financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes and programmes such as Accelerated Irrigation Benefits Programme (AIBP) under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

During 2016-17, ninety-nine (99) on-going Major/Medium irrigation projects under PMKSY-(AIBP) having ultimate irrigation potential of 76.03 lakh ha. and balance estimated cost of ₹ 77595 crore [Central assistance (CA) component of ₹ 31342 crore] have been prioritized in consultation with States, for completion in phases up to December, 2019 along with their Command Area Development and Water Management (CADWM) works. CA of ₹9750.56 crore and ₹ 2380.31 crore has been released for these projects during 2016-17 to 2018-19 for AIBP and CADWM works respectively. Further, during the same period, CA of ₹ 5914.16 crore has been released for Polavaram National Project.

Interlinking of rivers for water management

1014. SHRI HARNATH SINGH YADAV: Will the Minister of JAL SHAKTI be pleased to state:

(a) whether the problem of water scarcity can be addressed by streamlining the water management in the country;

(b) if so, the details thereof and the reaction of Government thereto;

(c) whether the inter-linking of rivers can play a major role in water management; and

(d) if so, the reaction of Government thereto along with the names of rivers selected so far for inter-linking?

THE MINISTER OF STATE IN THE MINISTRY OF JAL SHAKTI (SHRI RATTAN LAL KATARIA): (a) and (b) The average annual water availability of any region or country is largely dependent upon hydrological and geological factor and is generally constant. However, water availability per person is dependent on population of the country and for India per capita water availability in the country is reducing progressively due to increasing population. Moreover, due to high temporal and spatial variations in the precipitation, the water availability of many regions of the country is much below the national average, resulting in condition of water stress in such areas. This problem of water stress/scarcity can be addressed through balanced development and management of countryÊs water resources, with focus on both supply-side and demand-side solutions.

Water being a State subject, water management including dealing with the problem of water stress/scarcity is primarily the responsibility of the State Governments. Supplementing the efforts of the State Governments, and also for nation-wide reforms in the management of water resources, following steps have been taken by the Central Government:·

(i) The National Water Policy (2012) has been formulated and circulated to the States/UTs, which recommends that water needs to be managed as a common pool community resources held by the State, under public trust doctrine to achieve food security, support livelihood and ensure equitable and sustainable development for all.

(ii) Central Government has launched the Pradhan Mantri Krishi Sinchayee Yojna (PMKSY) by amalgamating ongoing schemes of different ministries with the vision of extending the coverage of irrigation and improving water use efficiency in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities.

(iii) Central Government has prioritized 99 ongoing major/medium irrigation projects for mission-mode completion for the creation of irrigation potential of 76 lakh hectares. Command area development works in the balance cultivable command area of about 43 lakh hectares have also been taken up in these projects.

(iv) Central Government has formulated a National Perspective Plan (NPP) which envisages transfer of water from water surplus basins to water deficit basins to improve availability of water.

(v) Central Government has launched the National Water Mission with the objective of conservation of water, minimizing wastage and ensuring its equitable distribution both across and within States through integrated water resources development and management.

(vi) Central Government is implementing a nation-wide programme of National Aquifer Mapping and Management (NAQUIM) with a view to facilitate sustainable development of ground water resources. Artificial recharge and rain water harvesting are being implemented under various schemes of the Union Government. Aquifer rejuvenation is also being attempted in select over-exploited blocks on pilot basis.

(vii) Central Ground Water Authority (CGWA) has been constituted under the Environment (Protection) Act-1986, for the purpose of regulation and control of ground water development and management in the country. CGWA also grants „No Objection Certificates‰ for ground water abstraction to industries, infrastructure units and mining projects in feasible areas with mandatory conditions for conservation, augmentation and efficient use of ground water.

(c) and (d) Interlinking of rivers can help in overcoming critical challenge posed by the temporal and spatial variations in rainfalls of the country. Accordingly, a National Perspective Plan (NPP) was prepared by the then Ministry of Irrigation (now Ministry of Jal Shakti) in August 1980 for transferring water from surplus basins to water-deficit basins. The link projects under NPP are judicially planned and designed to transfer water from surplus basins to the deficit/water short basins and thus minimizing water going to sea unutilized and mitigating the effects of floods and droughts to some extent. Under the NPP, the National Water Development Agency (NWDA) identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). The Pre-Feasibility Reports (PFRs) of all 30 links have been prepared and circulated to the concerned State Governments. After survey and investigations, FRs of 14 links under Peninsular Component and FRs of 2 links (Indian portion) and draft FRs of 7 links (Indian portion) under Himalayan Component have been completed.

The implementation of National Perspective Plan would give benefits of 25 million ha of irrigation from surface waters, 10 million ha by increased use of ground waters, raising the ultimate irrigation potential from 140 million ha to 175 million ha and generation of 34 million KW of power, apart from the incidental benefits of flood control, navigation, water supply, fisheries, salinity and pollution control etc. Name of rivers for linking and present status and States concerned are given in Statement.

Statement

Present status of Inter Basin Water Transfer Links, the States involved, name of rivers
Feasibility Reports/Detailed Project Report

Sl. No	Names	Rivers	States concerned	
1	2	3	4	
	Himalayan Component			
1.	Kosi-Mechi link	Kosi and Mechi	Bihar, West Bengal and Nepal	PFI
2.	Kosi-Ghaghra link	Kosi and Ghaghra	Bihar, Uttar Pradesh and Nepal	PFI
3.	Gandak-Ganga link	Gandak and Ganga	-do-	Dra
4.	Ghaghra-Yamuna link	Ghaghra and Yamuna	-do-	FR
5.	Sarda-Yamuna link	Sarda and Yamuna	Bihar, Uttar Pradesh, Haryana, Rajasthan, Uttarakhand and Nepal	FR
6.	Yamuna-Rajasthan link	Yamuna and Sukri	Uttar Pradesh, Gujarat, Haryana and Raj asthan	Dra
7.	Rajasthan-Sabarmati link	Sabarmati	-do-	Dra
8.	Chunar-Sone Barrage link	Ganga and Sone	Bihar and Uttar Pradesh	Dra
9.	Sone Dam - Southern Tributaries of Ganga link	Sone and Badua	Bihar and Jharkhand	PFI
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Manas-Sankosh-Tista-Ganga	Assam, West Bengal, Bihar and Bhutan	PFI

1	2	3	4	
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Manas, Tista and Ganga	-do-	(Al Lin
12.	Ganga (Farakka)-Sunderbans link	Ganga and Ichhamati	West Bengal	Dra
13.	Ganga(Farakka)-Damodar-Subernarekha link	Ganga, Damodar and Subernarekha	West Bengal, Odisha and Jharkhand	Dra
14.	Subernarekha-Mahanadi link	Subernarekha and Mahanadi	West Bengal and Odisha	Dra
	Peninsular Component			
15.	Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	Mahanadi and Godavari	Odisha, Maharashtra, Andhra Pradesh, Karnataka, and Chattisgarh	FR
16.	Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	Godavari and Krishna	Odisha, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka and Chattisgarh,	FR
17.	Godavari (Inchampalli) - Krishna (Pulichintala) link	Godavari and Krishna	-do-	FR
18.	Godavari (Polavaram) - Krishna (Vijayawada) link	Godavari and Krishna	Odisha, Maharashtra, Andhra Pradesh, Karnataka, and Chattisgarh	FR
19.	Krishna (Almatti) - Pennar link	Krishna and Pennar	-do-	FR

20.	Krishna (Srisailam) - Pennar link	Krishna and Pennar	-do-	FR
21.	Krishna (Nagarjunasagar) - Pennar (Somasila) link	Krishna and Pennar	Maharashtra, Andhra Pradesh and Karnataka,	FR
22.	Pennar (Somasila) Palar-Cauvery (Grand Anicut) link	Pennar and Cauvery	Andhra Pradesh, Karnataka, Tamil Nadu, Kerala and Puducherry	FR
23.	Cauvery (Kattalai)-Vaigai - Gundar link	Cauvery, Vaigai and Gundar	Karnataka, Tamil Nadu, Kerala and Puducherry	FR
24.	Ken-Betwa link	Ken and Betwa	Uttar Pradesh and Madhya Pradesh	FR Cor DPI of M

1	2	3	4

25.	Parbati-Kalisindh-Chambal link	Parbati, Kalisindh and Chambal	Madhya Pradesh, Rajasthan and Uttar Pradesh (UP requested to be consulted during consensus building)	FR
26.	Par-Tapi-Narmada link	Par, Tapi and Narmada	Maharashtra and Gujarat	FR
27.	Damanganga - Pinjal link	Damanganga and Pinjal	Maharashtra and Gujarat	FR
28.	Bedti - Varda link	Bedti and Varda	Maharashtra, Andhra Pradesh & Karnataka	PFI
29.	Netravati - Hemavati link	Netravati and Hemavati	Karnataka, Tamil Nadu and Kerala	PFI
30.	Pamba - Achankovil - Vaippar link	Pamba, Achankovil and Vaippar	Kerala and Tamil Nadu,	FR

PFR - Pre Feasibility Report.

FR - Feasibility Report.

DPR - Detailed Project Report.

Statement

Categorization of Blocks/ Mandals/ Talukas in India (2013)

Sl. No.	States / Union Territories	Total No. of Assessed Units	Safe		Semi-critical		Critical		C
			Nos.	%	Nos.	%	Nos.	%	
1	2	3	4	5	6	7	8	9	
	States								
1.	Andhra Pradesh	670	497	74	54	8	17	3	
2.	Arunachal Pradesh	11	11	100	0	0	0	0	
3.	Assam	27	27	100	0	0	0	0	
4.	Bihar	534	520	97	14	3	0	0	
5.	Chhattisgarh	146	125	86	18	12	2	1	
6.	Delhi	27	5	19	7	26	0.	0	
7.	Goa	12	12	100	0	0	0	0	
8.	Gujarat	223	175	78	9	4	6	3	
9.	Haryana	119	30	25	11	9	14	12	
10.	Himachal Pradesh	8	6	75	0	0	1	13	
11.	Jammu and Kashmir	22	22	100	0	0	0	0	

12.	Jharkhand	260	244	94	10	4	2	1
13.	Karnataka	176	98	56	21	12	14	8
14.	Kerala	152	131	86	18	12	2	1
15.	Madhya Pradesh	313	228	73	58	19	2	1
16.	Maharashtra	353	324	92	19	5	1	0
17.	Manipur	9	9	100	0	0	0	0
18.	Meghalaya	11	11	100	0	0	0	0
19.	Mizoram	22	22	100	0	0	0	0
20.	Nagaland	11	11	100	0	0	0	0
21.	Odisha	314	308	98	0	0	0	0
22.	Punjab	138	26	19	3	2	4	3
23.	Rajasthan	248	44	18	28	11	9	4
24.	Sikkim	-	-	-	-	-	-	-
25.	Tamil Nadu	1139	429	38	212	19	105	9
26.	Telangana	443	311	70	74	17	12	3
27.	Tripura	39	39	100	0	0	0	0
28.	Uttar Pradesh	820	603	74	45	5	59	7
29.	Uttarakhand	18	16	89	1	6	1	6

1	2	3	4	5	6	7	8	9
30.	West Bengal	268	191	71	76	28	1	0
	Total (States)	6533	4475	68	678	10	252	4
	Union Territories							
1.	Andaman and Nicobar	34	34	100	0	0	0	0
2.	Chandigarh	1	1	100	0	0	0	0
3.	Dadra and Nagar Haveli	1	1	100	0	0	0	0
4.	Daman and Diu	2	1	50	0	0	1	50
5.	Lakshdweep	9	6	67	3	33	0	0
6.	Puducherry	4	2	50	0	0	0	0
	Total (UTs)	51	45	88	3	6	1	2
	Grand Total	6584	4520	69	681	10	253	4