

### **APPENDICES**

## Appendix-1 (Referred to in Paragraphs 4.2 and 4.6) Statement showing the detail of completed water supply schemes scrutinized in test-checked divisions

(₹ in lakh)

Sr.	Name of	Name of scheme	Approva	l	Programme	Stipulated	Date of	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount		period	completion	incurred	population	required to be covered	covered	requirement
1.	Baggi	LWSS Karnehra, Samlon, Pipli and Kotlu, Mandi district.	Nov-10	205.05	NRDWP	2 years	Sep-17	263.37	2863	16	16	9.33 litres per second
2.	Baggi	LWSS Moviseri & its adjoining villages, Mandi district.	Jun-13	371.09	NABARD	4 years	Oct-20	432.36	3025	42	42	289795 litres per day (LPD)
3.	Bilaspur	Improvement of LWSS Dalli, Bilaspur district.	Mar-12	104.97	NABARD	3 years	Nov-16	104.97	7632	14	14	667790 LPD
4.	Bilaspur	Providing LWSS to PC and NC hamlets of census villages in GP Kutehla, Tanbol and Talli Zakatkhana, Bilaspur district.	Oct- 09	375.14	NRDWP	4 years	May-17	365.12	7881	70	70	517193 LPD
5.	Bhoranj	Providing LWSS to PC habitation under LWSS Jakhyal phase-II and LWSS Karohata, Hamirpur district.	Oct-18	279.89	NRDWP	5 years	Oct-21	204.52	2766	20	20	242060 LPD
6.	Bhoranj	Providing Water supply to Harizan Basti Kathialwin under LWSS Karohta, Hamirpur district.	Feb-14	60.52	SCCP	3 years	Sep-20	69.18	640	1	1	56350 LPD
7.	Chamba	Augmentation of WSS Sach, Rathiyar, Bakatpur and Draman, Chamba district.	Mar-15	84.32	NABARD	3 years	Jul-20	138.67	2135	33	33	197610 LPD
8.	Chamba	Augmentation of all drought effected WSS in GP Uteep, Bat, Luddu and Belly from Ghrosan Nallah, Chamba district.	Jul-11	1286.27	NABARD	3 years	Apr-17	1400.97	13813	13	13	987844 LPD
9.	Chountra	PWSS to PC habitation under GP Matroo Badeher & Talkehar, Mandi district.	Jan-11	149.61	NRDWP	3 years	Dec-20	92.40	2939	5	5	271950 LPD
10.	Chountra	Providing Water supply to NC/PC habitation under WSS Dul Panjajan and Dagon, Mandi district.	Jan-11	244.62	NRDWP	4 years	Mar-18	168.44	1104	16	16	70 LPCD

Sr.	Name of	Name of scheme	Approva		Programme	Stipulated	Date of	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount		period	completion	incurred	population	required to be covered	covered	requirement
11.	Dalhousie	Augmentation of WSS to Village Jassure, Dukhar, Bharari and Tikkri, Chamba district.	Jan-09	60.77	SCCP	3 years	Dec-17	118.82	2557	61	61	354240 LPD
12.	Dalhousie	Augmentation of WSS Banooni Awan in G.P.Awan, Chamba district.	May-12	89.60	NABARD	3 years	Jul-18	84.77	2232	35	35	211290 LPD
13.	Dharamshala	Improvement of Water Supply Scheme to Dharamshala Town, Kangra district.	Mar-13	2085.00		5 years	Apr-17	3070.64	37777	NA	NA	10267855 LPD
14.	Dharamshala	Improvement and Augmentation of Water Supply Scheme of Dari Barol, Kangra district.	Oct-14		NABARD	4 years	May-19	192.00	9161	6	6	1509920 LPD
15.	Hamirpur	Improvement of LWSS Lagwalti Jangle and LWSS Bhatlamber, Hamirpur district.	May-12		NABARD	3 years	Oct-20	56.55	2765	2	2	70 litres per capita per day (LPCD)
16.	Hamirpur	Improvement of LWSS Kareri Takroon Gwal Pather and Hathol for improving WSS to Harijan Basties in Village Badhera Barta Kardi and Banoh, Hamirpur district.	Nov-15	48.52	SCCP	3 years	Mar-18	94.31	2955	11	11	70 LPCD
17.	Jhandutta	LWSS Barad Manan, Bilaspur district.	Jun-13	150.17	NABARD	3 years	Nov-18	159.84	2931	10	10	294775 LPD
18.	Jhandutta	LWSS to PC hab. of village Dhararsani and its adjoining villages and Aug. & Imp of LWSS to PC habitations of Nerus, Bhajwan & its adjoining villages, Bilaspur district.	Aug-12		NRDWP	3 years	Apr-18	241.03	3538	16	16	333180 LPD
19.	Kaza	Augmentation of LWSS Kaza in GP Kaza, Lahaul & Spiti district.	Jun-16	182.28	NABARD	3 years	Aug-20	489.56	1663	2	2	417555 LPD
20.	Kaza	Providing LWSS to NC/PC habitation of census village Tabo, Lahaul & Spiti district.	Jun-17		NRDWP	3 years	Oct-20	124.11	671	1	1	160160 LPD
21.	Keylong	Augmentation of LWSS Tandi, Lahaul & Spiti district.	Sep-16		TASP	4 years	Oct-20	34.85	194	1	1	23920 LPD
22.	Keylong	Prov. WSS to PC Habitation Gaushal, Lahaul & Spiti district.	Feb-18	20.36	NRDWP	3 years	Oct-19	13.82	419	1	1	35210 LPD

Sr.	Name of	Name of scheme	Approva		Programme	Stipulated	Date of	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount		period	completion	incurred	population	required to be covered	covered	requirement
23.	Kullu-1	Water Supply Scheme Dawara, Kullu district.	Jul-10		NABARD	3 years	May-16	88.35	1275	3	3	118410 LPD
24.	Kullu-1	Water Supply Scheme Dobhi Shim, Kullu district.	Oct-14		NABARD	3 years	Dec-20	83.97	696	2	2	Not available
25.	Mandi	Providing LWSS from Juni <i>Khad</i> to Upper Pandoh and its adjoining villages, Mandi district.	Oct-09		NABARD	3 years	Jul-16	410.89	6899	47	47	731690 LPD
26.	Mandi	PLWSS to NC/PC hab. Suka Kun and its adjoining villages in GP Baggi, Nichla Lot, Sai, Kasan and Sehli, Mandi district.	Oct-08		NRDWP	3 years	2017	482.32	6271	38	38	596480 LPD
27.	Matiana	LWSS to NC habitation Cheog Dadas and Dehan etc., Shimla district.	Mar-12	95.07	NRDWP	3 years	Nov-20	130.69	922	11	10	85330 LPD
28.	Matiana	Providing LWSS from Swari <i>Khad</i> (Behra <i>Khad</i> ) to vill. Nanja Gharal Kirty in GP Kirty, Shimla district.	Nov-13	260.09	NABARD	3 years	Feb-21	227.57	3167	16	16	318640 LPD
29.	Palampur	PWSS to PC habitation Banuri, Banuri Khas, Kangra district.	Mar-15	357.41	NRDWP	4 years	Dec-20	120.57	9440	6	6	868390 LPD
30.	Palampur	Water Supply scheme Jia Gopalpur Phase-1 <sup>st</sup> , Kangra district.	May-12	114.10	NABARD	5 years	Feb-20	122.10	6362	15	15	590145 LPD
31.	Rampur	Providing LWSS from Kashapat Khad to Dansa (in GP Dansa) via Pataina Kuhal and Chiksa, Shimla district.	Jan-13	1595.34	NABARD/ NRDWP	4 years	Aug-17	1913.62	8647	75	75	773488 LPD
32.	Rampur	LWSS Kharahan <i>Khad</i> to Jahu, Kofradhar in GP Kharahan, Shimla district.	Mar-12	285.43	NABARD	4 years	May-17	292.41	3384	33	33	322100 LPD
33.	Reckong Peo	Providing WSS from Chhamble to Pangi, Kinnaur district.	Mar-07	34.18	TASP	3 years	Apr-16	26.18	228	5	1	22820 LPD
34.	Reckong Peo	Providing WSS to NC/PC habitation Sosaring, Kinnaur district.	Sep-19	9.02	JJM	6 months	Dec-20	6.40	41	1	1	95 LPCD
35.	Salooni	Improvement of WSS Bachuni Pukhri Phase-II and WSS Danoon, Chamba district.	Apr-17	26.62	BASP	1 year	Feb-20	26.61	900	14	14	80025 LPD

Sr.	Name of	Name of scheme	Approval		Programme	Stipulated	Date of	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount		period	completion	incurred	population	required to be covered	covered	requirement
36.	Salooni	Remodeling/Augmentation of WSS Bhunad Bhalogi, Chamba district.	Jul-18	115.28	NABARD	3 years	Jun-21	119.40	1161	21	21	110380 LPD
37.	Shimla	LWSS Tube Well Mehli to Pujarli and adjoining villages, Shimla district.	Mar-08	352.82	NABARD	5 years	Jul-19	372.81	3895	24	24	745780 LPD
38.	Shimla	LWSS to Village Shirgulli Kadrain and Balghar Ghassigoan Madhog, Shimla district.	Sep-06	83.83	ARWSP/ NRDWP	4 years	May-16	135.62	1478	30	30	125770 LPD
39.	Thural	Improvement & Augmentation of source level LWSS Jharet Rajhoon & LWSS Kiarwan From Neugal <i>Khad</i> , Kangra district.	May-11	705.15	NABARD	1 year	Mar-20	662.61	9495	64	64	896735 LPD
40.	Thural	Providing LWSS to PC habitation of census village Khajurnu & Rapota, Kangra district.	Mar-11	97.49	NRDWP	3 years	Oct-17	106.88	945	6	6	87430 LPD
		Total		11646.65				13249.30	176867		456	

## Appendix-2 (Referred to in Paragraphs 4.6 and 4.8) Statement showing the detail of incomplete water supply schemes scrutinized in test-checked divisions

(₹ in lakh)

Sr.	Name of	Name of Scheme	App	roval	Program-	Stipulated	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount	me	period		population	required to be covered	covered	requirement
1.	Baggi	LWSS to PC habitation of Dhaban & Tanda in GP Dhaban & Lohara, Mandi district.	Jan-17	99.80	NRDWP	4 years	47.67	2208	3	0	313595 LPD
2.	Bilaspur	LWSS to PC habitation of Shira from Ali <i>Khad</i> , Bilaspur district.	Sep-12	105.72	NRDWP	4 years	70.83	1293	1	0	122100 LPD
3.	Bhoranj	Construction of LWSS Bagwar, Hamirpur district.	Sep-18	79.70	State	4 years	92.50	1148	4	0	1.80 LPS
4.	Chamba	LWSS for a group of village Samoh, Drabbla, Butkar, Bangotu Dhar, Seri Niula etc., Chamba district.	Jan-13	432.55	NABARD	3 years	435.80	3085	141	141	287340 LPD
5.	Chountra	Construction of Aug. of WSS Lad Bharol (Under SCCP), Mandi district.	Jul-17	79.32	SCCP	2 years	114.05	874	5	0	70 LPCD
6.	Dalhousie	Providing Lift Water Supply Scheme to cantonment Area Dalhousie, Chamba district.	Not obtained	0	NA	NA	NA	NA	NA	NA	NA
7.	Dharamshala	State of Art Water Treatment Plant for potable tapped water for Improvement of source of WSS Ramnagar Shamnagar, Kangra district.	Nov-18	546.00	Smart City	3 years	149.62	7862	2	0	2067095 LPD
8.	Hamirpur	Providing Separate drinking water supply scheme to village Loungni Karot, etc., Hamirpur district.	Jun-13	214.90	NABARD	5 years	262.47	4213	26	0	398560 LPD
9.	Jhandutta	LWSS Chounta Jangle Thatal, Bilaspur district.	Jul-18	93.99	NABARD	3 years	16.27	618	4	0	64330 LPD
10.	Kullu-1	Augmentation of WSS Raison Mali Pather in GP Raison & Bench, Kullu district.	Dec-14	255.82	NABARD	4 years	230.19	3755	15	15	349710 LPD

Sr.	Name of	Name of Scheme	App	roval	Program-	Stipulated	Expenditure	Present	Habitation	Actually	Water
No.	division		Month	Amount	me	period		population	required to be covered	covered	requirement
11.	Matiana	Augmentation of 8 Nos. LWSS in Matiana under IPH Sub-Division Matiana, Shimla district.	Mar-12	1279.00	NRDWP	5 years	941.71	14173	276	0	1189610 LPD
12.	Palampur	Construction of Providing WSS to NC/PC habitation under water supply scheme Kusmal Bagora, Kangra district.	Feb-12	61.88	ARWSP	5 years	59.32	1820	5	0	70 LPCD
13.	Rampur	LWSS from Machhada <i>Khad</i> to Khanewli Group of villages in GP Devnagar, Shimla district.	Feb-17	220.00	NABARD	4 years	268.59	1918	14	0	195650 LPD
14.	Salooni	Tapping additional source to WSS Hadla Banetu Phase-II in G.P. Brangal, Chamba district.	Mar-14	48.31	BASP	3 years	92.50	247	3	0	70 LPCD
15.	Thural	Augmentation of WSS Darang Dhoran Ghanetta, Kangra district.	Sep-11	234.00	NABARD	1 year	183.67	3996	6	0	375790 LPD
		Total		3750.99			2204.34				

# Appendix-3 (Referred to in Paragraph 4.6) Inadequate supply of water in completed schemes of selected divisions

Sr. No.	Name of division	Name of scheme	_	Total water requirement per day (in litres)	lifted/ available	beneficiaries in LPCD	Impact due to inadequate supply of water
1.	Hamirpur	Improvement of LWSS Lagwalti	3349	234430 (at the rate of 70 LPCD)	129216	39	Beneficiaries stated in survey that water is supplied insufficient in summer.
		Improvement of LWSS Kareri Takroon Gwal Pather and Hathol		203840 (at the rate of 70 LPCD)	64516	22	Acute shortage in summer (beneficiaries stated in survey)
2.	Mandi	LWSS Juni Khad to Upper Pandoh	7211	504770 (at the rate of 70 LPCD)		59	In survey, beneficiaries stated that village Chowki, GP Majhwad situated at the tail end of the scheme was facing water problem since long time. People were not getting required amount of water as they confirmed in the survey. They stated that written complaint (April 2021) was made to the Jal Shakti Minister of the State by all villagers but no action has been taken by the Jal Shakti Vibhag to resolve the problem of scarcity of water as of now. They further stated that alternative source i.e. hand pump installed was also non-functional.
		LWSS Suka Kun	7695	538650 (at the rate of 70 LPCD)	519020	67	The villagers of Bathar, Chalahar and Khajroun stated in survey that water supply was not regular (Once in 3 days).
3.	Matiana	LWSS Swari Khad to Nanja Gharal		169400 (at the rate of 70 LPCD)	146560	61	The beneficiaries of Kepu village in GP Kirty situated at the tail end of the scheme are facing a severe water problem. People are not getting required amount of water (only once in a week)

Sr.	Name of	Name of	Population	Total water	Water	Water	Impact due to inadequate
		scheme		requirement	lifted/ available during a day (in	supplied to beneficiaries in LPCD	supply of water
		LWSS Cheog Dadas	1057	73990 (at the rate of 70 LPCD)	64387	61	which they have confirmed in the survey. No action has been taken by the department to resolve the problem of water of the beneficiaries of Kepu village. Besides, water is supplied in alternate day for the beneficiaries of village Nanja and Gharal and twice a week in the village Kirty.  Village Jagora GP Dadas situated at the tail end of the scheme has a water
							sufficiency problem. People are not getting required amount of water which they confirmed in the survey (water being supplied from old gravity scheme). Water from new scheme is still not being supplied to the beneficiaries even though village was to be covered under this scheme. No action has been taken by the Department as of now to resolve the problem of scarcity of water to the village of Jagora.
4.	Rampur	LWSS Kashapat to Dansa	9791 3832	the rate of 70 LPCD)	424899 221021	43	Water insufficiency in village Keem during summer as stated in survey by the beneficiaries.
		Kharahan Khad to Jahu etc.		268240 (at the rate of 70 LPCD)	221021		Irregular supply of water (once in week) in Rera village as stated in survey by the beneficiaries.
5.	Shimla	LWSS Mehli Pujarli	5534	664080 (at the rate of 120 LPCD)	403200	requirement	Beneficiary of Dhamechi intimated in survey that 15 connections against norm of 6 connections from half inch distribution pipe were released, due to which insufficient water is being received.

 Name of division	Name of scheme	as per	• '	lifted/	beneficiaries in LPCD	Impact due to inadequate supply of water
						Beneficiary intimated in survey that the habitations i.e. Malai and Dhala of Dhamechi were not connected with the scheme so for. Beneficiaries intimated that supply of water is not regular/ proper

**Source: Information supplied by the Department** 

<sup>\*</sup>Note-Present population (2021) has been calculated on the basis of population given in DPRs of the schemes.

Appendix-4
(Referred to in Paragraph 5.3 (ii))
Details of parameters for water quality tests conducted by laboratories in test-checked divisions

Name of laboratory	Hd	Turbidity	TDS	Total Hardness	Alkalinity	Fluoride	Chloride	Sulphate	Nitrate	Arsenic	Iron	Total coliform	E. coli
Baggi	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	No
Bhoranj	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	No
Bilaspur	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes
Chamba	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Dalhousie	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes
Dharamshala	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Hamirpur (at Hathli)	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes
Hamirpur (Didwin Tikker )	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	No
Jhanduta (at Ghumarwin)	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	No
Kaza	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Kullu (at Katrain)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No
Kullu (at Shamshi)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Keylong	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes
Mandi	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes
Matiana (at Thoeg)	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes
Palampur (at Panchrukhi)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Reckong Peo	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes
Rampur	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Salooni (at Koti)	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes
Thural	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No

**Source: Information supplied by the Department.** 

### Appendix-5 (Referred to in Paragraph 5.5) Statement showing the detail of availability of staff in the test-checked laboratories

No.	Name of Division	Name of laboratory	Ass che w an	emist/ istant emist/ ater alyst	Bacte	biologist/ eriologist	Assi	istant	Attei	ab ndant	En Ope	ata try rator	Assi	pling stant
			SS	PIP	SS	PIP	SS	PIP	SS	PIP	SS	PIP	SS	PIP
1.	Baggi	SD Lab at	1	1 (R)	1	0	2	1	1	0	1	0	2	0
		Baggi												
	Bhoranj	SD Lab at Bhoranj	1	1 (0)	1	0	2	1	1	0	1	1	2	0
3.	Bilaspur	Distt. Lab at Bilaspur	1	1 (R)	1	0	2	1	1	1	1	0	2	0
4.	Chamba	Distt. Lab at Chamba	1	1 (C)	1	0	2	0	1	0	1	0	2	0
5.	Dalhousie	SD Lab at Banikhet	1	0	1	0	2	1	1	0	1	0	2	0
6.	Dharamshala	Distt. Lab at Dharamshala	1	1 (C)	1	0	2	1	1	0	1	0	2	0
7.	Hamirpur	SD Lab at Didwin Tikker	1	1 (C)	1	0	2	1	1	0	1	0	2	0
8.	Jhandutta*	SD Lab at Ghumarwin	1	1 (R)	1	0	2	1	1	0	1	0	2	0
9.	Hamirpur	Distt. Lab at Hamirpur	1	1 (C)	1	0	2	1	1	0	1	0	2	0
10.	Kullu-1	SD Lab at Katrain	1	0	1	0	2	1	1	0	1	0	2	1
11.	Kaza	SD Lab at Kaza	1	1 (0)	1	0	2	0	1	0	1	0	2	0
12.	Keylong	Distt. Lab at Keylong	1	1 (0)	1	0	2	0	1	0	1	1	2	1
13.	Kullu-1	Distt. Lab at Kullu	1	1 (R)	1	0	2	0	1	0	1	0	2	1
14.	Mandi	Distt. Lab at Mandi	1	1 (0)	1	0	2	1	1	0	1	0	2	2
	Palampur	SD Lab at Panchrukhi	1	0	1	0	2	2	1	0	1	0	2	0
16.	Rampur	SD Lab at Rampur	1	1 (R)	1	0	2	1	1	0	1	0	2	0
	Reckong Peo	Distt. Lab at Reckong Peo	1	1 (R)	1	0	2	0	1	0	1	0	2	0
	Salooni	SD Lab at Koti**	1	1 (C)	1	0	2	0	1	0	1	0	2	0
	Matiana	SD Lab at Theog	1	1 (C)	1	1	2	1	1	0	1	0	2	0
20.	Thural	SD Lab at Thural	1	1 (C)	1	0	2	1	1	1	1	0	2	0
	Total		20	17	20	1	40	15	20	2	20	2	40	5

Source: Information supplied by the Department. Note: C: Contract; O: Outsourced; and R: Regular.

<sup>\*</sup> Sub-divisional laboratory is under Jal Shakti Division Ghumarwin. The water samples of JSD Jhandutta were tested in sub-divisional laboratory Ghumarwin.

<sup>\*\*</sup> Sub-divisional laboratory is under Jal Shakti Division Tissa. The water samples of JSD Salooni were tested in sub-divisional laboratory Koti.