

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE

**LOK SABHA**  
**UNSTARRED QUESTION NO.1610**  
TO BE ANSWERED ON THE 11<sup>TH</sup> FEBRUARY, 2020

**AGRICULTURAL PRODUCTION USING GROUND WATER**

1610. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:  
SHRI D.M. KATHIR ANAND:  
SHRI CHHATAR SINGH DARBAR:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) the percentage of agricultural production made by using ground water for irrigation purposes in the country;
- (b) whether the depleting water table has adversely affected the production of foodgrains in the country including Tamil Nadu;
- (c) if so, the details thereof, State-wise and the effective measures taken by the Union Government in this regard;
- (d) whether the Union Government has assessed the current status thereof in every State/Union Territory;
- (e) if so, the details thereof; and
- (f) the steps taken by the Government to increase the ground water levels and funds allocated in this regard during the last five years, State-wise?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री ( SHRI NARENDRA SINGH TOMAR)

- (a): As per available information, the net sown area in the country is 140.13 million hectare. The net irrigated area in the country is 68.3 million hectare which includes 41.08 million hectare irrigated by wells and tube wells.
- (b) & (c): Though there are instances of depletion of ground water in some regions of the country, yet it has had no significant adverse impact on food grain production. The production of food grain in the country including Tamil Nadu has increased from 252.03 million tonnes in 2014-15 to 284.95 million tonnes during 2018-19 (4th advanced estimates).

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(d) & (e): The dynamic Ground Water Resources of the country are being periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments. As per the 2017 assessment, total annual Ground Water recharge is 432 Billion Cubic Meter (BCM) and the Annual Extractable Ground Water Resource is 393 BCM. The Annual Ground Water Extraction for all uses is 249 BCM, out of which 221 BCM is for irrigation use.

CGWB periodical monitors the ground water levels throughout the country on a regional scale, through a network of monitoring wells. In order to assess the decline in water level on a long-term basis, pre-monsoon water level data collected by CGWB during pre-monsoon 2019 has been compared with the decadal average (2009-2018). Analysis of water level data indicates that about 61% of the wells monitored have registered decline in ground water levels, mostly in the range of 0 – 2 m. Decline of more than 4 m has also been observed in pockets of most of the States/ UTs except Himachal Pradesh, Meghalaya, Puducherry and Tripura. The States/UTs where more than 10% of monitoring wells show decline of more than 4m are - Delhi, Dadar & Nagar Haveli, Gujarat, Haryana, Maharashtra, Punjab, Rajasthan, Telangana and Uttarakhand.

(f): Central Ground Water Board is implementing the Central Sector Scheme on 'Ground Water Management & Regulation'. Water being a State subject, initiatives on water management including participatory groundwater management in the Country is primarily States' responsibility. A number of States have done notable work in the field of water management/conservation such as 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'Jalyukt Shibir' in Maharashtra, 'Sujalam Sufalam Abhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, Neeru Chettu' in Andhra Pradesh, Jal Jeevan Hariyali in Bihar etc. The important measures taken by the Central Government for conservation, management of ground water and effective implementation of rain water harvesting in the country is at [www.mowr.gov.in/sites/default/files/Steps\\_to\\_control\\_water\\_depletion\\_Jun2019.pdf](http://www.mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf).

Government of India launched Jal Shakti Abhiyan, a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. In this regard, teams of officers from Central Government along-with technical officers from Ministry of Jal Shakti were deputed to visit water stressed districts and to work in close collaboration with district level officials to undertake suitable interventions.

Indian Council for Agricultural Research (ICAR) has developed location specific rainwater harvesting measures, technology for ground water recharge, conjunctive use of surface & ground water, and micro-irrigation for sustainable management and judicious use of groundwater resources in agriculture. The Council also imparts training and organizes frontline demonstration on these aspects.

Central Government supports construction of water harvesting and conservation works primarily through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and Pradhan Mantri Krishi Sinchayee Yojana- Watershed Development Component (PMKSY-WDC). Micro Irrigation viz. Drip and Sprinkler Irrigation is being promoted under Per Drop More Crop component of PMKSY (PMKSY-PDMC) for enhancing water use efficiency at farm level. Crop diversification programme is also being implemented for encouraging water guzzling crops to be grown in more appropriate agro climatic regions and be replaced by less water intensive crops. Details of Central Assistance released to States under MGNREGS, PMKSY-WDC and PMKSY-PDMC are given at Annexure I, II and III.

**Annexure-I**

**Annexure to Lok Sabha Unstarred Question no. 1610 for answer on 11.02.2020  
regarding Agricultural Production using Ground Water**

**Fund released for WATER CONSERVATION & WATER HARVESTING UNDER  
MGNREGS**

Rs. in lakhs

S.No.	State	2018-19	2017-18	2016-17	2015-16	2014-15
1	Andaman and Nicobar	21.28	27.06	6.85	25.24	70.2
2	Andhra Pradesh	76072.54	45564.36	26883.27	57995.78	17854.82
3	Arunachal Pradesh	934.29	415.94	449.53	53.38	22.43
4	Assam	9077.23	6309.15	7289.78	2210.78	1792.06
5	Bihar	18503.75	15755.33	12815.34	9129.91	3728.03
6	Chhattisgarh	56564.34	46126.81	56969	29691.23	28990.4
7	Dadra & Nagar Haveli	0	0	0	0	0
8	Daman & Diu	0	0	0	0	0
9	Goa	0	0.79	4.17	2.99	8.58
10	Gujarat	19052.67	9356.06	10615.99	7252.24	4553
11	Haryana	5388.3	4807.84	4676.48	1272.51	2734.26
12	Himachal Pradesh	9222.73	6197.81	6097.89	4398.76	5772.01
13	Jammu And Kashmir	3543.53	5146.23	3492.12	2731.55	1302.12
14	Jharkhand	9108.26	13762.1	64559.95	33972.36	24965.33
15	Karnataka	58124.35	45327.55	42815.68	17620.79	17153.55
16	Kerala	90043.99	52227.05	47288.36	31616.23	38591.58
17	Lakshadweep	2.34	1.91	0	2.04	10.18
18	Madhya Pradesh	97835.98	49304.09	54783.02	26539.27	37799.98
19	Maharashtra	32376.13	28270.54	35478.25	36689.51	26225.91
20	Manipur	3032.1	756.16	2230.21	1217.14	1868.07
21	Meghalaya	5417.5	7612.55	6564.46	1850.71	2160.72
22	Mizoram	3772.23	1423.71	1029.55	2068.48	782.75
23	Nagaland	1787.86	6735.86	2441.35	740.32	95.19
24	Odisha	15187.21	15557.64	21500.72	13281.91	10003.46
25	Puducherry	340.04	273.47	94.26	73.32	37.21
26	Punjab	918.43	697.23	441.21	323.83	184.9
27	Rajasthan	112575	76703.75	94708.23	82303.68	70101.54
28	Sikkim	403.93	639.97	1256.02	1037.73	737.35
29	Tamil Nadu	218409.1	52327.56	46809.32	55366.42	43614.4
30	Telangana	54154.01	57285.68	39856.98	41593.84	19973.07
31	Tripura	9378.79	7190.18	15142.89	10881.14	13918.42
32	Uttar Pradesh	74204.53	55417.14	98099	37596.15	30083.11
33	Uttarakhand	6029.63	5742.98	4615.97	2990.56	1987.53
34	West Bengal	41323.23	67351.12	85367.99	49600.81	65130.02
	<b>Total</b>	<b>1032805</b>	<b>684315.6</b>	<b>794383.8</b>	<b>562130.6</b>	<b>472252.2</b>

## Annexure-II

Annexure to Lok Sabha Unstarred Question No.1610 for answer on 11.02.2020 regarding  
Agricultural Production using Ground Water

Rs.in crore

State-wise / Year-wise details of funds released under WDC-PMKSY (erstwhile IWMP) from  
2014-15 to 2018-19

S. No.	State	2014-15	2015-16	2016-17	2017-18	2018-19	Total
1	Andhra Pradesh	163.28	86.73	120.96	123.35	139.15	633.47
2	Arunachal Pradesh	0	18	23.12	9.62	19.17	69.91
3	Assam	6.99	45	0	65.09	66.55	183.63
4	Bihar	21.47	5	28.26	19.21	46.77	120.71
5	Chhattisgarh	10	20	34.96	33.45	57.03	155.44
6	Goa	0					0
7	Gujarat	72.34	100	115.04	87.51	151.84	526.73
8	Haryana	26.97	6.91	12.82	10.94	10	67.64
9	Himachal Pradesh	0	20	35.4	26.83	24.04	106.27
10	Jammu & Kashmir	51.43		25.59	43.66	71.87	192.55
11	Jharkhand	0	20	17.68		28.83	66.51
12	Karnataka	125.43	125	145.72	175.69	101.07	672.91
13	Kerala	15.16	20	16.62	17.83	13.06	82.67
14	Madhya Pradesh	303.98	150	129.44	134.84	162.41	880.67
15	Maharashtra	197.91	250	186.95	279.21	163.33	1077.4
16	Manipur	11.1	9	11.286	13.84	14.14	59.366
17	Meghalaya	37.16	18	11.56	8.95	6.69	82.36
18	Mizoram	75.81	8.87	16.06	22.35	23.14	146.23
19	Nagaland	95.09	27	60.84	32.08	38.51	253.52
20	Odisha	248.79	67.5	91.99	94.48	102.17	604.93
21	Punjab	0	7.953	0	7.96	0	15.913
22	Rajasthan	403.07	200	199.35	243.59	299	1345.0134
23	Sikkim	0	6.3	0	1.4	0	7.7
24	Tamil Nadu	124.02	75	62.36	82.75	90.59	434.72
25	Telangana	124.58	70	0	51.14	81.93	327.65
26	Tripura	19.04	20.89	27.12	16.66	15.89	99.6
27	Uttar Pradesh	75.39	75	58.38	63.93	0	272.7
28	Uttrakhand	49.77	25.677	16.15	9.97	6.98	108.547
29	West Bengal	25.85	10	24.06	15.48	46.39	121.78
	<b>Grand Total</b>	<b>2284.63</b>	<b>1487.83</b>	<b>1471.72</b>	<b>1691.81</b>	<b>1780.55</b>	<b>8716.54</b>

**ANNEXURE-III**

**Annexure to Lok Sabha Unstarred Question no. 1610 for answer on 11.02.2020  
regarding Agricultural Production using Ground Water  
Central assistance released under PMKSY-PDMC**

Rs in Crore

S.No.	States/UT	2014-15*	2015-16	2016-17	2017-18	2018-19
1	Andhra Pradesh	121.48	206.47	308.69	517.1	520
2	Bihar	35.00	28.6	21.6	12.5	27.91
3	Chhattisgarh	10.00	20.3	44.8	55	43.39
4	Goa	0.20	0.3	0.8	0	1.2
5	Gujarat	140.68	213.05	274	300	272.5
6	Haryana	23.00	34.97	27	14.01	27.41
7	Himachal Pradesh	1.50	7.6	8.5	19.25	26
8	Jharkhand	15.00	14.97	30.7	25	10
9	Jammu & Kashmir	0.00	4.87	5.4	3	7.8
10	Karnataka	124.25	213.12	229	385	372.03
11	Kerala	3.75	8.53	0	25	4
12	Madhya Pradesh	66.50	161.74	121.1	150	132.56
13	Maharashtra	177.50	107.26	305.7	362.5	360
14	Odisha	10.14	28.7	39.7	48	58
15	Punjab	0.00	43	1.18	0	9
16	Rajasthan	75.00	142.84	129	107.5	168.48
17	Tamil Nadu	56.63	129.78	143.5	369.55	355
18	Telangana	77.57	111.32	189	257	122
19	Uttarakhand	6.97	9.6	15	27.2	43
20	Uttar Pradesh	3.00	37.51	41.4	55	87.88
21	West Bengal	0.00	4.8	19.9	31	40
22	Arunachal Pradesh	0.00	2.6	2	8.3	12.5
23	Assam	1.00	5.03	11	3	30
24	Manipur	2.72	2.76	3.6	7.5	40
25	Meghalaya	0.00	1.43	0	3.3	12
26	Mizoram	4.50	3.27	8.1	12.3	27.8
27	Nagaland	0.00	2.34	4.5	11.8	35
28	Sikkim	4.26	4.86	5.4	4	55.19
29	Tripura	2.00	1.55	0	3.75	15
30	Andman & Nicobar Island	0	0.2	0	0.5	0
31	Puducherry	0	2.03	0	0	0
	<b>Grand Total</b>	<b>962.65</b>	<b>1555.4</b>	<b>1990.57</b>	<b>2818.06</b>	<b>2915.65</b>

\*Released under On Farm Water Management Scheme (OFWM)

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