have done plantation on 40,096 ha area. During 2023-24, horticulture plantation is done on 38,546.69 ha area.

7.28 Bhausaheb Fundkar Falbaug Lagwad Yojana: This scheme provides benefits of Orchard Plantation Scheme to the farmers who are not registered under MGNREGA. This scheme is being implemented in the State since *kharif* season of 2018-19 and provides 100 per cent subsidy. The objectives of the scheme are to increase farmers' income, create employment for young farmers, change cropping patterns, create a sustainable source of income and increase the availability of raw materials for agro-processing industries. A total of 16 perennial fruit crops can be planted under this scheme. Since inception of the scheme upto March 2024, in all 32,283 beneficiary farmers planted fruit crops on 37,331 ha and expenditure of ₹ 182.87 crore was incurred.

7.29 Plantation of horticulture and vegetable crops in kitchen garden of tribal families: This scheme is being implemented in 14 tribal districts of Maharashtra viz. Thane, Pune, Nashik, Dhule, Nandurbar, Jalgaon, Ahmednagar, Nanded, Amravati, Yavatmal, Gadchiroli, Chandrapur, Palghar and Gondia. The objective of the scheme is to encourage the planting of fruit trees and vegetables in the backyard at the place of residence in order to include vitamins A & C and minerals such as iron in the balanced diet of tribal families. Under this scheme, a subsidy of ₹ 390 per beneficiary is given for vegetable seeds, seedlings and grafts of fruit trees. During 2022-23, expenditure of ₹ 32.99 lakh was incurred for 8,461 beneficiary families. During 2023-24, expenditure of ₹ 25.41 lakh has been incurred on 6,515 beneficiary families.

7.30 Export of fruits, vegetables and flowers: Grapes, bananas, pomegranates, Oranges and mangoes are the major fruits exported from the State. The quantity and value of exports of fruits, vegetables and flowers is given in Table 7.27.

Table 7.27 Quantity & value of exports of fruits, vegetables & flowers

Commodity	Export From	2021-22		2022-23		2023-24 ⁺	
		Quantity (MT)	Value (₹ Crore)	Quantity (MT)	Value (₹ Crore)	Quantity (MT)	Value (₹ Crore)
Grapes	Maharashtra	1,65,244	1,890	2,52,091	2,487	1,25,480	1,270
	India	2,63,076	2,302	2,67,950	2,543	1,34,723	1,302
Banana	Maharashtra	2,73,381	923	2,65,855	1,133	3,52,897	1,532
	India	3,76,572	1,179	3,61,842	1,413	4,38,328	1,809
Pomegranate	Maharashtra	83,276	538	48,527	316	43,352	306
	India	99,043	689	62,280	470	52,374	409
Orange	Maharashtra	1,07,826	382	65,266	146	36,936	87
	India	1,19,548	406	73,158	167	43,000	103
Mango	Maharashtra	20,874	283	18,933	326	21,173	326
	India	27,873	327	22,964	378	27,651	398
Onion	Maharashtra	5,78,473	1,400	21,37,442	3,792	14,85,510	3,257
	India	15,36,905	3,431	25,23,495	4,519	16,99,417	3,837
Other vegetables (excluding Onion)	Maharashtra	1,09,242	607	1,08,426	690	1,04,990	711
	India	7,70,233	2,161	8,27,288	2,443	7,87,178	2,468
Rose Flowers	Maharashtra	211	12.3	254	19	172	11
	India	1,199	36.8	1,210	51	761	28
Rose Plants	Maharashtra	21	1.3	111	2.2	19	1.9
	India	23	1.4	126	3.2	78	3.1
Raisins	Maharashtra	17,740	159	26,221	248	37,534	392
	India	19,521	181	27,641	267	39,243	416
Mango Pulp	Maharashtra	15,065	128	8,256	110	16,359	165
	India	1,23,477	925	1,09,500	1,190	50,277	515
Other processed Fruits & Vegetables ^{\$}	Maharashtra	1,02,397	1,065	1,32,959	1,572	1,19,691	1,455
	India	3,74,260	3,626	3,88,208	4,755	4,37,906	5,124

^{\$} Excluding Mango pulp

+ upto January

Source: Commissionerate of Agriculture, GoM

7.30.1 Cold Storage: Subsidies are provided for establishing cold storages in the private sector. In the State, upto March 2024, there are 185 private cold storages, with a fruit storage capacity of 4.12 lakh MT.

7.31 Watershed Development Programme: The objective of the watershed development programme is to increase agricultural productivity by conserving natural resources. Since most of the area in the State is dependent on rainfall, various schemes are being implemented to increase the

productivity of dry land, stop soil erosion, conserve soil moisture and conserve water. Details of completed and ongoing micro watersheds upto March, 2024 are given in Table 7.28.

Table 7.28 Details of Completed and ongoing micro watersheds upto March 2024

Scheme	Number of micro watersheds		Expenditure incurred (₹ Crore) ⁺
	Selected	Completed	
1. Vidarbha Panlot Vikas Mission	1,032	1,032	365.36
2. Marathwada Panlot Vikas Mission	285	285	137.34
3. River Valley Project	271	226	580.80
4. Western Ghat Development Programme	160	160	137.19
5. National Watershed Development Programme	1,028	956	290.59
6. Accelerated Watershed Development Programme	12,344	10,556	3,208.71
7. Rural Infrastructure Development Programme- NABARD assistance	364	364	86.87
8. Integrated Watershed Management Programme	15,612	14,935	3,116.00
9. <i>Jalyukt Shivar Abhiyan</i>	22,586	22,581	9,731.32
10. Vidarbha Intensive Irrigation Development Programme	588	588	318.36
11. Other Schemes (DPAP, Hariyali, Jawahar, Ashwasit, etc.)	5,680	5,680	-

Source: Commissionerate of Agriculture, GoM, Commissionerate of Water & Soil Conservation, GoM

7.31.1 *Jalyukta Shivar Abhiyan 2.0:* *Jalyukta Shivar Abhiyan 2.0* is being implemented in the State from January, 2023. Components of the *abhiyan* are (i) soil and water conservation works in the villages where the first phase of *Jalyukt Shivar Abhiyan* as well as other watershed development programmes were not implemented and which are eligible as per the village selection criteria, (ii) watershed development works in the villages where *Jalyukt Shivar Abhiyan* first phase & other watershed development programmes were implemented but more water is required and there is a gap left to block, (iii) efforts for water availability & efficient use in villages through water literacy and (iv) sustainable development of watershed area through available ground water. During 2023-24 in all 49,511 works were completed and expenditure of ₹ 947.54 crore has been incurred.

7.32 Chief Minister Sustainable Agriculture Irrigation Scheme - Individual Farm Pond: The scheme aims to encourage creation of infrastructure for pumping the water flowing through streams, rivers etc. when it rains heavily or from other water sources such as ponds, wells, bores, etc. and storing it in farm ponds. Under this scheme, individual beneficiaries receive minimum subsidy of ₹ 14,433 and a maximum of ₹ 75,000 depending on the size of the farm pond. During 2023-24, subsidy of ₹ 84.52 crore has been paid to 12,254 beneficiaries through DBT.

7.33 *Dr. Punjabrao Deshmukh Jaivik Sheti Mission:* The cluster-based scheme is being implemented in the State from 2019-20 with the aim of promoting organic farming/toxin-free farming. Under the scheme eligible groups of farmers are given benefits for three consecutive years. In the first phase, distressed districts viz. Buldana, Akola, Washim, Amravati, Yavatmal and Wardha of Vidarbha region are included in the program. Under this scheme, in all 435 groups of 8,215 beneficiary farmers with a total land 13,705 ha have been formed. During 2023-24, an expenditure ₹ 19.12 crore was incurred as against ₹ 2.88 crore during 2022-23. The period of the

mission has been extended upto 2027-28 and scope of the scheme has been extended across the State. The scheme is named as Dr. Punjabrao Deshmukh Natural Farming Mission. In this second phase it is proposed to bring 6.61 lakh ha land under natural/organic farming and a provision of ₹ 1083.29 crore has been made. During 2023-24, in all 4,420 new groups have been formed.

7.34 Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project: GoM is implementing Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project in the State since 2020-21. The main objective of the project is to develop competitive and inclusive value chains of agriculture produce & thereby provide benefit to 20 lakh farmers in the State. Since inception of project, upto March 2024 expenditure of ₹ 412.47 crore was incurred and 5.69 lakh farmers benefitted.

7.35 Nanaji Deshmukh Krishi Sanjeevani Prakalp (Project on Climate Resilient Agriculture -PoCRA): This project is being implemented by GoM to enhance climate-resilience & profitability of small holder farming systems in selected 16 districts of the State. The project is being implemented in 5,220 villages in the State. Financial assistance to individual farmers, farmers' producer companies/farmers groups/self help groups, financial assistance for soil and water conservation works, farm schools, capacity building, agro-climatic advisory services, etc. is provided under this project. Since inception of project, upto March, 2024 financial assistance of ₹ 3,918.61 crore has been provided to 4.91 lakh farmers, expenditure of ₹ 87.96 crore was incurred for completion of soil & water conservation works and expenditure of ₹ 539.65 crore has been incurred for 5,003 agri-business projects.

7.36 Formation and promotion of 10,000 Farmer Producer Organisations: GoI is implementing this scheme since 2020-21. The objectives of the scheme are (i) to promote holistic system to facilitate development of sustainable income oriented farming, (ii) to enhance productivity through efficient, cost-effective and sustainable resource use, (iii) to provide support to new farmer producer organisations (FPOs) up to five years in all aspects of management of agricultural activity and (iv) capacity building to develop agriculture farmer producer organisations entrepreneurship skills to become economically viable and self-sustaining. Since inception of the scheme up to 2022-23, in all 531 FPOs are allocated to the State and 511 FPOs have been established.

7.37 Prime Minister Formalisation of Micro Food Processing Enterprises Scheme: This scheme is being implemented in the State on 'One District One Product' basis for a period of five years from 2020-21 to 2024-25. A target of empowering 22,234 micro food processing industries is set for the State. Individual micro food processing units would be provided 35 per cent of the project cost as credit-linked capital subsidy with a maximum limit of ₹ 10 lakh per unit. Under common infrastructure group enterprises would be provided 35 per cent credit linked subsidy with maximum limit of ₹ 300 lakh per unit. Under seed capital component, Self Help Groups (SHG) would be provided seed money upto ₹ four lakh per unit through Maharashtra State Rural Livelihood Mission (MSRLM), National Urban Livelihood Mission (NULM). Since inception upto March, 2024 out of 16,177 approved projects, subsidy of ₹ 213.80 crore has been disbursed to 8,338 projects.

7.38 Chief Minister Agriculture and Food Processing Scheme: Chief Minister Agriculture and Food Processing Scheme is being implemented in the State since 2017-18 for consecutive five years. The main objectives of the scheme are to encourage modern technology-based projects for quality enhancement of agricultural produce, to encourage exports, to create skilled manpower for agro & food processing and employment generation through small and medium agro & food processing units in rural areas. Since inception of the scheme upto March, 2024 grants of ₹ 201.47 crore were distributed for 584 projects.

7.39 Establishment of *Gram Krishi Vikas Samiti*: The State has made it mandatory to establish a *Gram Krishi Vikas Samiti* in every village to ensure the holistic development of agriculture, optimum use of natural resources and the prioritisation of the works to be undertaken through various schemes & projects. Upto March, 2024 in all 25,347 *Gram Krishi Vikas Samitis* have been formed in the State.

7.40 *Jilha Krishi Mahotsav*: *Jilha Krishi Mahotsav* are organised in 34 districts of the State to create awareness among farmers about new technologies from production to processing in agriculture sector, exchange of experiences of progressive farmers, entrepreneurs & scientists and establish direct marketing relations by developing supply chains. Grants of ₹ 20 lakh per district are distributed for organising *krishi mahotsav*. Agriculture exhibitions, seminars/workshops, grain festival, direct marketing, buyers & sellers conferences, farmers' celebrations, etc. are the key components of the *mahotsav*. During 2023-24, *Jilha Krishi Mahotsav* were organised in 24 districts and, expenditure of ₹ 4.76 crore has been incurred.

7.41 Turmeric Research and Processing Policy - *Hon. Balasaheb Thackeray Haridra* (Turmeric) Research and Training Centre: India is the largest producer and consumer of turmeric. Area under turmeric crop in the State is about 25 per cent of that of the country. The 'Turmeric Research and Processing Strategy 2022-2027' was announced in the State in September, 2022 to help farmers overcome the difficulties in the production, processing, marketing and export of turmeric. To implement this policy, Hon. *Balasaheb Thackeray Haridra* (Turmeric) Research and Training Centre is set up in Bhandara district and during 2023-24 expenditure of ₹ 23.71 crore has been incurred.

7.42 International Year of Millets 2023: The year 2023 was declared as 'The International Year of Millets' by United Nations at the behest of GoI. Due to limited demand, area and production of millet crops have been continuously declining in the State. Around 22 years ago, area under these crops was 72.30 lakh ha and the production was 53.16 lakh MT. As per third advance estimate of 2023-24 the area under these crops is 22.90 lakh ha. and the production is 22.40 lakh MT. 'Maharashtra Millet Mission' is being implemented in the State to increase the production of millets. Processing of millets is being encouraged in the State to increase their consumption. Innovative concepts like 'Millet of the Month', '*Shet tithe poushtik trundhanya*' are also being implemented in the State to popularise millets.

Allied Activities

7.43 Animal husbandry, dairy, fishery and forestry sectors not only provide supplementary income to farmers but also generate employment opportunities. These allied activities also provide protein-rich nutritious food. Government is implementing various programmes/schemes for these sectors.

Animal Husbandry

Livestock Census

7.44 As per 20th Livestock Census 2019, total livestock in the State was 3.31 crore and State ranks seventh at National Level. There is an increase of 1.8 per cent in total livestock as compared to 19th Livestock census 2012. Total poultry birds in the State were 7.43 crore and the State ranks fifth at National Level. Livestock and poultry birds in selected states as per Livestock Census 2019 are given in Table 7.29. Region wise livestock and poultry birds as per Livestock Census 2019 are given in Table 7.30.

Graph 7.7 : Livestock in the State as per livestock census 2019

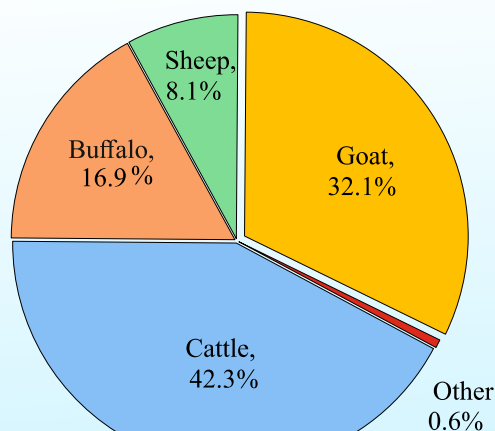


Table 7.29 Livestock and poultry birds in selected states as per Livestock Census 2019

('000)

State	Livestock				Poultry birds	
	Cattle	Buffaloes	Sheep & Goats	Other [@]	Backyard	Commercial
Andhra Pradesh	4,601	6,219	23,149	99	22,267	85,595
Gujarat	9,634	10,543	6,655	61	4,219	17,553
Karnataka	8,469	2,985	17,220	339	11,045	48,448
Madhya Pradesh	18,751	10,307	11,389	190	9,435	7,224
Maharashtra	13,993	5,604	13,285	198	22,113	52,184
Rajasthan	13,938	13,693	28,744	426	1,934	12,688
Tamil Nadu	9,519	519	14,389	74	21,264	99,516
Telangana	4,232	4,226	23,998	185	17,543	62,455
Uttar Pradesh	19,020	33,017	15,465	511	4,460	8,055
All-India	1,93,463	1,09,852	2,23,146	10,300	3,17,073	5,34,736

[@] includes pigs, horses & ponies, mules, camels and donkeys

Source: Department of Animal Husbandary & Dairiying, GoI

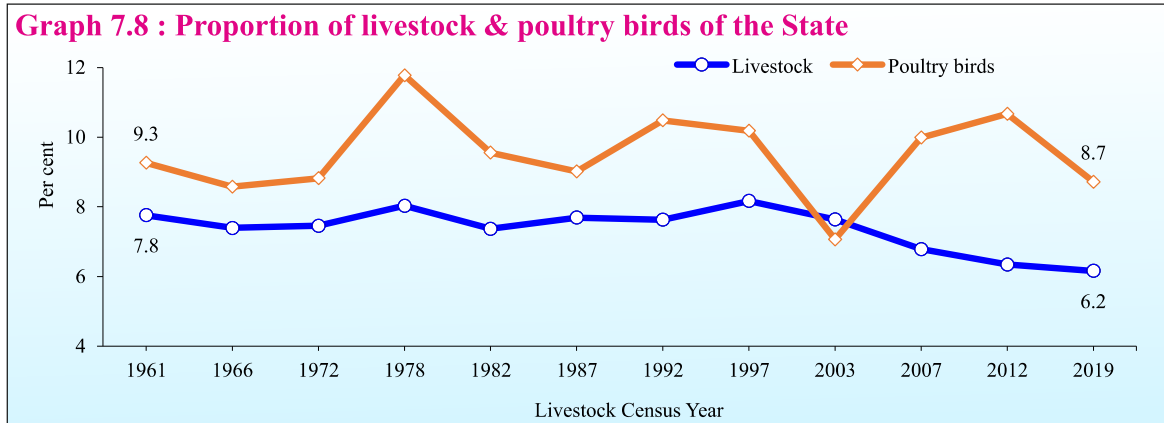
Table 7.30 Regionwise livestock and poultry birds as per Livestock Census 2019

('000)

Vaterinary Region	Livestock				Poultry birds	
	Cattle	Buffaloes	Sheep and Goats	Other [@]	Backyard	Commercial
Mumbai	839	342	348	7	4,264	6,530
Nashik	3,510	883	4,038	47	3,539	17,455
Pune	2,553	2,184	3,316	38	7,730	22,896
Chhatrapati Sambhajinagar	1,757	534	1,591	28	1,642	968
Latur	1,355	756	990	22	1,097	896
Amravati	1,924	456	1,584	26	1,197	1,795
Nagpur	2,055	449	1,418	30	2,644	1,644
State	13,993	5,604	13,285	198	22,113	52,184

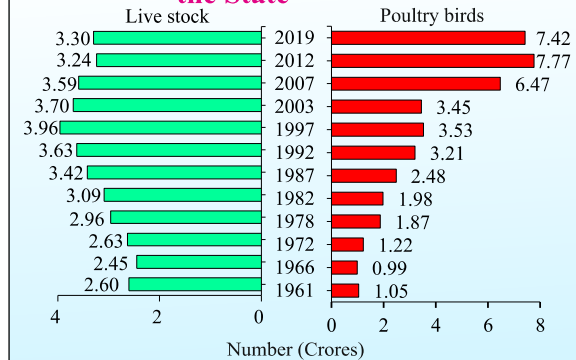
[@] includes pigs, horses & ponies, mules, camels and donkeys

Source: Office of the Commissioner of Animal Husbandry, GoM

Graph 7.8 : Proportion of livestock & poultry birds of the State

Veterinary health care infrastructure of the State Government

7.45 The State has provided facilities for animal health care upto village level through a network of veterinary institutions. Veterinary health care infrastructure of the State Government is given in Table 7.31. Veterinary medical facilities are provided for various diseases and vaccination programmes are implemented through veterinary institutions in the State. Details of cases treated and vaccinated are given in Table 7.32.

Graph 7.9 : Livestock and poultry birds in the State**Table 7.31 Veterinary health care infrastructure of the State Government**(As on 31st March, 2024)

Veterinary Region	Polyclinics [#]	Mini polyclinics	Veterinary Dispensaries		Mobile veterinary clinics	Mukhyamantri pashuchikista pathak	LH and DC mobile van	Total [#]	District artificial insemination centres
			Grade I	Grade II					
Mumbai	6	20	139	359	12	7	9	552	5
Nashik	5	25	365	491	6	10	21	923	5
Pune	6	26	458	559	7	20	9	1,085	5
Chhatrapati Sambhajanagar	4	20	162	288	2	5	11	492	4
Latur	5	20	168	291	3	9	7	503	4
Amravati	6	28	191	394	17	7	17	660	5
Nagpur	7	30	262	459	18	15	6	797	6
State	39	169	1,745	2,841	65	73	80	5,012	34

[#] includes six polyclinics attached to Veterinary colleges at Mumbai, Parbhani, Nagpur, Shirval (Satara), Udgir (Latur) & Akola

LH and DC - Live stock health and disease control

Source: Office of the Commissioner of Animal Husbandry, GoM

Table 7.32 Details of cases treated and vaccinated

('000)

Particulars	2021-22	2022-23	2023-24
General treatment	14,252	11,512	9,329
Castration	689	486	451
Major operation	47	36	32
Minor operation	375	214	163
Vaccination (including poultry)	32,122	51,631	56,488

Source: Office of the Commissioner of Animal Husbandry, GoM

Artificial Insemination

7.46 Semen straws are prepared in frozen semen laboratories located at Pune, Nagpur & Chhatrapati Sambhajanagar and distributed to veterinary institutions in the State through artificial insemination centers in 34 districts. Information about Artificial Insemination (AI) is given in Table 7.33.

Table 7.33 Information about Artificial Insemination

('000)			
Particulars	2021-22	2022-23	2023-24
I) Cow (AI)	2,027	1,551	1,650
Exotic	201	155	215
Cross breed	1,360	970	995
Indigenous	466	426	441
No. of calves born (Cow)	693	521	478
Cross breed	525	378	342
Indigenous	168	143	136
II) Buffalo (AI)	885	721	731
No. of calves born (Buffalo)	308	236	221

Source: Office of the Commissioner of Animal Husbandry, GoM

Rashtriya Gokul Mission

7.47 *Rashtriya Gokul* Mission is being implemented in the State since 2014-15 to undertake breed improvement and to enhance milk production & productivity and distribute disease-free high genetic merit Bulls. During 2023-24, an expenditure of ₹ 101.59 crore was incurred. New projects of strengthening of existing Frozen Semen Laboratories (FSL) at Nagpur, Pune & Chhatrapati Sambhajanagar along with project for establishment of Bovine Breeding Farm (BBF) at Sakud (Beed) were sanctioned during 2023-24. Details of expenditure under *Rashtriya Gokul* Mission is given in Table 7.34.

Table 7.34 Details of *Rashtriya Gokul* Mission during 2023-24

(₹ Crore)	
Activity	Expenditure
Strengthening of two bull mother farms, procurement of 600 high genetic Gaolao cows & Pandharpuri buffaloes at each mother farm, Establishment of Breeders Association, training, managerial expenses, purchase of biodegradable hand gloves, purchase of AI equipments, etc	26.93
National Artificial Insemination Programme	14.48
Establishment / Strengthening of Embryo Transfer (ET) and In-vitro Fertilization (IVF) Laboratories	11.09
<i>Pashusanjivani</i> (purchase of tags for identifying animals, tag applicators, tabs and computerisation, printing of health cards, etc.)	3.82
Training & Induction of MAITRI workers	3.68
Purchase of sex sorted semen of genetic merit bulls	1.33
Strengthening of FSL Nagpur	9.60
Strengthening of FSL Pune	7.50
Strengthening of FSL Chhatrapati Sambhajanagar	6.40
Establishment of GBBF Sakud (Beed)	16.04
Purchase of Semen Doses & Salary of IT Person under NDLM	0.72
Total	101.59

Source: Office of the Commissioner of Animal Husbandry, GoM

National Livestock Mission

7.48 National Livestock Mission (NLM) was launched by GoI in 2014-15 by merging various schemes of sheep, goat, poultry, pig, livestock insurance, feed & fodder development, skill development, technology transfer and animal husbandry extension activities for socially and economically backward classes. The NLM is revised and realigned from 2021-22. The revised mission aims toward employment generation, entrepreneurship development, increase in per animal productivity and to create forward linkage for the produce available with the unorganised sector to

the organised sector. The realigned NLM have three sub-missions viz. breed development of livestock & poultry, feed & fodder development and innovation & extension. Under the realigned mission during 2023-24, total 7,000 online applications were received and 780 proposals were sanctioned.

Livestock Insurance Scheme

7.49 Livestock insurance scheme is being implemented in the State by Maharashtra Livestock Development Board since 2006-07. The main objective of the scheme is to provide protection to livestock holders against any eventual losses due to death of animals because of natural calamity, accident or disease.

National Animal Disease Control Programme

7.50 National Animal Disease Control Programme is being implemented in the State since 2019-20 to achieve effective control of Foot & Mouth Disease (FMD) and Brucellosis by 2024-25 and complete eradication by 2029-30. From 2020-21 to 2023-24, during four rounds of FMD 642.9 lakh animals were treated, whereas, during 2021-22 to 2023-24, three rounds of Brucellosis preventive vaccinations have been carried out to 15.81 lakh animals in the state.

Revised Govardhan Govansh Seva Kendra Yojana

7.51 Newly Revised *Govardhan Govansh Seva Kendra Yojana* is being implemented in the State since 2023-24. Under this scheme, establishment of one *Govardhan Govansh Seva Kendra* in each taluka of 34 districts is proposed. The objective of this scheme is to take care of cows and bulls that are not suitable for milk production, agricultural work, animal breeding, carrying of burden. Under this scheme subsidy of ₹ 15 lakh for cowsheds with 50 to 100 livestock, ₹ 20 lakh for cowsheds with 101 to 200 livestock and ₹ 25 lakh for cowsheds with more than 200 livestock is given. 152 *Goshalas* have been approved by the Government during 2023-24.

Special project to increase milk production in Vidarbha & Marathwada region

7.52 GoM has started a special project in collaboration with National Dairy Development Board and Mother Dairy Fruit & Vegetable Pvt. Ltd. to increase milk production in 11 districts of Vidarbha and Marathwada region. This project includes fodder development programme, supply of quality cattle feed, feed supplements (mineral mixture) and veterinary services such as AI service at doorstep, vaccination, eradication of ticks & flies, infertility & treatment camps, etc. Upto March, 2023, in all 5,075 infertile camps & training to 25,000 farmers has been organised. In all 13,169 ha. made available for fodder production and 18,745 MT enriched cattle feed were supplied. During 2022-23, expenditure of ₹ 43.43 crore was incurred.

Chief Minister Animal Health Scheme

7.53 Chief Minister Animal Health Scheme aims at establishing mobile veterinary clinics in rural areas to provide veterinary services to remote, hilly and tribal villages. Farmers/livestock owners get medical treatment for their animals at their doorstep through these mobile veterinary health clinics. These veterinary clinics also provide services like preventive vaccination, artificial insemination, guidance regarding diet & health of animals and information about various schemes. During 2022-23, in all 45,530 veterinary services were provided at doorstep of the farmers. During 2023-24, total 1,12,144 farmers/livestock owners received online information, out of which direct services were given to 1,09,634 animals.

Fodder Development

7.54 Fodder crop seed distribution scheme is being implemented in the State to make available nutritious required fodder to livestock. During 2023-24, funds of ₹ 10.87 crore was sanctioned and about 12,636.06 quintal seeds of fodder crop has been distributed to livestock owners, through which it is expected to produce 20.93 Lakh MT green fodder.

Raje Yashwantrao Holkar Mahamesh Yojana

7.55 The scheme aims at promotion of sheep rearing for Nomadic Tribes-C beneficiaries. Under the scheme, 75 per cent subsidy is given for sheep unit (20 females + one male), distribution of improved male sheep, providing infrastructure for sheep rearing & balanced feed for each sheep unit and 50 per cent subsidy given for purchasing of mini silage baler-cum-wrapper machine & installation of animal feed units. During 2019-20 to 2023-24, sheep units were distributed to 1575 beneficiaries, infrastructure for sheep rearing was provided to 148 beneficiaries, improved rams were distributed to 262 beneficiaries and balanced feed was provided to 8213 sheeps. Various State Level *Navinyapurna Yojana* are implemented in the State to uplift rural poor through livestock rearing, creating entrepreneurship and generating employment in rural areas. Information of selected State level schemes is given in Table 7.35.

Table 7.35 Information of selected State level schemes

Scheme	2021-22		2022-23		2023-24	
	Beneficiaries (no.)	Expenditure incurred (₹ lakh)	Beneficiaries (no.)	Expenditure incurred (₹ lakh)	Beneficiaries (no.)	Expenditure incurred (₹ lakh)
Distribution of 6/4/2 Milch animal group.	6,133	2,807	4,547	2,900	5,191	5,099
Distribution of Stall-fed group of 10 females & 1 male goat	5,602	2,774	5,024	2,959	4,316	2,241
Poultry farming (avocation) by rearing 1,000 broiler birds	1,217	1,529	1,015	1,559	41	70

Source: Office of the Commissioner of Animal Husbandry, GoM

Poultry development

7.56 The GoM has established four central hatcheries in Chhatrapati Sambhajnagar, Kolhapur, Nagpur and Pune with the following objectives:

- To produce and supply improved chicks, pullets & hatching eggs to farmers at government approved rate
- To make arrangement to distribute improved variety of eggs, day old chicks and cockerels & pullets to beneficiaries under different poultry schemes
- To supply improved birds for rural poultry farming
- To impart poultry farming training to farmers, women self-help groups, educated unemployed youths, students, etc.
- To give technical advice and motivate farmers for poultry farming

The poultry birds supplied through central hatcheries during 2022-23 were 3.58 lakh as against 3.60 lakh during 2021-22.

Swayam Prakalp

7.57 The project is being implemented since 2017-18 in scheduled areas of 16 tribal districts of the State to supply eggs for inclusion in childrens' diet in *Anganwadi* and creation of self-employment. The project aims at creating 104 mother units of poultry to supply 45 chicks of four weeks old to beneficiaries for rearing. The beneficiaries are motivated to raise the flock of 45 birds to 100 birds by hatching eggs domestically so as to have sustainable and significant source of income. The eggs produced are being supplied to children in *anganwadis* for protein nourishment. The total project cost is ₹ 22.56 crore and expenditure ₹ 19.76 crore was incurred upto March, 2023. During 2022-23, in all 100 mother units were established and 16.30 lakh four weeks old birds were distributed to 40,963 beneficiaries for self-employment generation.

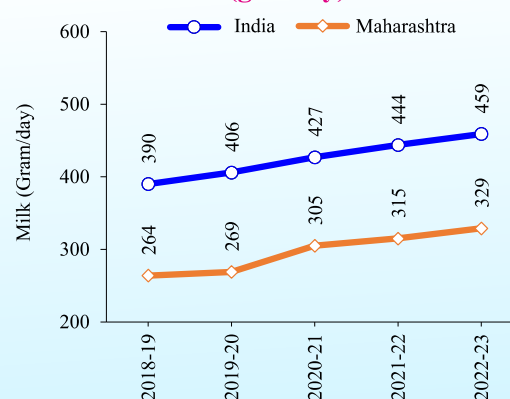
Kisan Credit Card for animal husbandary farmers

7.58 The objective of this scheme is to give short-term credit to farmers for rearing their dairy animals, poultry birds and small ruminants. Upto March, 2024, in all 82,400 *Kisan Credit Cards* were distributed to eligible livestock farmers.

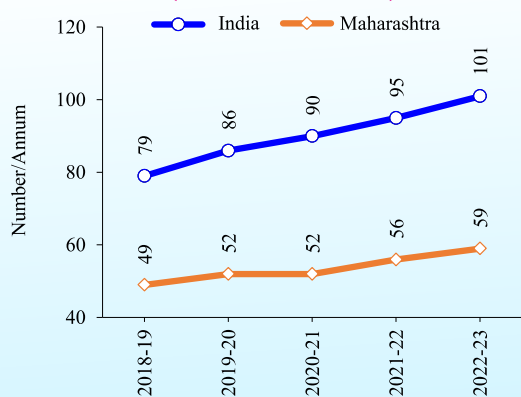
Major livestock products

7.59 During 2022-23, the State ranks third in meat production with 11.5 per cent share. The State ranks sixth in milk production and per capita availability of milk in the State is 329 gram per day as against 459 gram per day at the national level. The State ranks seventh in eggs production and per capita availability of eggs in the State is 59 eggs per annum as against 101 eggs per annum at the national level. Livestock and poultry products in the State are given in Table 7.36 and livestock and poultry products in selected states during 2022-23 are given in Table 7.37

Graph 7.10 : Per capita availability of milk (gm/Day)



Graph 7.11 : Per capita availability of egg (Number/Annum)



Graph 7.12 : Per capita availability of meat (Kg/Annum)

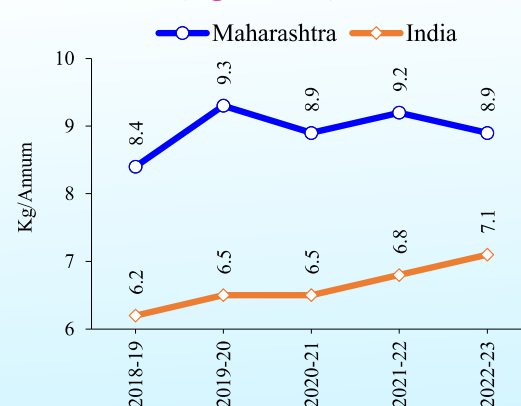


Table 7.36 Livestock and poultry products in the State

Year	Meat (’000 MT)	Milk (’000 MT)	Egg (Crore)	Wool (’000 kg)
2020-21	1,109 (12.6)	13,703 (6.5)	640 (5.3)	1,550 (4.2)
2021-22	1,138 (12.3)	14,305 (6.2)	702 (5.4)	1,585 (4.8)
2022-23	1,124 (11.5)	15,042 (6.5)	738 (5.3)	1,592 (4.7)

Note: Figures in bracket indicate Per centage share to All-India

Source: Basic Animal Husbandry Statistics-2023, Department of Animal Husbandry and Dairying, GoI

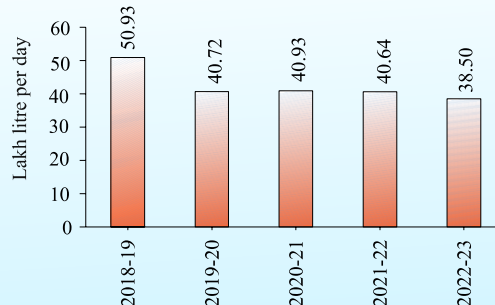
Table 7.37 Livestock and poultry products in selected states during 2022-23

States	Meat ('000 MT)	Milk ('000 MT)	Egg (Crore)	Wool ('000 kg)
Andhra Pradesh	1,094	15,448	2,784	0
Gujarat	35	17,281	188	2,019
Karnataka	433	12,829	901	733
Madhya Pradesh	139	20,122	318	426
Maharashtra	1,124	15,042	738	1,592
Rajasthan	240	33,307	276	16,129
Tamil Nadu	704	10,317	2,156	2
Telangana	1,081	5,855	1,767	0
Uttar Pradesh	1,192	36,242	455	819
All-India	9,769	2,30,577	13,838	33,614

Source: Basic Animal Husbandry Statistics-2023, Department of Animal Husbandry and Dairying, GoI

Dairy Development

7.60 Dairy is a supplementary activity to agriculture, which has potential for generating additional income & employment opportunities for the rural households besides improving nutrition levels. Milk production and per capita availability of milk is given in Table 7.38 and regionwise milk production in Maharashtra is given in Table 7.39.

Graph 7.13 : Average daily collection of milk by co-operative and government dairies**Table 7.38 Milk production and per capita availability**

Year	Milk production (Lakh MT)		Per capita availability of Milk (gram per day)	
	State	India	State	India
2020-21	137.03	2,099.60	305	427
2021-22	143.05	2,210.64	315	444
2022-23	150.42	2,305.77	329	459

Source: Basic Animal Husbandry Statistics -2023,
Department of Animal Husbandry and Dairying, GoI

Table 7.39 Regionwise milk production

(Lakh MT)

Region	2020-21	2021-22	2022-23
Konkan	4.64	4.78	4.68
Nashik	36.68	38.51	41.51
Pune	62.41	65.33	68.59
Chhatrapati Sambhajinagar	20.86	21.61	22.39
Amravati	6.51	6.67	6.25
Nagpur	5.93	6.15	7.00
State	137.03	143.05	150.42

Source: Office of the Commissioner of Animal Husbandry, GoM

7.61 At the end of March, 2023, there were 103 milk processing plants with capacity of 135.72 lakh litre per day and 122 chilling centres with capacity 36.57 lakh litre under co-operative sector. During 2022-23 the average daily collection of milk by co-operative dairies was 38.45 lakh litre and during 2023-24 upto December, it was 41.54 lakh litre. There were 215 cold storages with capacity of 11,276 MT, of which 196 cold storage with capacity of 10,881 MT were with private sector during 2023-24 upto January.

Fisheries

7.62 The State has a coastline of 720 km with 1.12 lakh sq km area suitable for marine fishing. The State has developed 173 fish landing centers. During 2022-23, there were 17,571 marine fishing boats in operation, of which 14,670 were mechanised and 2,901 were non mechanised.

7.62.1 The area suitable for inland and brackish water fishing in the State is 3.46 lakh ha and 0.17 lakh ha respectively. Fish production and exports are given in Table 7.40.

7.62.2 In RKVY, development of 25 fishing jetties worth ₹ 177 crore have been undertaken since 2011-12, of which, works of 21 jetties have been completed and works of 2 jetties are in progress.

7.63.3 Under Rural Infrastructure Development Fund, development of 14 fishing jetties worth ₹ 193.74 crore have been undertaken, of which seven jetties have been completed, work of three jetties are cancelled and work of four jetties are in progress.

Pradhan Mantri Matsya Sampada Yojana

7.63 GoI launched *Pradhan Mantri Matsya Sampada Yojana* (PMMSY) in May, 2020 for a period of five years. PMMSY is designed to address critical gaps in fish production & productivity, quality, technology, post-harvest infrastructure & management, modernisation & strengthening of value chain, establishing a robust fisheries management and fishers' welfare.

7.63.1 During 2021-22 under PMMSY, the State Level Approval and Monitoring Committee approved total amount of ₹ 216.39 crore for 1,106 beneficiaries, of which GoI, GoM and beneficiaries share was ₹ 72.48 crore, ₹ 48.32 crore and ₹ 95.59 crore respectively. During 2023-24, under PMMSY, the State Level Approval and Monitoring Committee approved total amount of ₹ 602.32 crore for 3,448 beneficiaries, of which GoI, GoM and beneficiaries share was ₹ 226.17 crore, ₹ 150.88 crore and ₹ 225.28 crore respectively. Details of major activities sanctioned under *Pradhan Mantri Matsya Sampada Yojana* are given in Table 7.41.

Graph 7.14 : Per capita availability of milk and milk production during 2022-23

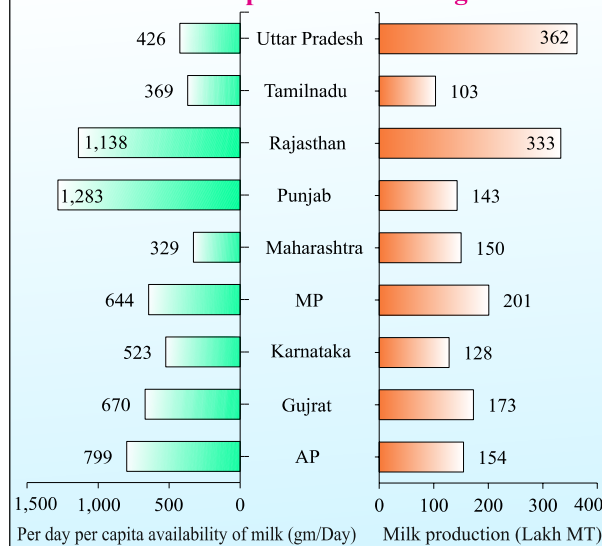


Table 7.40 Fish Production and exports

Item	Unit	2021-22	2022-23
Fish production	Lakh MT		
Marine		4.33	4.46
Inland		1.57	1.44
Total		5.89	5.90
Gross value	₹Crore		
Marine		6,655	7,951
Inland		1,915	1,807
Total		8,570	9,758
Export of fish			
a) Quantity	Lakh MT	1.86	2.42
b) Value	₹Crore	5,878	6,212

Source: Commissioner of Fisheries GoM

Table 7.41 Details of major activities sanctioned under Pradhan Mantri Matsya Sampda Yojana

(2022-23)		
Activity Name	No of Beneficiaries	Expenditure (₹ Crore)
Installation of Cages in Reservoirs under cage fish farming	531	286.74
Establishment of Small / Medium / Large Recirculating Aquaculture System (RAS)	262	83.93
Establishment of Cold storage / Ice manufacturing plant (storage of minimum 10/20/30/50-tonne capacity)	30	31.30
Fish Feed Mills with production capacity of 2/8/20 ton /day	38	22.20
Construction of Biofloc pond for Freshwater areas including input of ₹ four lakh/ha	35	5.88
Construction of New Growout Ponds	69	4.50
Inputs of Freshwater Aquaculture including Composite Fish Culture, Scampi Tilapia, Pangasius etc	69	2.57
Open Sea Cage culture (100-120 m ³)	4	1.75
Livelihood and Nutritional support for fishers' families	2,000	0.90
Other activities	410	99.55

Source: Commissioner of Fisheries GoM

7.64 Cage culture fish farming is being implemented under PMMSY to increase fish production in the State. Since inception upto December, 2023 in all 11,811 cages were sanctioned for inland fishing in 97 water reservoirs in the State. Since inception upto December, 2023, in all 4,136 cages were erected and is expected to have 10,340 MT of fish production.

7.65 A compensation scheme for the fishermen is being implemented in the State in which the fishermen are encouraged to cut their fishing nets to release marine animals such as whale, shark, dolphin, seaturtle, etc. protected under the Wildlife (Protection) Act, 1972. During 2022-23, compensation of ₹ 6.53 lakh was given for 52 released animals back to the sea whereas during 2023-24 upto December, compensation of ₹ 3.85 lakh is given for 31 released animals back to the sea.

Kisan Credit card for fisherman

7.66 The object of this scheme is to give short-term credit to fishermen for fish farming, shrimp farming and fishing, etc. During 2023-24 upto January, in all 14,031 Kisan credit cards were distributed to eligible livestock fishermen.

Sericulture

7.67 Sericulture is an agro-based industry which has high potential to generate employment opportunities in rural areas. Mulberry silk development programme is being implemented in 24 districts of the State. Mulberry plantation and silk production is given in Table 7.42.

Table 7.42 Mulberry plantation and silk production

('000)				
Item	Unit	2021-22	2022-23	2023-24
Area under plantation				
Total	ha	14,905	13,872	18,607
Old	ha	11,094	10,376	13,063
New	ha	3,811	3,496	5,544
Beneficiaries (farmers)	no.	14,296	13,367	17,521
Supply of disease free layings	Lakh	51.40	59.25	70.97
Cocoon production	MT	3,356.56	963.69	4,902.70
Production of raw silk	MT	516.39	609.80	754.26
Employment generated (mandays)	Lakh	56.81	67.08	82.93

Source: Directorate of Sericulture, GoM

7.67.1 Tasar silk development programme is being implemented in four districts of the State viz. Bhandara, Chandrapur, Gadchiroli and Gondia. Area under plantation of Ain and Arjun trees (on which Tasar silkworms are grown) in these four districts is 18,866 ha. During 2022-23 production of raw Tasar silk was 195.56 lakh, where as during 2023-24, it was 182.79 lakh.

Forest

7.68 The forest area of the State at the end of March, 2023 was 61,965.88 sq km which was about 20.1 per cent of geographical area of the State. Of the total forest area in the State, about 55,877.45 sq km is under the jurisdiction of Forest Department, 3,469.11 sq km is under the jurisdiction of Forest Development Corporation of Maharashtra (FDMC) and 1,434.30 sq km is under the jurisdiction of Revenue department. In addition to these, about 1,185.02 sq km of private forest is brought under possession of Forest department.

7.68.1 As per India State of Forest Report (ISFR) 2021, the total forest cover in the State is 50,798 sq km showing an increase of 20 sq km over that reported in ISFR 2019. The forest cover of the State is 16.5 per cent of the geographical area as against the goal of 33 per cent envisaged in the National Forest Policy, 1988. Of the total forest cover of the State, the very dense forest constitutes 17.2 per cent, moderately dense forest constitutes 40.5 per cent and open forest constitutes 42.3 per cent. Forest circlewise distribution of forest area is given in Table 7.43 & forest cover of selected States is given in Table 7.44.

Table 7.43 Forest circlewise distribution of forest area

Forest circle	Forest area (sq km)				Per centage to total forest area
	Reserved	Protected	Unclassed	Total	
Gadchiroli	11,229.87	1,403.05	264.20	12,897.12	20.8
Nagpur	4,467.72	2,155.20	1,130.11	7,753.03	12.5
Dhule	6,148.10	57.06	222.91	6,428.07	10.4
Thane	4,443.05	1,161.37	258.11	5,862.53	9.4
Nashik	4,994.05	238.43	54.10	5,286.58	8.5
Amravati	5,054.52	14.07	14.66	5,083.25	8.2
Chandrapur	3,838.58	880.42	123.50	4,842.50	7.8
Kolhapur	3,402.25	354.01	778.85	4,535.11	7.3
Yavatmal	3,370.99	6.30	104.46	3,481.75	5.6
Chhatrapati Sambhajnagar	2,926.78	73.64	176.63	3,177.05	5.1
Pune	2,474.93	0.03	143.93	2,618.89	4.2
State	52,350.84	6,343.58	3,271.46	61,965.88	100.0

Source : Office of the Principal Chief Conservator of Forest, GoM

Table 7.44 Forest cover of selected states

State	Geographical area	Total forest cover	(sq km)
			Per centage of forest cover to geographical area
Andhra Pradesh	1,62,968	29,784	18.3
Gujarat	1,96,244	14,926	7.6
Karnataka	1,91,791	38,730	20.2
Kerala	38,852	21,253	54.7
Madhya Pradesh	3,08,252	77,493	25.1
Maharashtra	3,07,713	50,798	16.5
Rajasthan	3,42,239	16,655	4.9
Telangana	1,12,077	21,214	18.9
Uttar Pradesh	2,40,928	14,818	6.2
All- India	32,87,469	7,13,789	21.7

Source: India State of Forest Report, 2021

Tree cover

7.69 Tree cover means patches of trees as well as isolated trees of less than one ha area located outside the recorded forest area. As per the ISFR, 2021 the State ranks first at national level with tree cover 12,108 sq km. Forest cover, tree cover and carbon stock is given in Table 7.45.

Table 7.45 Forest cover, Tree cover and Carbon stock

(sq km)								
Year	Forest cover					Scrub forest	Tree cover	Carbon stock (MT)
	RFA	Very dense	Moderately dense	Open forest	Total			
2013	Within	8,369	15,962	13,132	37,463			
	Outside	351	4,808	8,010	13,169			
	Total	8,720	20,770	21,142	50,632	4,157	9,142	NA
2015	Within	8,361	15,939	13,143	37,443			
	Outside	351	4,808	8,026	13,185			
	Total	8,712	20,747	21,169	50,628	4,157	9,558	NA
2017	Within	8,027	14,168	11,596	33,791			
	Outside	709	6,484	9,698	16,891			
	Total	8,736	20,652	21,294	50,682	4,160	9,831	493
2019	Within	8,200	14,477	11,962	34,639			
	Outside	521	6,095	9,523	16,139			
	Total	8,721	20,572	21,485	50,778	4,256	10,806	441
2021	Within	8,476	15,068	12,496	36,040			
	Outside	258	5,521	8,979	14,758			
	Total	8,734	20,589	21,475	50,798	4,247	12,108	452

Source: India State of Forest Report

RFA Recorded forest area

NA Not available

Wild life, National Parks and Sanctuaries

7.70 There are six national parks, 51 sanctuaries and 27 conservation reserves in the State to preserve and conserve wildlife. Tiger Census is carried out quadrennially by National Tiger Conservation Authority. As per the Status of Tigers in India, 2022 report estimated number of tigers in the State were 444 as against 312 as per the status of Tigers in India, 2018 report. Area of wildlife projects and expenditure incurred are given in Table 7.46.

Table 7.46 Area of wildlife projects and expenditure incurred

Project	Area (sq km)		Expenditure incurred (₹ Crore)		
	Core	Buffer	2021-22	2022-23	2023-24 ⁺
Tiger Project					
Melghat	1,500.49	1,268.04	21.37	4.79	3.94
Tadoba-Andhari	625.82	1,101.77	34.41	4.16	3.00
Pench	257.26	483.96	8.90	3.32	3.51
Sahyadri	511.87	565.45	2.96	1.65	1.63
Navegaon-Nagzira	653.67	1,241.27	11.76	3.99	1.66
Bor	138.12	678.14	3.36	1.61	1.33
Elephant Project, Kolhapur	Area not specified			0.47	0.29

Source: Office of the Principal Chief Conservator of Forest, GoM

+ upto Decembar

Forest Produce

7.71 Forest provides major produce like timber & firewood and minor produce like bamboo, tendu leaves, gums, grass, etc. The production and value of forest produce in the State are given in Table 7.47.

Table 7.47 Production and value of forest produce

(₹ crore)							
Forest produce	Unit of production	2021-22		2022-23		2023-24@	
		Production	Value	Production	Value	Production	Value
(A) Major forest produce**							
Timber	LCM	1.83	545.46	1.59	637.62	1.36	490.15
Firewood	LCM	2.07	65.92	2.34	63.76	2.90	71.46
Total (A)	LCM	3.90	611.38	3.93	701.38	4.26	561.61
(B) Minor forest produce							
Bamboo**	LMT	9.47	20.87	1.05	21.22	0.57	22.26
Tendu leaves	LSB	2.42*	54.95*	2.61*	73.37*	1.36*	35.62*
Grass	MT	1,031*	0.15*	1,191*	0.12*	NA	NA
Gum	Quintal	2,461.50*	0.15*	4,184.2*	0.25*	NA	NA
Others (Lac, Hirda, Shikekai etc)	-	NA	1.37	NA	1.34*	NA	NA
Total (B)			77.49	96.30		57.88	
Total (A + B)			688.87	797.68		619.04	

* Provisional

** including data of FDCM

NA- Not available

@ expected

LCM Lakh Cubic Metre

LMT Lakh Metric Tonne

LSB Lakh Standard Bags (1 Bag is 1,000 bundles of 50 tendu leaves)

Source: Office of the Principal Chief Conservator of Forest, GoM

Tree Plantation

7.72 Tree plantation programme is mainly implemented in the State through Forest Department, FDCM and Directorate of Social Forestry. An amount of ₹ 395.45 crore was spent on plantation activity during 2022-23. Area under tree plantation and expenditure incurred is given in Table 7.48.

Table 7.48 Area under tree plantation and expenditure incurred

Year	Forest Dept.		FDCM		Social Forestry		
	Area (ha)	Expenditure incurred (₹ Crore)	Area (ha)	Expenditure incurred (₹ Crore)	Area (ha)	Length@ (km)	Expenditure incurred (₹ Crore)
2019-20	1,02,987	388.35	8,987	89.72	21,032	17,858	521.94
2020-21	7,234	46.70	2,361	17.57	3,302	1,224	51.92
2021-22	10,698	98.76	11,835	12.65	7,413	7,238	238.01
2022-23	18,164	156.77	2,523	25.45	5,557	6,477	213.22

Source: Office of the Principal Chief Conservator of Forest, GoM

@ includes plantation along road side

Social Forestry

7.73 Various social forestry schemes are being implemented in the State. Under social forestry seedlings are planted on community land and along road/railways/canals, etc. Seedling are also provided to various institutions, *gram panchayats* and individuals for plantation. Major social forestry schemes are given in Table 7.49.

Table 7.49 Major social forestry schemes

Scheme	Unit	2021-22	2022-23	2023-24 ⁺
Seedlings planted on community land	Lakh seedlings	80.28	45.21	0.00
a) Block Plantation	ha	6,279.17	4,144.00	0.00
b) Road / railway/ canal side Plantation	km	4,780.33	7,503.00	0.00
Seedlings supplied to <i>Gram panchayat</i> institutions and individuals	Lakh seedlings	27.05	215.49	143.92
MGNREGA Scheme				
a) Farm bund plantation unit	Lakh seedlings	1.50	17.54	0.84
b) Agroforestry Plantation	Lakh seedlings	10.01	105.01	2.46
<i>Kanya Van Samruddhi Yojana</i>	Lakh seedlings	1.22	1.57	1.59

Source: Office of the Principal Chief Conservator of Forest, Social Forestry, GoM

+ upto December

Sant Tukaram Vangram Yojana

7.74 *Sant Tukaram Vangram Yojana* is launched to create awareness about the importance of forest & wild life, to protect the forest from illegal tree cutting, encroachments, etc. Under the scheme 11,645 Joint Forest Management Committees (JFMC) are formed in 15,500 villages. About 25.18 lakh ha of forest area is under the management of JFMCs.

Mangroves conservation

7.75 As per India State of Forest Report 2021, the total mangrove cover of the State is 324 sq km area showing an increase of four sq km over that reported in ISFR 2019. For conservation of mangroves, about 11,548 ha of mangroves have been declared as reserved forests under section 20 of the Indian Forest Act, 1927.

7.75.1 The State is implementing Mangrove Conservation and Livelihood Generation Scheme since 2017 with the participation of local communities across coastal stretch of the State covering 191 villages from Palghar, Thane, Raigad, Ratnagiri and Sindhudurg districts. During 2023-24, the State has allocated funds of ₹ five crore for upscaling various livelihood activities such as Mud Crab Farming, Fish Cage Culture, Oyster & Mussel Farming, Ornamental Fish Culture, Eco-tourism and mangrove plantation under the scheme. These activities can be taken up as group activity or as an individual beneficiary. The group is entitled to receive 90 per cent subsidy, while individual beneficiary (land owners with more than one acre of mangroves) is entitled to get 75 per cent subsidy. During 2022-23, mangrove plantation over an area of 65 ha was carried out and a profit of ₹ 141.34 lakh was earned by beneficiaries through various livelihood activities. During 2023-24 mangrove plantation over an area of 138.8 ha has been carried out and a profit of ₹ 177 lakh was earned by beneficiaries through various livelihood activities.

* * * * *

ANNEXURE 7.1

TOTAL NUMBER, AREA AND AVERAGE SIZE OF OPERATIONAL HOLDINGS IN
THE STATE ACCORDING TO AGRICULTURAL CENSUSES

Sr. No.	Size class (ha)	Number of operational holdings ('00)							
		1970-71	1980-81	1990-91	1995-96	2000-01	2005-06	2010-11	2015-16
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Below 0.5	6,834	9,914	16,672	22,409	27,462	31,658	36,457	43,722
2	0.5—1.0	5,585	9,345	16,075	20,252	25,595	29,525	30,633	34,436
3	1.0—2.0	8,783	15,409	27,276	31,755	36,056	41,503	40,523	43,392
4	2.0—3.0	6,266	10,275	13,969	14,745	15,791	17,020	15,463	16,964
5	3.0—4.0	4,606	6,583	7,289	6,774	6,949	7,496	6,128	6,306
6	4.0—5.0	3,576	4,601	4,469	3,874	3,780	4,037	3,142	3,353
7	5.0—10.0	8,715	9,316	7,241	5,558	4,873	5,214	3,964	3,984
8	10.0—20.0	4,180	2,819	1,530	1,029	773	622	590	576
9	20.0 and above	961	363	176	132	97	81	89	121
	Total	49,506	68,625	94,697	1,06,528	1,21,376	1,37,156	1,36,989	1,52,854

Sr. No.	Size class (ha)	Area of operational holdings ('00 ha)							
		1970-71	1980-81	1990-91	1995-96	2000-01	2005-06	2010-11	2015-16
(1)	(2)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1	Below 0.5	1,634	2,630	4,119	5,746	7,328	7,740	9,180	10,278
2	0.5—1.0	4,142	7,103	12,057	15,120	19,159	20,274	22,680	24,209
3	1.0—2.0	12,842	23,337	39,833	46,059	51,271	52,476	57,391	57,711
4	2.0—3.0	15,386	25,363	33,689	35,420	37,414	37,542	36,681	38,844
5	3.0—4.0	15,920	22,815	25,108	23,303	23,676	23,756	20,974	21,412
6	4.0—5.0	15,961	20,556	19,864	17,210	16,717	16,717	13,901	14,778
7	5.0—10.0	61,213	63,937	48,700	37,150	32,084	32,135	26,027	26,216
8	10.0—20.0	56,302	37,213	19,749	13,514	9,961	6,776	7,524	7,251
9	20.0 and above	28,394	10,662	6,129	5,274	3,418	2,634	3,314	4,365
	Total	2,11,794	2,13,616	2,09,248	1,98,796	2,01,028	2,00,050	1,97,672	2,05,064

Sr. No.	Size class (ha)	Average size of holdings (ha)							
		1970-71	1980-81	1990-91	1995-96	2000-01	2005-06	2010-11	2015-16
(1)	(2)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
1	Below 0.5	0.24	0.27	0.25	0.26	0.27	0.24	0.25	0.24
2	0.5—1.0	0.74	0.76	0.75	0.75	0.75	0.69	0.74	0.70
3	1.0—2.0	1.46	1.51	1.46	1.45	1.42	1.26	1.42	1.33
4	2.0—3.0	2.46	2.47	2.41	2.40	2.37	2.21	2.37	2.29
5	3.0—4.0	3.46	3.47	3.44	3.44	3.41	3.17	3.42	3.40
6	4.0—5.0	4.46	4.47	4.44	4.44	4.42	4.14	4.42	4.41
7	5.0—10.0	7.02	6.86	6.73	6.68	6.58	6.16	6.57	6.58
8	10.0—20.0	13.47	13.20	12.91	13.13	12.89	10.89	12.75	12.59
9	20.0 and above	29.55	29.37	34.82	39.95	35.24	32.52	37.24	36.07
	Total	4.28	3.11	2.21	1.87	1.66	1.46	1.44	1.34

Source - Commissionerate of Agriculture, GoM

ANNEXURE 7.2

LAND UTILISATION STATISTICS OF THE STATE

(Area '000 ha)

Year	Geographical area	Area under forests	Land not available for cultivation		Other uncultivated land			Fallow lands		Cropped Area		Gross cropped area
			Barren and uncultivable land	Land put to non-agricultural uses	Culturable waste land	Permanent pastures and grazing land	Land under miscellaneous tree crops and groves	Current fallows	Other fallows	Net area sown	Area sown more than once	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1986-87	30,758	5,350	1,679	1,152	1,044	1,367	196	909	1,057	18,004	2,320	20,324
1990-91	30,758	5,128	1,622	1,091	966	1,125	301	898	1,063	18,565	3,295	21,859
1995-96	30,758	5,148	1,544	1,349	960	1,166	292	1,072	1,248	17,980	3,524	21,504
2000-01	30,758	5,150	1,544	1,364	959	1,168	327	1,126	1,276	17,844	3,775	21,619
2005-06	30,758	5,212	1,720	1,407	914	1,252	249	1,327	1,204	17,473	5,083	22,556
2010-11	30,758	5,216	1,731	1,449	919	1,242	250	1,366	1,179	17,406	5,769	23,175
2011-12	30,758	5,210	1,728	1,450	919	1,243	250	1,378	1,191	17,385	5,720	23,106
2012-13	30,758	5,207	1,721	1,455	916	1,244	250	1,417	1,200	17,343	5,772	23,115
2013-14	30,758	5,205	1,723	1,460	915	1,242	249	1,401	1,192	17,368	6,012	23,380
2014-15	30,758	5,201	1,727	1,482	919	1,249	249	1,399	1,188	17,344	5,929	23,273
2015-16	30,758	5,194	1,731	1,521	887	1,249	251	1,477	1,255	17,191	5,671	22,863
2016-17	30,758	5,194	1,822	1,642	924	1,351	253	1,401	1,257	16,910	6,314	23,224
2017-18	30,758	5,219	1,834	1,650	923	1,287	256	1,365	1,262	16,942	6,326	23,268
2018-19	30,758	5,174	1,849	1,692	924	1,323	272	1,448	1,260	16,815	6,397	23,212
2019-20	30,758	5,222	1,882	1,712	935	1,353	273	1,444	1,215	16,722	6,848	23,570
2020-21	30,758	5,207	1,951	1,726	934	1,365	272	1,438	1,214	16,650	7,248	23,898
2021-22	30,758	5,209	1,975	1,744	943	1,364	274	1,455	1,203	16,590	7,558	24,149
2022-23	30,758	5,199	1,986	1,768	963	1,412	268	1,477	1,195	16,491	7,924	24,415

Note - Figures for the years 2010-11 to 2021-22 are provisional.

Source - Commissionerate of Agriculture, GoM

ANNEXURE 7.3

**AREA UNDER PRINCIPAL CROPS, PRODUCTION AND YIELD PER HECTARE
IN THE STATE**

Area : '000 ha
Production : '000 MT
Yield : Kg per ha

Foodgrains

Sr. No.	Year	Rice			Wheat			Jowar		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	1960-61	1,300	1,369	1,054	907	401	442	6,284	4,224	672
2	1970-71	1,352	1,662	1,229	812	440	542	5,703	1,557	273
3	1980-81	1,459	2,315	1,587	1,063	886	834	6,469	4,409	681
4	1990-91	1,597	2,344	1,467	867	909	1,049	6,300	5,929	941
5	2000-01	1,512	1,930	1,277	754	948	1,256	5,094	3,988	783
6	2010-11	1,516	2,691	1,775	1,307	2,301	1,761	4,060	3,452	850
7	2020-21	1,561	3,291	2,109	1,126	2,071	1,839	2,320	2,186	942
8	2021-22	1,575	3,435	2,181	1,132	2,144	1,894	2,285	2,150	941
9	2022-23	1,687	3,963	2,349	1,204	2,301	1,912	1,507	1,551	1,029

Sr. No.	Year	Bajra			Other Cereals			All Cereals		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	1960-61	1,635	489	299	480	272	567	10,606	6,755	637
2	1970-71	2,039	824	404	414	254	614	10,320	4,737	459
3	1980-81	1,534	697	454	451	340	754	10,976	8,647	788
4	1990-91	1,940	1,115	575	432	443	1,025	11,136	10,740	964
5	2000-01	1,800	1,087	604	664	544	819	9,824	8,497	865
6	2010-11	1,035	1,123	1,086	1,068	2,749	2,575	8,985	12,317	1,371
7	2020-21	687	906	1,317	1,385	3,747	2,706	7,079	12,201	1,724
8	2021-22	667	619	928	1,393	3,714	2,667	7,052	12,062	1,710
9	2022-23	539	579	1,074	1,447	4,026	2,782	6,384	12,421	1,945

Sr. No.	Year	Tur			Gram			Moong		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
1	1960-61	530	468	883	402	134	333	0	0	0
2	1970-71	627	271	432	310	87	281	0	0	0
3	1980-81	644	319	495	410	137	335	0	0	0
4	1990-91	1,004	419	417	668	355	532	0	0	0
5	2000-01	1,096	660	602	676	351	519	714	244	341
6	2010-11	1,302	976	750	1,438	1,300	904	554	372	672
7	2020-21	1,340	1,450	1,082	2,231	2,397	1,074	401	207	517
8	2021-22	1,419	1,650	1,163	2,372	2,715	1,145	440	211	481
9	2022-23	1,191	859	721	2,935	2,974	1,013	299	181	605

Sr. No.	Year	Udid			Other Pulses			All Pulses		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
1	1960-61	0	0	0	1,417	387	273	2,349	989	421
2	1970-71	0	0	0	1,629	319	196	2,566	677	264
3	1980-81	0	0	0	1,661	369	222	2,715	825	304
4	1990-91	0	0	0	1,585	667	421	3,257	1,441	442
5	2000-01	574	205	357	497	177	356	3,557	1,637	460
6	2010-11	482	329	682	262	119	455	4,038	3,096	767
7	2020-21	356	227	636	266	163	613	4,595	4,444	967
8	2021-22	380	184	484	210	127	605	4,821	4,887	1,014
9	2022-23	368	234	635	230	150	652	5,023	4,398	876

(Contd.)

ANNEXURE 7.3 (Concl.d.)

Area : '000 ha
Production : '000 MT
Yield : Kg per ha

Foodgrains

Sr. No.	Year	Total Foodgrains			Groundnut			Soyabean		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)
1	1960-61	12,955	7,744	598	1,083	800	739	0	0	0
2	1970-71	12,886	5,414	420	904	586	649	0	0	0
3	1980-81	13,691	9,472	692	695	451	648	0	0	0
4	1990-91	14,393	12,181	846	864	979	1,132	201	190	947
5	2000-01	13,382	10,133	757	490	470	958	1,142	1,266	1,109
6	2010-11	13,023	15,413	1,183	395	470	1,290	2,729	4,316	1,581
7	2020-21	11,674	16,646	1,426	309	407	1,318	4,290	6,264	1,460
8	2021-22	11,873	16,949	1,427	320	401	1,255	4,595	5,500	1,197
9	2022-23	11,407	16,818	1,474	254	335	1,317	4,918	6,699	1,362

Sr. No.	Year	Safflower			Other Oilseeds			All Oilseeds		
		Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)
1	1960-61	331	0	0	454	0	0	1,868	0	0
2	1970-71	406	102	252	408	65	159	1,718	753	438
3	1980-81	480	174	363	605	103	170	1,780	728	426
4	1990-91	634	258	408	1,127	455	404	2,826	1,882	666
5	2000-01	296	122	412	631	241	382	2,559	2,099	820
6	2010-11	173	94	544	331	176	532	3,628	5,056	1,394
7	2020-21	21	12	569	105	36	343	4,725	6,719	1,422
8	2021-22	28	21	749	91	32	351	5,033	5,954	1,183
9	2022-23	31	24	767	88	34	383	5,291	7,091	1,340

Cash crops

Sr. No.	Year	Sugarcane			Cotton (lint)			Tobacco		
		Harvested Area	Production	Yield (in MT)	Area	Production	Yield	Area	Production	Yield
(1)	(2)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	(64)	(65)
1	1960-61	155	10,404	67	2,500	1,673	114	25	12	480
2	1970-71	167	14,433	87	2,750	484	30	12	5	448
3	1980-81	258	23,706	92	2,550	1,224	82	12	8	648
4	1990-91	442	38,154	86	2,721	1,875	117	8	8	1,039
5	2000-01	595	49,569	83	3,077	1,803	100	8	9	1,148
6	2010-11	965	85,691	89	3,942	7,473	322	1	1	994
7	2020-21	1,143	1,11,642	98	4,545	10,110	378	0.6	1.2	2,015
8	2021-22	1,489	1,39,159	93	4,410	7,791	300	0.53	0.8	1,505
9	2022-23	1,488	1,35,754	91	4,240	8,591	344	0.85	2.24	2,637

Note — (1) Production of cotton in "000" bales of 170 kg/bale

(2) Sugarcane Productivity in MT/ha

Source - Commissionerate of Agriculture, GoM

ANNEXURE 7.4

CROPWISE INDEX NUMBERS OF AGRICULTURAL PRODUCTION IN THE STATE

(Triennial average - Base: 1979-82=100)									
Groups/Crops	Weight	1982-83	1990-91	2000-01	2010-11	2019-20	2020-21	2021-22	2022-23
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Foodgrains -									
(a) Cereals -									
(i) Rice	9.49	87.4	106.1	87.4	122.1	131.2	149.0	155.6	179.5
(ii) Wheat	5.92	80.6	93.9	97.9	237.7	185.3	214.0	221.5	237.7
(iii) Jowar	22.16	95.5	121.1	81.4	70.5	38.1	44.6	43.7	31.4
(iv) Bajra	3.08	64.2	154.3	150.5	155.5	70.9	125.4	85.6	80.2
(v) Barley	0.02	37.7	17.0	13.2	188.7	NA	NA	NA	NA
(vi) Maize	0.46	36.9	105.2	253.8	2,180.5	1,642.5	3,006.7	3,004.2	3,258.3
(vii) Ragi	0.85	92.0	98.4	60.8	55.5	41.3	44.4	48.5	51.8
(viii) Kodra	0.05	73.7	66.6	43.6	23.6	NA	NA	NA	NA
(ix) Other cereals	0.19	76.7	150.8	162.5	26.1	160.2	100.7	54.9	67.8
Total - Cereals	42.22	88.5	115.7	91.9	134.2	100.1	130.2	129.2	132.9
(b) Pulses -									
(i) Gram	1.47	78.4	215.8	213.3	790.7	1,362.3	1,458.0	1,651.2	1,808.8
(ii) Tur	5.45	96.1	105.2	166.0	245.3	300.8	364.5	414.6	215.9
(iii) Other pulses	3.52	112.5	160.0	150.0	196.5	98.8	143.1	125.2	135.3
Total - Pulses	10.44	99.2	139.2	167.3	305.6	382.2	444.0	491.1	413.0
Total - Foodgrains	52.66	90.6	120.4	106.8	168.2	156.0	192.4	200.9	188.4
2. Non-Foodgrains									
(a) Oil Seeds -									
(i) Groundnut	7.23	71.4	158.9	76.2	74.3	50.2	66.1	65.1	54.4
(ii) Sesamum	0.57	94.2	223.7	88.9	58.9	15.3	19.2	17.1	12.5
(iii) Rape, mustard and linseed	0.78	73.4	86.5	30.8	5.1	8.7	11.1	20.0	19.1
(iv) Castor seed	0.01	25.0	166.7	358.3	333.3	270.7	359.0	73.0	88.0
(v) Sunflower	0.57	76.8	609.8	352.3	267.3	24.4	24.5	22.7	29.1
Total - Oil seeds	9.16	73.3	184.8	90.6	79.8	43.1	56.2	55.7	47.2
(b) Fibres -									
(i) Cotton	9.89	110.4	128.6	123.6	512.3	455.2	693.1	534.1	589.0
(ii) Mesta	0.04	44.5	38.0	36.5	26.4	NA	NA	NA	NA
Total - Fibres	9.93	110.1	128.2	123.2	510.4	453.3	690.4	532.0	586.7
(c) Miscellaneous -									
(i) Sugarcane	25.97	114.3	158.2	186.9	297.2	261.3	421.0	524.6	511.8
(ii) Tobacco	0.14	68.3	117.3	138.1	32.7	12.3	17.7	11.8	33.2
(iii) Potato	0.22	84.2	120.9	121.9	NA	NA	NA	685.2	469.0
(iv) Chilly	1.92	107.1	102.2	82.0	NA	NA	NA	478.6	525.2
Total- Miscellaneous	28.25	113.3	153.9	179.0	273.4	240.3	387.0	520.2	510.0
Total - Non - Foodgrains	47.34	104.9	154.5	150.2	285.6	246.8	386.6	432.8	436.5
All Crops	100.00	97.4	136.5	127.4	223.8	199.0	284.3	310.7	305.9

Note – Index numbers for 2019-20 to 2022-23 are provisional

N.A. Not Available

Source - Commissionerate of Agriculture, GoM

ANNEXURE 7.5

AREA UNDER IRRIGATION IN THE STATE

Sr. No.	Year	Area irrigated				Intensity of irrigated cropping	No. of irrigation Wells ('000)	Net area irrigated per well (ha)	Gross cropped area	Percentage of gross irrigated area to gross cropped area
		Wells	Other sources	Net	Gross					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	1960-61	595	477	1,072	1,220	114	542	1.10	18,823	6.5
2	1970-71	768	579	1,347	1,570	117	694	1.11	18,737	8.4
3	1980-81	1,055	780	1,835	2,415	132	826	1.28	19,642	12.3
4	1990-91	1,672	999	2,671	3,319	124	1,017	1.64	21,859	15.2
5	2000-01	2,262	987	3,249	3,852	119	1,318	1.72	21,619	17.8
6	2001-02	2,146	990	3,136	3,727	119	1,322	1.52	20,991	17.8
7	2002-03	2,145	1,071	3,216	3,806	118	1,331	1.61	20,915	18.2
8	2003-04	1,914	1,030	2,944	3,636	123	NA	NA	22,190	16.4
9	2004-05	1,942	1,001	2,993	3,665	125	NA	NA	22,376	16.4
10	2005-06	2,077	1,070	3,147	3,810	118	NA	NA	22,556	16.9
11	2006-07	2,109	1,137	3,246	3,958	122	NA	NA	22,557	17.6
12	2007-08	2,151	1,160	3,311	4,037	122	NA	NA	22,655	17.8
13	2008-09	2,115	1,140	3,255	3,970	122	NA	NA	22,454	17.7
14	2009-10	2,159	1,162	3,321	4,050	122	NA	NA	22,612	17.9
15	2010-11	NA	NA	NA	NA	NA	NA	NA	23,175	NA
16	2011-12	NA	NA	NA	NA	NA	NA	NA	23,106	NA
17	2012-13	NA	NA	NA	NA	NA	NA	NA	23,115	NA
18	2013-14	NA	NA	NA	NA	NA	NA	NA	23,380	NA
19	2014-15	NA	NA	NA	NA	NA	NA	NA	23,273	NA
20	2015-16	NA	NA	NA	NA	NA	NA	NA	22,863	NA
21	2016-17	NA	NA	NA	NA	NA	NA	NA	23,224	NA
22	2017-18	NA	NA	NA	NA	NA	NA	NA	23,268	NA
23	2018-19	NA	NA	NA	NA	NA	NA	NA	23,212	NA
24	2019-20	NA	NA	NA	NA	NA	NA	NA	23,570	NA
25	2020-21	NA	NA	NA	NA	NA	NA	NA	23,898	NA
26	2021-22	NA	NA	NA	NA	NA	NA	NA	24,149	NA
27	2022-23	NA	NA	NA	NA	NA	NA	NA	24,415	NA

Note - (1) Figures may not add up to the totals due to rounding.

NA Not Available

(2) Intensity under Col. No. 7 is worked out by using the formula (Col. No. 6 ÷ Col. No. 5) X 100.

(3) Figures for the years 2003-04 to 2022-23 are provisional.

(4) Vide Water Resources Department, GoM, GR dated 26th August 2016, and instructions regarding procedure for collecting data are issued.

Source - Commissionerate of Agriculture, GoM

ANNEXURE 7.6

IRRIGATION & NON-IRRIGATION WATER CHARGES

(₹ Crore)

Year	Water charges levied			Recovery			Outstanding at the end of year		
	Irrigation	Non-Irrigation	Total	Irrigation	Non-Irrigation	Total	Irrigation	Non-Irrigation	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2000-01	74.48	362.60	437.08	41.23	153.99	195.22	223.39	571.30	794.69
2001-02	84.72	368.83	453.55	43.57	208.12	251.69	264.54	732.01	996.55
2002-03	83.17	360.68	443.85	42.02	335.50	377.52	303.79	751.99	1,055.78
2003-04	93.03	360.26	453.29	42.89	335.20	378.09	376.63	353.06	729.69
2004-05	78.69	418.44	497.13	45.78	402.57	448.35	415.59	378.59	794.18
2005-06	68.25	350.28	418.53	64.03	349.45	413.48	410.18	282.09	692.27
2006-07	90.70	408.75	499.45	74.72	420.26	494.98	427.01	245.82	672.82
2007-08	110.35	563.89	674.24	70.47	556.54	627.01	473.70	275.20	748.90
2008-09	112.95	695.37	808.32	71.05	602.11	673.16	531.10	466.38	1,004.61
2009-10	95.00	715.11	810.11	69.94	732.69	802.63	561.77	466.38	1,028.15
2010-11	96.24	670.46	766.70	79.03	666.87	745.90	745.90	468.62	1,047.90
2011-12	109.73	541.06	650.79	79.13	541.13	620.26	608.87	461.74	1,070.61
2012-13	82.98	670.12	753.10	63.10	443.05	506.15	618.78	656.52	1,275.30
2013-14	70.37	536.67	607.04	57.57	457.20	514.77	631.49	728.24	1,359.73
2014-15	78.15	593.59	671.74	61.97	574.53	636.50	648.29	695.80	1,344.09
2015-16	80.04	660.13	740.16	49.16	523.42	572.59	679.02	835.13	1,514.15
2016-17	73.05	690.47	763.52	59.48	513.43	572.89	693.99	1,010.29	1,704.28
2017-18	93.72	735.06	828.78	74.30	613.84	688.14	714.00	1,135.19	1,849.19
2018-19	105.79	1,030.95	1,136.74	78.27	965.87	1,044.14	749.07	1,198.52	1,947.59
2019-20	114.03	1,195.69	1,309.72	59.97	908.34	968.31	809.40	1,593.71	2,403.11
2020-21	130.57	1,004.03	1,134.60	93.71	901.44	995.15	846.62	1,697.89	2,544.51
2021-22	180.88	1,417.29	1,598.17	101.76	1,058.36	1,160.12	923.76	2,059.84	2,983.60
2022-23*	172.82	2,211.27	2,383.89	103.38	1,448.17	1,551.55	998.28	2,822.86	3,821.14

Source – Chief Auditor, Water and Irrigation, Chhatrapati Sambhajanagar Water Resources Department, GoM

* Provisional

ANNEXURE 7.7
LIVESTOCK AND POULTRY IN THE STATE

('000)									
Livestock Census Year	Cattle	Buffaloes	Sheep and goats	Other live stock ⁺	Total live stock	Sheep and goats per hundred hectares of grazing and pasture land (no.)	Livestock per hundred hectares of net area cropped (no.)	Livestock per lakh of population	Total poultry ^{\$}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1961	15,328	3,087	7,273	360	26,048	512	144	66	10,578
1966	14,729	3,042	7,326	352	25,449	522	140	57	9,902
1972	14,705	3,301	8,038	317	26,361	491	164	52	12,217
1978	15,218	3,899	10,199	326	29,642	650	162	51	18,751
1982	16,162	3,972	10,376	409	30,919	673	175	48	19,845
1987	16,983	4,755	12,068	449	34,255	950	189	48	24,830
1992	17,441	5,447	13,016	489	36,393	940	202	46	32,187
1997	18,071	6,073	14,802	692	39,638	1,104	223	50	35,392
2003	16,738	6,084	13,624	612	37,058	1,016	213	36	34,596
2007	16,184	6,073	13,301	397	35,955	1,064	206	37	64,756 [@]
2012	15,484	5,595	11,016	394	32,489	885	187	29	77,795 [@]
2019	13,993	5,604	13,285	198	33,080	973	199	26	74,298 [@]

Note - Figures may not add up to totals due to rounding.

+ 'Other livestock' includes pigs, horses & ponies, mules, camels and donkeys.

\$ Total poultry includes Turkey, Quail & other birds.

@ Total poultry includes birds in poultry farm.

Source - Livestock Census