

## All India – Crop Production, Surplus biomass availability and Biomass Power Potential for TE 2015-18

From the above table, it is evident that the total gross cropped area (TE-2015-2018) brought under selected crops in India was around 198.11 m.ha, which includes the Kharif, rabi and summer seasons acreage and annual crops. Total production produced from these selected crops at all India level for the selected period was around 774.38 million tonnes. From this total production, total biomass-derived by multiplying the crop-specific Crop Residue Ratio (CRR) with the total production of the respective crops. The calculated total available biomass potential at all India level was derived to around 754.50 million tonnes. Out of this total biomass production, a specific portion of the biomass is used for domestic uses such as

domestic fuel, feed for cattle and manure etc.; the utilization rate of biomass varied from crop to crop and state to state.

From table no. 15, it is clear that 2/3rd portion of total biomass produced, i.e., 525.98 million tonnes, are utilized for domestic uses and for consumption, whereas the remaining 1/3rd portion has resulted in surplus biomass, i.e., 228.52 million tonnes. From this, biomass power potential is derived by multiplying the crop-specific power factor (derived from the Gross Heating Value) to the surplus biomass of the respective crop surplus biomass (refer to table no. 10.1). The estimated gross biomass power potential is around 28445.52 MWe at all India level.

The lions share of all India biomass power potential is contributed by Punjab (10.6%), Uttar Pradesh (9.8%), followed by Gujarat (9.3%), Maharashtra (9.2%), Madhya Pradesh (8.8%) and Andhra Pradesh (7%) states majorly.

**Table 24: State-wise Total Cropped Area Production, Biomass Generation, Surplus Biomass Production and Biomass Power Potential in India (TE 2015-18)**

States/UTs	Total Crop Area (Million Hectares)	Total Crop Production (Million Tonnes)	Total Biomass Generation (Million Tonnes)	Surplus Biomass Potential (Million Tonnes)	Biomass Utilization (Million Tonnes)	Biomass Power Potential (Mwe)	% Share in total Biomass Power Potential
Andhra Pradesh	7.36	28.62	40.01	17.09	22.92	1999.49	7.03
Arunachal Pradesh	0.33	0.58	0.75	0.17	0.58	18.46	0.06
Assam	3.40	8.93	12.57	2.54	10.03	321.89	1.13
Bihar	7.28	32.50	32.57	7.98	24.59	964.37	3.39
Chhattisgarh	5.47	8.71	12.99	2.65	10.34	353.68	1.24
Goa	0.14	0.24	0.45	0.23	0.22	32.97	0.12
Gujarat	9.67	32.27	50.24	21.74	28.50	2637.84	9.27
Haryana	6.60	27.17	36.24	10.91	25.33	1353.35	4.76
Himachal Pradesh	0.77	1.51	2.74	0.57	2.17	69.71	0.25
Jammu & Kashmir	0.96	1.77	3.24	0.65	2.59	82.82	0.29
Jharkhand	1.96	3.32	5.31	1.20	4.11	146.31	0.51
Karnataka	10.94	51.34	34.09	14.05	20.05	1793.88	6.31
Kerala	1.30	4.79	8.58	6.04	2.54	778.41	2.74
Madhya Pradesh	23.70	43.81	70.23	19.93	50.30	2516.42	8.85
Maharashtra	21.07	86.48	52.54	21.49	31.05	2629.55	9.24
Manipur	0.34	1.12	1.14	0.48	0.66	62.31	0.22
Meghalaya	0.25	0.91	1.37	0.56	0.81	68.54	0.24
Mizoram	0.05	0.13	0.13	0.02	0.11	2.90	0.01
Nagaland	0.44	1.37	1.37	0.44	0.94	53.90	0.19
Odisha	4.45	7.88	11.84	2.23	9.61	298.72	1.05
Punjab	7.17	37.88	53.00	22.25	30.75	3022.11	10.62
Rajasthan	31.93	32.11	59.50	10.21	49.29	1299.55	4.57
Sikkim	0.08	0.12	0.23	0.04	0.19	4.73	0.02

States/UTs	Total Crop Area (Million Hectares)	Total Crop Production (Million Tonnes)	Total Biomass Generation (Million Tonnes)	Surplus Biomass Potential (Million Tonnes)	Biomass Utilization (Million Tonnes)	Biomass Power Potential (Mwe)	% Share in total Biomass Power Potential
Tamil Nadu	8.96	47.92	52.14	12.22	39.92	1560.08	5.48
Telangana	9.38	18.57	33.62	13.76	19.86	1678.36	5.90
Tripura	0.35	0.97	1.41	0.25	1.16	34.35	0.12
Uttar Pradesh	24.19	246.66	124.69	21.60	103.09	2800.31	9.84
Uttarakhand	1.00	8.05	3.55	0.72	2.83	93.34	0.33
West Bengal	8.49	38.20	47.51	16.28	31.23	1741.74	6.12
Andaman & Nicobar	0.04	0.08	0.20	0.13	0.07	18.13	0.06
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.15	0.00
Dadra & Nagar Haveli and Daman & Diu	0.02	0.10	0.07	0.02	0.06	2.16	0.01
Puducherry	0.02	0.27	0.12	0.04	0.08	5.00	0.02
<b>Total</b>	<b>198.11</b>	<b>774.37</b>	<b>754.50</b>	<b>228.53</b>	<b>525.98</b>	<b>28445.52</b>	<b>100</b>

(Note: District wise data compiled from Directorate of Economics and Statistics)

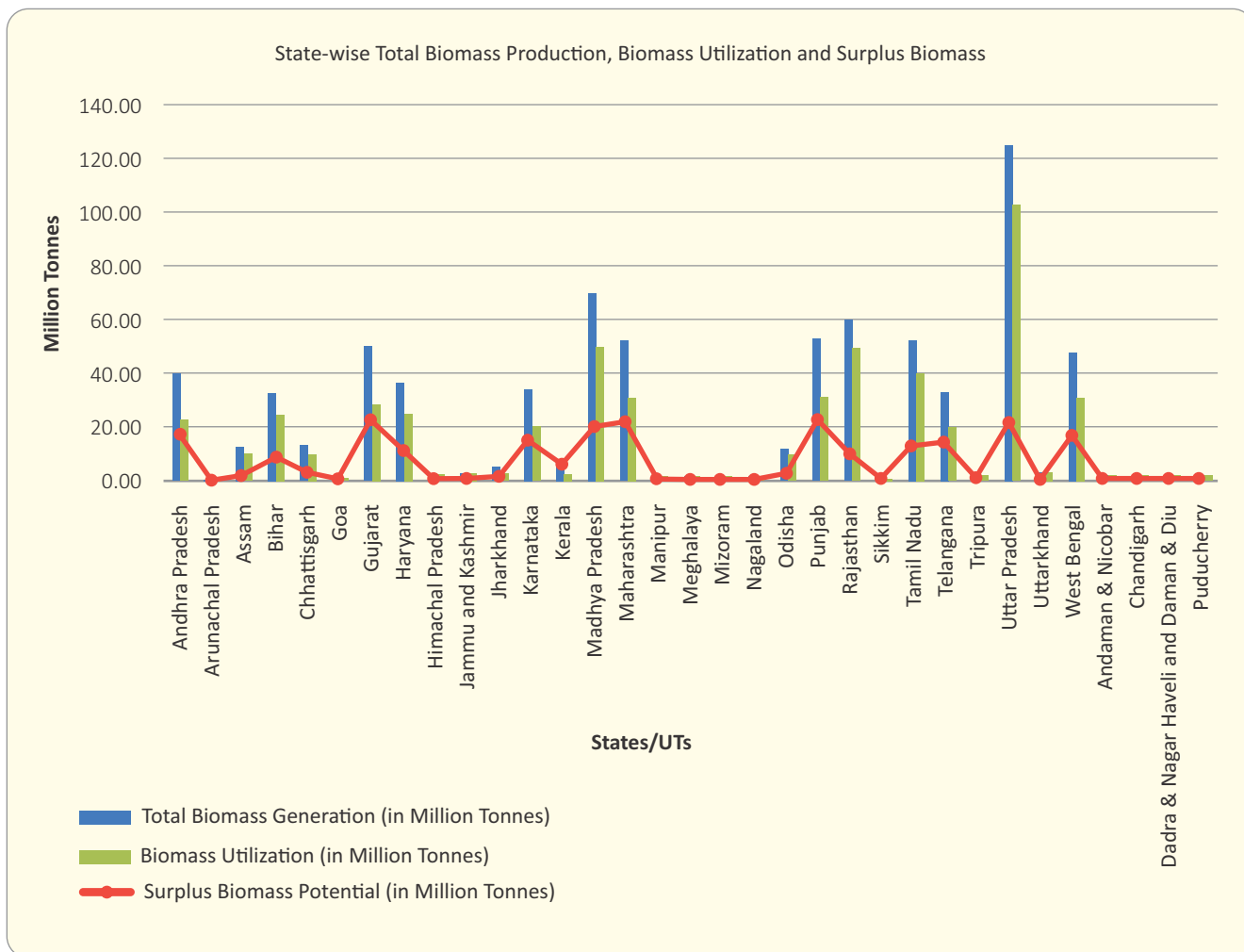


Figure 15: State-wise total biomass production, biomass utilization and surplus biomass