(Reference: Paragraphs 1.2 & 1.3; Page 3, 4)

Details of Rural and Urban Water Supply Schemes

Rural Water Supply Schemes:

Rural Water Supply Schemes are financed through State Schemes and Centrally Sponsored Schemes on the basis of their funding pattern.

Centrally Sponsored Scheme

(i) National Rural Drinking Water Programme (NRDWP) now renamed as Jal Jeevan Mission (JJM):

NRDWP was renamed as JJM w.e.f. 15th August 2019. JJM, is intended to provide safe and adequate drinking water through individual household tap connection by 2022 in rural Haryana area. JJM has three main components viz. Coverage, Support Activities & WQMS. The funding pattern for Coverage is 50:50 whereas for Support Activities and WQMS it is 60:40 as Central and State share respectively.

(ii) National Institution for Transforming India (NITI) Aayog Assistance/Scheme: To tackle the Quality Affected Habitations (QAH) and to provide immediate intermediate solution in form of Community Water Purification Plants (CWPP) to quality affected habitations, NITI Aayog provided one time (March 2016) central assistance out of its own fund.

State Plan Schemes

- (i) Augmentation Rural Water Supply Programme: This is a 100 per cent State Sector scheme. Under this programme, the existing drinking water supply facilities are improved / strengthened in the villages by undertaking an array of activities which amongst other include Drilling additional tubewells, Augmentation of existing canal based schemes, Creating new canal based water works, Constructing boosting stations, Strengthening of existing distribution system.
- (ii) National Bank for Agriculture and Rural Development (NABARD) Aided Schemes: In order to accelerate the implementation of augmentation of major rural drinking water supply schemes, the State has been availing funding from NABARD since 2000-2001 against various projects. NABARD has been partnering the State Government in the creation of an extensive infrastructure in the rural areas. The funding pattern is 85:15 with 85 *per cent* coming from NABARD as a loan component whereas 15 *per cent* is contribution of the State.
- (iii) Special Component Sub Plan (SCSP) (Rural): Under the Special Component Sub Plan, drinking water facility is provided/ upgraded in the villages/habitations predominantly inhabited by scheduled caste households. The funds allocated under SCSP are to be exclusively utilised for the welfare of

the Scheduled Castes and other disadvantaged section of the society towards objective of ensuring equity and empowerment, particularly of women.

- **(iv) Swaran Jayanti Mahagram Yojana Rural Water Supply:** Under this scheme, 132 villages having population of around 10,000 persons were planned to be provided with water supply and sewerage facility in three phases at par with urban area. Under this scheme water supply @ 135 LPCD is to be provided in the selected villages.
- (v) Mahatma Gandhi Gramin Basti Yojana (MGGBY): Mahatma Gandhi Gramin Basti Yojana (MGGBY) was launched in the State of Haryana during the year 2008-09 for the benefit of poorer sections of the society. Under this scheme, the State Government allotted free residential plots to the beneficiaries and the work of laying of water supply pipelines was to be done by the PHED as a deposit work of the Development and Panchayat Department.

Urban Water Supply Schemes

For water supply in urban areas, various Centrally Sponsored schemes and State schemes are implemented, the details are as follows:

Centrally Sponsored Schemes

(i) AMRUT: The Government of India, Ministry of Urban Development launched a scheme namely Atal Mission for Rejuvenation and Urban Transformation (AMRUT) in June, 2015 with the objective to ensure that every household has access to a tap with assured supply of water and a sewerage connection. The scope of work under the water supply component in AMRUT is to ensure that every household has access to a tap with assured supply of water, augmentation/rehabilitation of existing water supply schemes, water treatment Plants and universal metering.

State Sponsored Schemes

- (i) Urban Water Supply State Plan: This scheme/programme is being operated in all 87 towns (83 notified and 4 de-notified) which are under the jurisdiction of PHED. Under this programme, the existing drinking water supply facilities are being improved/ strengthened in the urban areas.
- (ii) **Urban NCR (Water Supply)**: This scheme/programme is being operated in National Capital Region (NCR) towns falling in eight districts of the state viz. Gurugram, Mewat, Rohtak, Sonipat, Rewari, Jhajjar, Panipat and Palwal.

Appendix-2

(Reference: Paragraph 1.3; Page 3)

Details of towns and areas under PHED, ULB and HSVP

	Nam	e of towns	which are under jurisd	iction of PH	ED		
Sr. No.	Name of Town	Sr. No.	Name of Town	Sr. No.	Name of Town		
			Notified Towns				
1.	Ambala City	2.	Jhajjar	3.	Pinjore		
4.	Assandh	5.	Jind	6.	Pundri		
7.	Ateli Mandi	8.	Julana	9.	Punhana		
10.	Bahadurgarh	11.	Kaithal	12.	Radaur		
13.	Barara	14.	Kalanaur	15.	Rania		
16.	Barwala	17.	Kalanwali	18.	Ratia		
19.	Bawal	20.	Kalayat	21.	Rewari		
22.	Bawani Khera	23.	Kalka	24.	Rohtak		
25.	Beri	26.	Kanina	27.	Safidon		
28.	Bhiwani	29.	Kharkhoda	30.	Samalkha		
31.	Charkhi Dadri	32.	Kurukshetra	33.	Sampla		
34.	Cheeka	35.	Ladwa	36.	Shahbad		
37.	Dharuhera	38.	Loharu	39.	Sirsa		
40.	Ellenabad	41.	Mahendragarh	42.	Siwani		
43.	F. P. Zhirka	44.	Mandi Dabwali	45.	Sohna		
46.	Farukh Nagar	47.	Meham	48.	Taoru		
49.	Fatehabad	50.	Naraingarh	51.	Taraori		
52.	Ganaur	53.	Nangal Chaudhary	54.	Tohana		
55.	Gharaunda	56.	Narnaul	57.	Uchana		
58.	Gohana	59.	Narnaund	60.	Yamuna Nagar		
61.	Haily Mandi	62.	Narwana	63.	Uklana Mandi		
64.	Hansi	65.	Nilokheri	66.	Bass		
67.	Hathin	68.	Nissing	69.	Bhuna		
70.	Hisar	71.	Nuh	72.	Ismaliabad		
73.	Hodel	74.	Palwal	75.	Rajound		
76.	Indri	77.	Panipat	78.	Sadhuara		
79.	Jagdhari	80.	Pataudi	81.	Sisai		
82.	Jakhal	83.	Pehowa				
Denotified Towns							
1.	Chhachrauli	2.	Tosham	3.	Hassanpur		
4.	Kosli						
		Name of to	owns under jurisdiction	n of ULB			
1.	Karnal	2.	Sonepat	3.	Faridabad		
4.	Gurugram						
		Name of to	own under jurisdiction	of HSVP			
1.	Panchkula						

^{*} In all towns, where sectors have been developed by HSVP, water supply is maintained by HSVP.

^{**} Notified town are towns those notified under law by the concerned state and have local bodies like Municipal Corporations/Councils/Committees irrespective of their demographic characteristics.

^{***}De-notified towns are towns those which were previously falls under the category of notified towns but due to any reason as of now they are not falling under the category of notified town.

(Reference: Paragraph 1.4 (III); Page 6)

Organisation structure of implementing agencies

Organisational structure of Haryana Shehri Vikas Pradhikaran

Chief Administrator at the Headquarters is the overall in charge and responsible for discharging the functions of the Authority. He is assisted by five Zonal Administrators, posted at Faridabad, Gurugram, Hisar, Panchkula and Rohtak and one Administrator at Headquarters. The CA is guided by the policies framed by the Authority headed by the Minister-in-charge (designated as the Chairman of the Authority) of the Town & Country Planning Department (TCPD).

Additional Chief Secretary
Chief Administrator
Zonal Administrator
Chief Engineer
Superintending Engineer
Executive Engineer

Organisational structure of Urban Local Bodies

The ULBs Department, headed by the Additional Chief Secretary, is the nodal department for the governance of all ULBs. The Directorate of Urban Local Bodies (DULB) functions as an interface between the State Government and ULBs. In accordance with the powers conferred under the HM Act, 1973 and HMC Act, 1994, the DULB administers, facilitates, co-ordinates and monitors the ULBs.

Additional Chief Secretary
Director
Municipal Commissioner
Chief Engineer
Superintending Engineer
Executive Engineer

(Reference: Paragraph 1.7; Page 7)

Detailed Audit Methodology

Out of 22 districts, 20 districts were divided in two equal categories/strata (10 district in each group) after arranging the districts in decreasing order of total weightage based on expenditure, area, rural and urban population, average rainfall & over exploited blocks. Thereafter, random sampling was done through Computer Assisted Audit Techniques (CAAT) and total seven districts were selected from both the strata. One additional district, Panchkula was selected as water supply in Panchkula town is being maintained by Haryana Shehri Vikas Pradhikaran (HSVP). As part of this audit, dump data of PHED as available with the department was analysed in detail. Audit was conducted at 36 offices including offices at directorate level during field study. Further, to verify the coverage, survey was conducted in MGGBY bastis in villages of selected districts. In addition to this, some locations were selected in these districts for assessment of:

- (i) Quantity of water supplied by installation of flow meters and sub-meters and noting down their one month reading and applying mathematical calculations.
- (ii) Quality of water by jointly collecting samples with departmental representatives and sending the samples to privately hired lab (third party) as well as to State Water Testing Laboratory of PHED at Karnal.
- (iii) Quantity and quality of water by conducting beneficiary survey. Beneficiary survey was conducted from 3 August 2022 to 8 August 2022. A total of 20 locations were selected and 30 beneficiaries from each location were chosen depending upon availability. Overall, 617 beneficiaries (PHED: 243; MCs: 254 & HSVP: 120) were surveyed.

Offices covered during Field Study

Sr. No.	District	Name of office	Number of offices
1.	Hisar	Executive Engineer, Public Health Engineering Divisions No.1, No.2 No.3 and Hansi	7
		Municipal Corporation	
		Executive Engineer, Haryana Shehri Vikas Pradhikaran Divisions No.1 & No.2	
2.	Kurukshetra	Executive Engineer, Public Health Engineering Division	2
		Executive Engineer, Haryana Shehri Vikas Pradhikaran Division, Ambala (Sub-division Kurukshetra)	

Sr. No.	District	Name of office	Number of offices
3.	Panchkula	Engineer-in-Chief, PHED	7
		Director, Urban Local Bodies	
		Municipal Corporation	
		Chief Administrator, HSVP	
		Executive Engineer, PHED	
		Executive Engineer, HSVP Divisions No.1 & No. 2	
4.	Rewari	Executive Engineer, PHED (Rewari, Bawal, Kosli)	5
		Executive Engineer, HSVP Division	
		Municipal Council	
5.	Fatehebad*	Executive Engineer, PHED, Fatehebad and Tohana	2
6.	Karnal	Executive Engineer, PHE Division No.1 & No. 2	4
		Municipal Corporation	
		Executive Engineer, HSVP Division	
7.	Rohtak	Executive Engineer, PHE Division No.1 & No. 2	5
		Municipal Corporation	
		Executive Engineer, HSVP Division No.1 & No. 2	
8.	Faridabad	Executive Engineer, PHE Division,	4
		Municipal Corporation	
		Executive Engineer, HSVP Divisions No.1 & No. 3	
		Total	36

^{*} HSVP area of Fatehabad district falls under the jurisdiction of HSVP Division no. 2, Hisar.

(Reference: Paragraph 2.7 (b); Page 17)

Details of villages covered for survey under MGGBY

Sr. No.	Name of District	Name of Block	Name of Village	Sr. No.	Name of District	Name of Block	Name of Village
1	Faridabad	Ballabgarh	Atali	23	Kurukshetra	Ismailabad	Dhangali
2	Faridabad	Ballabgarh	Malerna	24	Kurukshetra	Ismailabad	Mandi
3	Faridabad	Ballabgarh	Samaipur	25	Kurukshetra	Pehowa	Arnaicha
4	Faridabad	Faridabad	Bhainsrawali	26	Kurukshetra	Pehowa	Chanalheri
5	Faridabad	Faridabad	Kheri Kalan	27	Kurukshetra	Pehowa	Saina Saidan
6	Faridabad	Faridabad	Tajupur	28	Panchkula	Pinjore	Khokhra
7	Fatehabad	Fatehabad	Badopal	29	Panchkula	Pinjore	Patter
8	Fatehabad	Fatehabad	Dariyapur	30	Panchkula	Pinjore	Tibbi
9	Fatehabad	Fatehabad	Nagpur	31	Panchkula	Raipur Rani	Naraynpur
10	Fatehabad	Ratia	Alipur Barota	32	Panchkula	Raipur Rani	Natwal
11	Fatehabad	Ratia	Hukmawali	33	Panchkula	Raipur Rani	Raipur Rani
12	Fatehabad	Ratia	Rozanwali	34	Rewari	Dharuhera	Asiyaki Tappa Jarthal
13	Hisar	Barwala	Behbalpur	35	Rewari	Bawal	Jaliawas
14	Hisar	Barwala	Kheri Barki	36	Rewari	Bawal	Bolni
15	Hisar	Barwala	Bhada Khera	37	Rewari	Bawal	Khandola
16	Hisar	Hisar-1	Mirkan	38	Rewari	Rewari	Gendokher
17	Karnal	Nilokheri	Barani Khalsa	39	Rewari	Rewari	Kishangarh
18	Karnal	Nilokheri	Kurak Jagir	40	Rewari	Rewari	Nand Rampurpass
19	Karnal	Nilokheri	Sohlon	41	Rohtak	Lakhan Majra	Sunderpur
20	Karnal	Indri	Patehra	42	Rohtak	Rohtak	Dobh
21	Karnal	Indri	Butan Kheri	43	Rohtak	Rohtak	Kabulpur
22	Kurukshetra	Ismailabad	Bhusthala	44	Rohtak	Rohtak	Taja Majra

Status of water supply during physical verification MGGBY

Total village selected	Villages where water supply service was available	Villages where water supply service was not made available	Percentage of villages not having water supply services
44	27	17	39

Appendix-6

(Reference: Paragraph 2.8; Page 18)

Details of non-functional tube-wells due to pending electric connections

İ							
Sr. No	Name of Scheme/ Name of Tubewell Consty.	Name of Consty.	Name of division	Year	No. of TWs	Date of Drilling	Status
	Nathera	Kosli	Kosli	2020-21	1	17 January 2021	Electric Connection not Released
2.	Shadipur	Kosli	Kosli	2020-21	1	18 January 2021	Electric Connection not Released
3.	Kheri Ramgarh	Kosli	Kosli	2020-21	1	20 December 2020	Electric Connection not Released
	Siha	Kosli	Kosli	2020-21	1	24 November 2020	Electric Connection not Released
	Uncha	Kosli	Kosli	2020-21	1	14 December 2020	Electric Connection not Released
6.	Majra Gurdas	Rewari	Rewari	2019-20	1	12 September 2020	Electric Connection not Released

(Reference: Paragraphs 3.4.1, 3.4.2 & 3.4.3; Page 23, 24)

Details of outstanding water charges

(a) Outstanding water charges in PHED

(₹ in crore)

Sr.	Name of Division		Rural		Urban		
No.		Total revenue which was to be realized	Total Revenue realized	Balance	Total revenue which was to be realized	Total Revenue realized	Balance
1	No. 1, Hisar	24.85	1.10	23.75	10.40	2.06	8.34
2	No.2, Hisar	32.69	0.87	31.82	15.53	13.44	2.09
3	Hansi		Not provided		5.29	4.79	0.50
4	Fatehabad	4.32	0.54	3.78	3.34	3.34 0.14 3	
5	Tohana	17.26	1.02	16.24	10.22	6.14 4	
6	Kurukshetra	14.23	1.24	12.99	45.81	13.72 32.	
7	No.1, Karnal	2.33	0.86	1.47	4.41	3.29 1.12	
8	No.2, Karnal	6.93	1.04	5.89	3.59	3.59 3.07 0.5	
9	Panchkula	7.84	1.45	6.39	10.67	10.67 5.94 4.	
10	Rewari	1.23	0.17	1.06	17.55	17.55 11.84 5	
11	Bawal	10.98	0.44	10.54	3.76	1.55	2.21
12	Kosli	2.37	0.02	2.35	1.97	1.97 0.19 1.	
13	Faridabad	3.14	0.13	3.01	NA		
14	No.1, Rohtak	Not provided			2.93 1.25 1.68		
15	No.2, Rohtak		Not provided			Not provided	
	Total	128.17	8.88	119.29	135.47	67.42	68.05

Data of rural areas in Hansi and non-domestic connection in Tohana was not provided. In Kosli, data is available from 08/2019 onwards.

(b) Outstanding water charges in HSVP

Sr. No.	Sr. No. Name of Divisional Office			
1	Executive Engineer, Haryana Shehri Vikas Pradhikaran No 2, Hisar	0.95		
2	Executive Engineer, Haryana Shehri Vikas Pradhikaran No 1, Panchkula	2.16		
3	3 Executive Engineer, Haryana Shehri Vikas Pradhikaran No 2, Panchkula			
4	Executive Engineer, Haryana Shehri Vikas Pradhikaran, Faridabad	3.23		
5	Executive Engineer, Haryana Shehri Vikas Pradhikaran, Rewari	0.79		
6	Executive Engineer, Haryana Shehri Vikas Pradhikaran, Rohtak	7.16		
7	Executive Engineer, Haryana Shehri Vikas Pradhikaran, Karnal	4.2		
8.	Executive Engineer, Haryana Shehri Vikas Pradhikaran, Ambala (Subdivision Kurukshetra)	0.40		
	Total	19.18		

(c) Outstanding water charges in MCs

Sr. No.	Name of Unit	Amount Outstanding as on 31 March 2021 (₹ in crore)		
1	Municipal Corporation, Faridabad	30.04		
2	Municipal Corporation, Karnal	41.64		
	Total	71.68		

Appendix-8

(Reference: Paragraph 3.5; Page 24)

Details of Community Contribution Collection

Sr. No.	District	Total No. of Gram Panchayats under the jurisdiction of the department	10 per cent community contribution amount to be collected from Gram Panchayats (₹ in lakh)	10 per cent community contribution amount collected from Gram Panchayats (₹ in lakh)	Balance amount of community contribution to be collected from Gram Panchayats (₹ in lakh)
1.	Panipat	175	162.07	8.30	153.77
2.	Mahendragarh	341	21.50	0.70	20.80
3.	Karnal	379	560.18	15.80	544.38
4.	Fatehabad	256	750.10	8.20	741.90
5.	Ambala	397	354.85	2.20	352.65
6.	Jhajjar	247	384.31	1.70	382.61
7.	Yamunanagar	471	386.86	1.60	385.26
8.	Kurukshetra	392	363.62	0.80	362.82
9.	Kaithal	277	478.56	0	478.56
10.	Sonipat	311	455.76	0	455.76
11.	Rohtak	139	479.45	0	479.45
12.	Faridabad	116	163.69	0	163.69
13.	Gurugram	162	137.05	0	137.05
14.	Rewari	358	417.92	0	417.92
15.	Palwal	259	115.37	0	115.37
16.	Charkhi Dadri	166	10.42	0	10.42
17.	Nuh	317	699.57	0	699.57
18.	Bhiwani	304	57.16	0	57.16
19.	Jind	297	430.58	0	430.58
20.	Hisar	299	78.14	0	78.14
21.	Sirsa	338	277.19	0	277.19
22.	Panchkula	128	191.92	0	191.92
	Total	6,129	6,976.27	39.30	6,936.97

Appendix-9

(Reference: Paragraph 4.1; Page 29)

Assessment of quantity of water supplied by installing flow meters

Requirement Remarks as per norms		70 Below	70 Below	70 Below	70 Below	55 Excess	55 Excess	55 Excess	70 Below	70 Below	135 Below	70 Below	70 Excess		135 Below	135 Excess	135 Below	135 Below	135 Below	135 Below	135 Below	135 Below	135 Below	
*LPCD 1		09	3	3	62	79	78	150	32	7	6	0.45	81.12		105.54	229.85	128.01	103.69	104.47	42.45	105.68	112.45	83.40	
Total days		09	4	61	112	117	62	85	81	83	<i>L</i> 9	35	74		116	94	110	118	115	116	154	116	112	
Date of last reading of flow meter		18 September 2022	04 October 2022	30 September 2022	29 September 2022	29 September 2022	07 October 2022	04 October2022	04 October 2022	07 October 2022	29 September 2022	09 October 2022	11 October 2022		21 September 2022	21 September 2022	21 September 2022	21 September 2022	21 September 2022	21 September 2022	21 September 2022	21 September 2022	21 September 2022	
Reading of flow meter (in cubic meter)		4,773.00	57.00	681.00	24,586.00	58,033.00	44,729.00	8,563.00	9,912.49	3,110.00	65.07	88.90	38,459.00		35,505.00	62,657.00	40,836.00	26,919.00	34,840.00	14,279.00	47,197.00	28,698.00	65,388.00	
Date of installation of flow meter		20 July 2022	01 October 2022	01 August 2022	10 June 2022	05 June 2022	21 July 2022	12 July 2022	16 July 2022	17 July 2022	25 July 2022	05 September 2022	30 July 2022		29 May 2022	20 June 2022	04 June 2022	27 May 2022	30 May 2022	29 May 2022	29 April 2022	29 May 2022	02 June 2022	
Population as of 2022		1,321	4,671	3,483	3,562	6,250	7,255	671	3,818	5,352	110	5,588	6,407		2,900	2,900	2,900	2,200	2,900	2,900	2,900	2,200	7,000	
Population as per census 2011		1,083	3,829	2,855	2,920	5,123	5,947	955	3,130	4,387	Not available	4,581	5,252		2,000	2,000	2,000	1,500	2,000	2,000	2,000	1,500	200	
Name of TW/WW	tment (PHED)	Karnadi	Jeora	Juddi	Khaleta	Kalsora-3	Katesra	Kalwa	Koth Khurd	Kabrel	Kasturba Sewa Sadan	Khijuri	Dhingsara	an (HSVP)	T/Well No. S-2, Sec-2, PKL	T/Well No. Golf Course Sec-3, Pkl	T/Well No. Peer Baba I/A Ph-I, PKl	T/Well No. 5, Sec-11, PKL	T/Well No. 5, Sec-12, PKL	T/Well No. 6, Sec-6, PKL	T/Well No. S-18, Sec-4, PKL	T/Well No. M-11, Sec-17, PKL	T/Well No. M-27, Sec-9, PKL	
Name of Division	Public Health Engineering Department (PHED)	PHED Tohana	PHED Hisar-2	PHED Kosli	PHED Bawal	PHED Karnal-2	PHED Rohtak-1	PHED Kurukshetra	PHED Hansi	PHED Hisar-1	PHED Faridabad	PHED Rewari-1	PHED Fatchabad	Haryana Shehri Vikas Pradhikaran (HSVP)	HSVP No 1	Division, Panchkula								
District	Public Health	Fatehabad	Hisar	Rewari	Rewari	Karnal	Rohtak	Kurukshetra	Hisar	Hisar	Faridabad	Rewari	Fatchabad	Haryana She	Panchkula									

District	Name of Division	Name of TW/WW	Population	Population	Population Date of installation	Reading of flow	Date of last reading	Total	*LPCD	Requirement	Remarks
			as per census 2011	as of 2022	of flow meter	meter (in cubic meter)	of flow meter	days	status	as per norms	
	No 2, Panchkula	E-21, Sector 26, Panchkula	009	612	09 June 2022	22,677.00	18 October 2022	132	280.72	135	Excess
		Ashaina, Sector 28, Panchkula	630	643	04 June 2022	16,795.00	18 October 2022	137	82'061	135	Excess
		E-14, Sector 28, Panchkula	1,220	1,244	04 June 2022	38,941.00	18 October 2022	137	228.42	135	Excess
		E-1, Sector 31, Panchkula	009	612	25 June 2022	16,924.00	18 October 2022	116	238.39	135	Excess
Kurukshetra	Ambala	Sector 2, Water Works		2,000	14 September 2022	1,520.00	19 October 2022	36	21.11	135	Below
		Tubewell No 08, Sector 13, Kurukshetra		2,600	2,600 14 September 2022	785.00	19 October 2022	36	8.39	135	Below
		Tubewell No 4, Sector 13, Kurukshetra		2,600	2,600 21 September 2022	1,077.00	19 October 2022	29	14.28	135	Below
		Tubewell No 2, Sector 03, Kurukshetra		3,300	05 October 2022	00'86L	19 October 2022	14	17.27	135	Below
		Tubewell No 3, Sector 04, Kurukshetra		5,400	09 October 2022	00'66	19 October 2022	10	1.83	135	Below
		Tubewell No 7, Sector 05,		5,000	08 October 2022	821.00	19 October 2022	11	14.93	135	Below

* LPCD assessment: {Reading of flow meter (in cubic meter) X 1000}/ (No. of days X Total Population)

(Reference: Paragraphs 4.2 & 4.2.2; Page 30, 31)

Audit Methodology for assessment of sanctioned discharge by I&WRD and storage tank capacity

The said dump data of eight selected district was analysed and accordingly information viz. name of waterworks, village name, division name, original discharge, canal closure, canal running, population (as per census 2011) were extracted from the data damp. Prospective population for year 2021 was taken in calculation by considering two *per cent* increase per year in the population (census 2011) provided in data dump. To calculate the required discharge of raw water from Irrigation Department, calculation (as detailed below) was done by taking prospective population for the year 2021, canal running days, canal closure days, 55 LPCD requirement for Non DDP areas and 70 LPCD requirement for DDP areas while working out the actual sanctioned water as follows:

Total cusec of water required during canal running and closure days (Raw water discharge required):

Total requirement of water in litre: Total Population * LPCD (55/70) + 15 per cent evaporation losses

Conversion of Water requirement in Litre to Gallons: Total water required in litre/4.54

Conversion of Water requirement in Gallons to cusec: (Gallons/25)* 4 per second

Total water requirement in cusec = (Water requirement in Gallons * (canal running days + canal closure days) * 4)/ (25 * 60 * 60 * 24 * canal running days)

Further analysis of dump data, some additional information viz. name of waterworks, village name and code, Division name, S&S tank capacity, original discharge, canal closure, canal running, population (as per census 2011) were extracted for checking the storage capacity of Storage & Sedimentation tank. For the required capacity of S&S tank during the closure period of canal, audit worked out the capacity of the S&S tanks by taking prospective population for the year 2021, canal running days, canal closure days, S&S tank capacity, evaporation losses @ 15 per cent, 55 LPCD requirement for Non DDP areas and 70 LPCD requirement for DDP areas as follows:

Total capacity of S&S tank required during closure period of canal:

{Total Population * LPCD (55/70) * Canal closure days + 15 per cent evaporation losses}.

Appendix-11

(Reference: Paragraph 4.2.1; Page 30)

Water works/Cases with less sanctioned discharge against the water requirement of 55 LPCD

per cent of	less sanction	∞	31	5	29	23	12	30	33	4	31	75	11	24	36
less	sanction	0.04	0.16	90'0	0.24	0.09	0.14	0.19	0.16	0.04	0.34	0.74	60'0	0.24	0.31
Discharge	Required	0.52	0.51	1.05	0.84	0.39	1.21	0.64	0.49	1.08	1.09	66.0	0.83	1.02	0.87
Original	Discharge	0.48	0.35	1.00	09'0	0.30	1.07	0.45	0.33	1.04	0.75	0.25	0.74	0.78	0.56
Daily water	Requirement+15 per cent	3,28,963	3,09,609	6,62,987	3,70,139	2,47,814	7,38,887	3,93,415	2,69,888	5,93,981	6,01,634	5,49,137	4,55,780	5,62,799	4,80,131
Population	2021	5,201	4,895	10,482	5,852	3,918	11,682	6,220	4,267	9,391	9,512	8,682	7,206	868'8	7,591
Entered	Population	4,334	4,079	8,735	4,877	3,265	9,735	5,183	3,556	7,826	7,927	7,235	900'9	7,415	6,326
Canal	Running	7	8	7	7	7	8	8	7	7	7	7	7	7	7
Canal	Closure	20	24	20	32	20	24	24	24	24	24	24	24	24	24
Type of	inlet canal.csv)	Minor	Minor	Minor	Minor	Distributory	Distributory	Minor	Minor	Distributory	Sub-Branch	Minor	Distributory	Distributory	Minor
Irrigation	Canal Name	1/L Katesra	Bhutain	Dharana	Katesra	Bond	Kahanuar	Titoli	Nidana	Dulhera	Bhiwani	Mokhra	Bhalaut	Dulhera	Jasrana
O Ro		22887R	2600 R	7002L	15291 L	2975-L	43120L	9206L	5375 L	48500L	71400-L	47023 L	14500 R	40800	73200-L
Village Name		GUDHAN	GURNAUTHI	KAHANAUR	ANWAL	KHERARI	CHIRI	GURAUTHI	NIDANA	ISMAILA 11 BISWA	GIRAWAR	MADINA KORSAN	PAKASMA	KHARAWAR	SAMCHANA
District Division Water Works Name		Rohtak-1 WW-ROH-GUDHAN GUDHAN	WW-ROH- GARNAUTHI	WW-ROH- KAHNAUR	WW-ROH-ANWAL	WW-ROH-KHERRI	WW-ROH-CHIRI	WW-ROH- GHAROUTHI	Rohtak-2 WW-ROH-NIDANA- NIDANA MAHAM	WW-ROH- ISMAILA-11B	WW-ROH- GIRAWAR	WW-ROH-MADINA KORSAN	WW-ROH- PAKASMA	WW-ROH- KHARAWAR	WW-ROH- SAMCHANA-II
Division									Rohtak-2						
District		Rohtak													

Appendix-12

(Reference: Paragraph 4.2.1; Page 30)

Water works/Cases with less sanctioned discharge against the water requirement of 70 LPCD

Per cent of less sanction	65	13	47	09	43	25	29	32	3	91	35	45	27	99	99	35	43	12	51
less sanction	79.0	0.07	60.0	1.36	0.41	0.12	0.24	0.12	0.02	0.84	0.19	0.41	0.22	0.73	0.63	0.27	0.23	80:0	0.83
Discharge Required	1.03	0.55	0.19	2.26	\$6:0	0.48	0.84	0.37	0.62	0.92	0.54	0.91	0.82	1.13	1.13	0.77	0.53	0.65	1.63
Original Discharge	0.36	0.48	0.10	0.90	0.54	0.36	09.0	0.25	09.0	0.08	0.35	0.50	09:0	0.40	0.50	0.50	0.30	0.57	0.80
Daily water Requirement+1 5 per cent	12,62,401	6,76,200	2,30,552	9,23,174	7,70,868	2,96,079	5,13,993	2,98,977	5,09,002	5,64,949	3,32,224	7,42,935	5,02,481	9,23,335	9,21,484	4,69,074	3,24,657	3,95,497	9,94,417
Population 2021	15,682	8,400	2,864	11,468	9,576	3,678	6,385	3,714	6,323	7,018	4,127	9,229	6,242	11,470	11,447	5,827	4,033	4,913	12,353
Entered Population	13,068	7,000	2,387	9,557	7,980	3,065	5,321	3,095	5,269	5,848	3,439	7,691	5,202	9,558	9,539	4,856	3,361	4,094	10,294
Canal Running	15	15	15	5	8	8	8	8	8	8	8	8	8	8	8	8	8	8	~
Canal Closure	15	15	15	25	16	24	24	16	16	24	24	16	24	16	16	24	24	24	24
Type of inlet canal.csv)	Branch	Branch	Distributory	Branch	Minor	Minor	Sub-Branch	Distributory	Distributory	Sub-Branch	Distributory	Branch	Sub-Branch	Distributory	Distributory	Minor	Channel	Minor	Minor
Irrigation Canal Name	Fatehabad Branch	Fatehabad Branch	Khajuri	Fatehabad Branch	New Masudpur	Jamni Khera	Sunder Sub Branch	Kharkari	Kharkari	Balsamand	Sunder	Barwala	Balsamand	Nara	Datta	Restoration Sorkhi	Panihari/ Masudpur	Sarangpur	Moda Khera
O Ro	139258L	183550L	27944/R	799659	7-008L	29545	175552R	22800-L	1400-L	12000-L	89950-L	15000-L	25500-L	26690-R	45813-L	13200-L	70340-R	14850-R	12000-L
Village Name	GORAKHPUR	BADOPAL	CHAUBARA	BHATTU KALAN	MASUDPUR	DHARAM KHERI	SORKHI	SINGHWA RAGHO	CHANOT	BHATLA	MUZADPUR	GURANA	RAKHI KHAS	KOTH KALAN	DATTA	BADALA	KHERI GAGAN	BHANA	SISWAL
Water Works Name	WW-FTB-GORAKH PUR-BHUNA	WW-FTB-BADOPAL OLD WW	WW-FTB-CHOBARA	WW-FTB-BHATTU KALANI	WW-HSR- MASOODPUR- HANSI-I	WW-HSR-DHARAM KHERI	WW-HSR-SORKHI	WW-HSR-SINGHWA RAGOO	WW-HSR-CHANOT	WW-HSR-BHATLA	WW-HSR- MUZADPUR	WW-HSR-GURANA	WW-HSR-RAKHI KHAS	WW-HSR-KOTH KALAN	WW-HSR-DATTA	WW-HSR-BADALA- HANSI-II	WW-HSR-KHERI GANGAN	WW-HSR-BHANA- AGROHA	WW-HSR-SISWAL
Division	Fatehabad				Hansi													Hisar-1	
District	Fatehabad				Hisar														

Per cent of	less sanction	73	79	63	42	63	2	4	39	62	28	48	10	45	15	75	5	100	43	50	2	19	57
_	sanction k	0.53	0.41	98.0	0.47	1.43	0.01	0.27	0.22	0.32	0.31	0.42	0.07	0.41	60.0	0.43	0.07	1.74	0.74	0.5	0.02	0.10	0.24
Discharge	Required	0.73	0.52	1.36	1.12	2.28	0.63	0.62	0.57	0.52	1.11	0.88	0.67	0.91	0.59	0.57	1.29	1.74	1.74	1	0.93	0.52	0.42
Original	Discharge	0.20	0.11	0.50	99:0	0.85	0.62	0.35	0.35	0.20	08.0	0.46	09.0	0.50	0.50	0.14	1.22	0	1.00	0.50	0.91	0.42	0.18
Daily water	Requirement+1 5 per cent	4,47,339	3,19,746	8,33,336	5,47,561	13,92,489	4,21,820	3,82,214	3,49,370	3,16,687	6,76,120	5,37,016	4,12,402	5,57,382	3,60,962	3,46,714	7,90,269	10,65,981	10,65,981	8,11,360	5,69,779	3,18,861	2,06,322
lation	2021	5,557	3,972	10,352	6,802	17,298	5,240	4,748	4,340	3,934	8,399	6,671	5,123	6,924	4,484	4,307	9,817	13,242	13,242	10,079	7,078	3,961	2,563
	Population	4,631	3,310	8,627	2,668	14,415	4,367	3,957	3,617	3,278	66669	5,559	4,269	5,770	3,737	3,589	8,181	11,035	11,035	8,399	5,898	3,301	2,136
Canal	Kunning	8	8	8	8	∞	∞	∞	8	7	8	8	8	8	8	8	8	∞	∞	8	8	7	8
Canal	Closure	24	24	24	32	24	21	24	24	21	24	24	24	24	24	24	24	24	24	16	24	21	32
Type of	inlet canal.csv)	Sub-Branch	Channel	Distributory	Distributory	Minor	Minor	Minor	Minor	Distributory	Minor	Minor	Sub-Minor	Sub-Branch	Sub-Minor	Sub-Minor	Minor	Branch	Sub-Minor	Feeder	Minor	Feeder	Feeder
Irrigation	Canal Name	Kishangarh	Kishangarh Iink	Jakhod	Rana	Chiberwal	kohli	Khairampur	kabir	Adampur	Chaudhary	kabir	Barsa	Parba	Burak	Burak	Sarsana	Ratia Branch	Balsamand	Devsar	Chaudhariwas	Devsar	Devsar
O Ro		8852-L	19800-R	22000-R	102430R	25950-L	8500R	22000-R	126340L	39550-L	47000-L	12000-R	11000-L	143900L	26000-L	9000-R	8825-R	0	28850-L	21415-R	9400	45500-R	32800-R
Village Name		KOHLI	DAROLI	KALIRAWAN	NEOLI KALAN	SADELPUR	KHERAMPUR	SARANGPUR	MATER SHAM	BHODIA KHERA BISHNOIAN	DOBHI	SHAHPUR	SARSANA	LANDHARI SUKHLAMBR AN	BURAK	BANDA HERI	ARYA NAGAR	BALSMAND	BALSMAND	KAIMRI	CHAUDHRIW AS	KALUWAS	DEVAN
Division Water Works Name		WW-HSR-KHOLI	WW-HSR-DAROLI	WW-HSR- KALIRAWAN	WW-HSR-NEOLI KALAN	WW-HSR- SADALPUR	WW-HSR- KHAIRAMPUR	WW-HSR- SARANGPUR- AGROHA	WW-HSR-MATTAR SHYAM	WW-HSR-BHODIA BISHNOIAN	WW-HSR-DOBHI	WW-HSR-SHAHPUR	WW-HSR- SARSANA-HISAR-II	WW-HSR- LANDHARI	WW-HSR-BURAK	WW-HSR- BANDAHERI	WW-HSR-ARYA NAGAR(KURRI)	WW-HSR-	BALSAMANDH (Old)	WW-HSR KAIMARI	WW-HSR- CHAUDHRIWAS	WW-HSR-KALWAS	WW-HSR-DEVAN
																				-			
District																							

jo	81	72	54	21	28	17	100	28	24	57	27	88	82	89	39	4	100
Per cent of less sanction			.,	•	- /		1(. 1	•	- 1	. ,				,		<u> </u>
less sanction	0.83	0.77	0.33	0.36	0.33	0.10	0.47	0.25	0.14	0.26	0.22	0.77	1.55	0.54	0.39	0.31	0.33
Discharge Required	1.03	1.07	0.61	1.68	0.57	09'0	0.47	0.88	0.58	0.46	0.82	0.91	1.88	62'0	66'0	0.70	0.33
Original Discharge	0.20	0.30	0.28	1.32	0.24	0.50	0	0.63	0.44	0.20	0.60	0.14	0.33	0.25	09:0	0.39	0
Daily water Requirement+1 5 per cent	6,29,027	6,53,016	3,70,864	10,25,570	2,77,081	2,94,067	2,86,339	4,29,870	3,52,268	2,78,530	4,98,456	5,54,484	11,52,599	4,83,000	4,83,000	4,25,684	1,67,038
Population 2021	7,814	8,112	4,607	12,740	3,442	3,653	3,557	5,340	4,376	3,460	6,192	6,888	14,318	000,9	000,9	5,288	2,075
Entered Population	6,512	6,760	3,839	10,617	2,868	3,044	2,964	4,450	3,647	2,883	5,160	5,740	11,932	5,000	5,000	4,407	1,729
Canal Running	7	7	8	8	8	8	7	8	7	8	8	8	8	8	8	8	7
Canal Closure	21	21	24	24	32	32	21	32	21	24	24	24	24	24	32	24	27
Type of inlet canal.csv)	Distributory	Distributory	Distributory	Distributory	Minor	Feeder	Distributory	Minor	Sub-Minor	Minor	Distributory	Distributory	Sub-Branch	Sub-Branch	Minor	Minor	Distributory
Irrigation Canal Name	Pabra	Dehman	Rana	Pabra	Gawar	Devsar	Jakhod	kabir	Siswal No.1	Dhansu	Rana	Rana	Balsamand	Balsamand	Mirzapur	Chaudhary	Jandwala
O Ro	96425-L	14750-L	32300-R	130400L	4000-R	57000-L	12000-L	27000-L	17600-R	5450-L	28000-L	59600-R	64368-L	56200-L	1000-R	T-0000L	1.760/L
Village Name	KANOH	SIWANI BOLAN	KHERI BARKI	NANGTHALA	GAWAR	CHIRAUD	ASRANWAN	KIRTAN	JAKHOD KHERA	BUGANA	BAHBALPUR	TALWANDI RANA	SATROD KALAN	RAIPUR	MIRZAPUR	BANBHORI	SAHBAJ PUR KHALSA
Water Works Name	WW-HSR-KANOH	WW-HSR-SIWANI BOLAN	WW-HSR-KHERI BARKHI	WW-HSR- NANGTHALA	WW-HSR-GAWAR	WW-HSR-CHIROD	WW-HSR- ASSRAWAN	WW-HSR-KIRTAN	WW-HSR-JAKHOD KHERA	WW-HSR-BUGANA	WW-HSR- BEHBALPUR- BARWALA	WW-HSR- TALWANDI RANA	WW-HSR-SATROD KALAN	WW-HSR-RAIPUR- HISAR-I	WW-HSR- MIRJAPUR-HISAR-I	WW-HSR- BANBHORI	WW-RWR- SHABAZPUR KHALSA
Division										Hisar-2							Rewari-1
District																	Rewari

(Reference: Paragraph 4.2.2; Page 31)

Cases with less capacity of Storage and Sedimentation Tanks where water requirement is 55 LPCD

Per cent	25	99
less capacity	48,43,260	66,09,372 42,64,806
ement day +	5,41,104 81,43,230 1,29,86,490 48,43,260	
S&S tank Water Capacity require during closing 15 per	81,43,230	2,75,391 23,44,566
Daily water Requirement+ 15 per cent		
llation	8,555	4,354
Original Discharge Canal Canal Entered Populoischarge required Running Closure Population 2021	7,129	3,628
Canal	24	24
Canal Running	8	∞
Discharge required	0.88	0.45
Original Discharge	1.69	1.00
Village Name	BALAND	ровн
District Division Water works Village Name Name Name	Rohtak Rohtak WW-ROH- BALAND PHED BALAND-2	WW-ROH- DOBH DOBH
Division Water Name Name	Rohtak PHED	No. 1
District	Rohtak	

Appendix-14

(Reference: Paragraph 4.2.2; Page 31)

Cases with less capacity of Storage and Sedimentation Tanks where water requirement is 70 LPCD

Per cent		70	68	22	32	8	44	2	11	70	99	13	09	80	17	4	8	16	16	20	22
less capacity Per		71,18,000	25,83,396	19,44,950	37,75,107	14,23,305	17,86,500	1,46,038	5,18,193	78,84,711	66,74,662	17,29,273	1,38,22,667	86,39,214	13,14,756	4,24,120	9,30,108	9,24,308	18,42,062	18,64,992	17,92,098
	during closing day + 15 per cent	1,01,43,000	28,98,000	86,94,000	1,18,50,405	1,89,36,015	40,57,200	86,94,000	48,32,576	1,12,57,764	1,01,73,912	1,35,58,776	2,31,84,000	1,08,55,264	77,91,756	99,69,120	1,15,32,108	58,81,008	1,15,03,128	93,81,792	80,64,168
S&S tank Capacity		30,25,000	3,14,604	67,49,050	80,75,298	1,75,12,710	22,70,700	85,47,962	43,14,383	33,73,053	34,99,250	1,18,29,503	93,61,333	22,16,050	64,77,000	95,45,000	1,06,02,000	49,56,700	96,61,066	75,16,800	62,72,070
Daily water Requirement+	15 per cent	6,76,200	1,93,200	5,79,600	7,90,027	12,62,401	2,70,480	5,79,600	6,04,072	4,69,074	4,23,913	5,64,949	9,66,000	6,78,454	3,24,657	4,15,380	4,80,505	2,45,042	4,79,297	3,90,908	3,36,007
ulation	· ·	8,400	2,400	7,200	9,814	15,682	3,360	7,200	7,504	5,827	5,266	7,018	12,000	8,428	4,033	5,160	5,969	3,044	5,954	4,856	4,174
Canal Entered Popu Closure Population 2021		7,000	2,000	6,000	8,178	13,068	2,800	6,000	6,253	4,856	4,388	5,848	10,000	7,023	3,361	4,300	4,974	2,537	4,962	4,047	3,478
Canal Closure		15	15	15	15	15	15	15	∞	24	24	24	24	16	24	24	24	24	24	24	24
Canal Running		15	15	15	15	15	15	15	30	8	8	8	8	8	8	8	8	8	∞	∞	8
d)		0.55	0.16	0.47	99.0	1.03	0.22	0.47	0.31	0.77	69.0	0.92	1.58	0.83	0.53	89.0	0.79	0.40	0.78	0.64	0.55
Original Discharge Discharge required		0,48	0.51	0.45	1.26	0.36	08'0	0.57	2.25	05.0	1.00	80.0	0.86	1.76	0.30	1.15	1.00	0.47	1.56	1.00	1.16
Village Name		BADOPAL	BANAWALI SOTTAR	BIGHAR	MUSSAHALI	GORAKHPUR	JANDWALA SOTTAR	MOHAMMAD PUR ROHI	MEHUWALA	BADALA	BHAKLANA	BHATLA	DHANI PEERANWALI	GHIRAI	KHERI GAGAN	KUTABPUR	MADAN HERI	MAZOD	SINGHWA KHAS	SISAR	SULCHANI
Water works Name		WW-FTB-BADOPAL OLD WW	WW-FTB-BANAWALI SOTTAR Canal Based	WW-FTB-BIGHAR	WW-FTB-DHANI MUSAWALI	WW-FTB-GORAKH PUR-BHUNA	WW-FTB-JANDWALA SOTTER(NEW)	WW-FTB-M P ROHI	WW-FTB-MEHUWALA	WW-HSR-BADALA- HANSI-II	WW-HSR-BHAKLANA 1	WW-HSR-BHATLA	WW-HSR-Dhani Pirwali	WW-HSR-GHIRAI	WW-HSR-KHERI GANGAN	WW-HSR-KUTABPUR- HANSI-I	WW-HSR-MADAN HERI MADAN HERI	WW-HSR-MAJAD	WW-HSR-SINGHWA KHASS	WW-HSR-SISAR	WW-HSR-SULCHANI
Division Name		Fatehabad PHED								Hansi PHED											
District		Fatehabad								Hisar											

Village Name
Discharge required Running
CHULI KHURD 0.00 0.36
SADELPUR 0.75 2.85
BALSMAND 0.00 3.48
1.00 3.48
BANDA HERI 0.14 0.57
BHANA 0.57 0.65
BURAK 0.50 0.59
CHIRAUD 0.50 0.60
DAROLI 0.11 0.52
AMBLI 0.35 0.25
JAGAN 1.20 0.58
LANDHARI 0.50 0.91 SUKHLAMBRAN
SANDOL 1.00 0.22
SARANGPUR 0.35 0.62
BADON 0.43 0.43 BRAHMANAN
BANBHORI 0.39 0.70
BHAINI 0.58 0.53 BADSHAHPUR
BHAIRI 0.71 0.77 AKBARPUR
BIANA KHERA 0.48 0.63
BITHMARA 2.39 1.79
BOBUA 0.75 0.81
WW-HSR-CHARNAUND CHARNAUND 2.00 0.17
DHANSU 0.52 1.30
UR
R
KHEDAR 0.27 2.98

		Ī		Cantai		Population	Population Daily water	S&S tank	Water	less capacity Per	Per
	200	Discharge required by			Kunning Closure Fopulation	1707	Kedurement 15 per cent	Capacity	during closing day + 15 per cent		nesc cemi
КНОКНА	1.80	0.39	8	24	2,490	2,988	2,40,534	51,07,500	57,72,816	6,65,316	12
LITANI	0.40	96.0	8	24	6,070	7,284	5,86,362	1,32,46,471	1,40,72,688	8,26,217	9
PANIHARI	0.93	0.70	8	24	4,459	5,351	4,30,756	92,70,112	1,03,38,132	10,68,020	10
PARBHUWALA	06.0	1.01	∞	24	6,386	7,663	6,16,872	6,16,872 1,45,49,065	1,48,04,916	2,55,851	2
RAJLI	0.70	1.28	∞	24	8,089	9,707	7,81,414	7,81,414 1,39,09,424	1,87,53,924	48,44,500	26
SAHU	0.11	0.54	8	24	3,448	4,138	3,33,109	75,22,213	79,94,616	4,72,403	9
SATROD KALAN	0.33	1.88	8	24	11,932	14,318	11,52,599	11,52,599 2,30,75,963	2,76,62,376	45,86,413	17
SULKHANI	0.50	0.43	8	24	2,751	3,301	2,65,731	5,88,725	63,77,532	57,88,807	91
SARHERA	0.54	0.43	8	24	2,695	3,234	2,60,337	60,23,104	62,48,088	2,24,984	4
SUREWALA	0.37	09.0	8	24	3,799	4,559	3,67,000	82,86,408	88,07,988	5,21,580	9
DAHINA	1.27	1.27	7	24	7,246	8,695	6,99,948	49,15,200	1,67,98,740	1,18,83,540	71
MUNDI	2.47	0.50	8	24	3,163	3,796	3,05,578	63,72,325	73,33,872	9,61,547	13
KANHRI	1.89	0.98	8	24	6,207	7,448	5,99,564	46,06,000	1,43,89,536	97,83,536	89
LUDHUWAS	1.26	0.20	16	16	2,505	3,006	2,41,983	16,720	38,71,728	38,55,008	100
NAGPUR	1.47	1.07	8	24	6,748	8,008	6,51,889	1,15,65,758	1,56,45,336	40,79,578	26
NANGAL	0.49	0.34	15	15	4,279	5,135	4,13,368	28,19,681	62,00,513	33,80,832	55
エミロスロスエエー エスエストのしのコスニー	KHANI HERA EWALA IINA JDI HRI HUWAS PUR GAL		0.50 0.54 0.37 1.27 1.89 1.89 1.47 0.49	0.50 0.43 0.54 0.43 0.37 0.60 1.27 1.27 2.47 0.50 1.89 0.98 1.26 0.20 1.47 1.07 0.49 0.34	0.50 0.43 8 0.54 0.43 8 0.54 0.60 8 1.27 1.27 7 2.47 0.50 8 1.89 0.98 8 1.26 0.20 16 1.47 1.07 8 0.49 0.34 15	0.50 0.43 8 24 0.54 0.43 8 24 0.57 0.60 8 24 1.27 1.27 7 24 2.47 0.50 8 24 1.89 0.98 8 24 1.26 0.20 16 16 1.47 1.07 8 24 0.49 0.34 15 15	0.50 0.43 8 24 2,751 0.54 0.43 8 24 2,695 0.37 0.60 8 24 3,799 1.27 1.27 7 24 7,246 2.47 0.50 8 24 3,163 1.89 0.98 8 24 6,207 1.26 0.20 16 16 2,505 1.47 1.07 8 24 6,748 0.49 0.34 15 15 4,279	0.50 0.43 8 24 2,751 3,301 0.54 0.43 8 24 2,695 3,234 0.37 0.60 8 24 3,799 4,559 1.27 1.27 7 24 7,246 8,695 2.47 0.50 8 24 3,163 3,796 1.89 0.98 8 24 6,207 7,448 1.26 0.20 16 16 16 2,505 3,006 1.47 1.07 8 24 6,748 8,098 0.49 0.34 15 15 4,279 5,135	0.50 0.43 8 24 2,751 3,301 2,65,731 0.54 0.43 8 24 2,695 3,234 2,60,337 6 0.57 0.60 8 24 3,799 4,559 3,67,000 8 1.27 1.27 7 24 7,246 8,695 6,99,948 4 2.47 0.50 8 24 3,163 3,796 3,05,578 6 1.89 0.98 8 24 6,207 7,448 5,99,564 4 1.26 0.20 16 16 6,207 3,006 2,41,983 1 1.47 1.07 8 24 6,748 8,098 6,51,889 1,1 0.49 0.34 15 15 4,279 5,135 4,13,368 2	0.50 0.43 8 24 2,751 3,301 2,65,731 5,88,725 0.54 0.43 8 24 2,695 3,234 2,60,37 60,23,104 0.37 0.60 8 24 3,799 4,559 3,67,000 82,86,408 1.27 1.27 7 24 7,246 8,695 6,99,948 49,15,200 1, 2.47 0.50 8 24 3,163 3,796 3,05,578 63,72,325 1.89 0.98 8 24 6,207 7,448 5,99,564 46,06,000 1, 1.26 0.20 16 16 2,505 3,006 2,41,983 16,720 1.47 1.07 8 24 6,748 8,098 6,51,889 11,5,65,758 1, 0.49 0.34 15 15 4,279 5,135 4,13,368 28,19,681	0.50 0.43 8 24 2,751 3,301 2,65,731 5,88,725 63,77,532 0.54 0.43 8 24 2,695 3,234 2,60,337 60,23,104 62,48,088 0.57 0.60 8 24 3,799 4,559 3,67,000 82,86,408 88,07,988 1.27 1.27 1.27 7 24 7,246 8,695 6,99,948 49,15,200 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,67,98,740 1,43,89,536 1,67,60,000 1,43,89,536 1,67,20 1,43,89,536 1,67,20 1,43,89,536 1,67,20 1,43,89,536 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336 1,56,45,336

Appendix-15

(Reference: Paragraph 4.5.1; Page 36)

Details of water connections in HSVP

Name of	Total		Domestic Beneficiary	eneficiary			Other than Domestic Beneficiary	estic Beneficiary	
District	Consumer (a=b+e+f+i)	No. of Connections (b=c+d)	Metered Connection (c)	Unmetered connection (d)	Illegal Connection (e)	No. of Connection (f=g+h)	Metered Connection (g)	Unmetered connection (h)	Illegal Connection (i)
Hisar	15,454	14,681	13,142	1,539	0	773	594	179	0
Panchkula	32,493	30,186	15,517	14,671	0	2,307	1,728	222	0
Faridabad	5,583	4,950	586	4,364	0	633	218	415	0
Rewari	6,541	6,529	6,529	0	0	12	12	0	0
Rohtak	7,944	7,755	7,755	0	26	162	162	0	1
Karnal	16,815	15,793	6,149	9,644	553	407	184	223	62
Fatehabad	700	674	625	49	0	26	21	5	0
Total	85,530	80,568	50,303	30,267	579	4,320	2,919	1,399	63

Appendix-16

(Reference: Paragraph 5.1.1; Page 43)

Adverse bacteriological examination reports (Total Coliform Bacteria) by PHED and SRI laboratory

Sr.	Name of office/department	Name of location	Rural/Urban	Results of PHED	Results of SRI
No.			(R/U)		
1	HSVP, Panchkula	Tubewell no. S-6	U	15	NIL
2	HSVP, Panchkula	Tubewell no., KV-5	n	210	NIL
3	PHED, Kurukshetra	Thana	R	1,100	NIL
4	PHED Kurukshetra	Kalwa	R	14	NIL
5	PHED-2, Rohtak	Meham	R	22	NIL
9	PHED-1, Rohtak	Katesara	R	460	NIL
7	PHED-1, Hisar	Kabrel	R	240	NIL
8	PHED-1, Karnal	Mound	R	23	NIL
6	HSVP, Karnal	Sector-4 TN, Tubewell no. 1	U	1,100	NIL
10	M.C. Karnal	Gogipur phatak	U	75	NIL
11	PHED-1, Rewari	Khaleta	R	120	NIL
12	PHED, Faridabad	Bada Gaon, Kasturba Sewa Sadan	R	210	37
13	PHED-1, Rewari	Khijuri	R	1,100	NIL
14	M.C. Faridabad	Village Anangpur, Near Manoj Badhana Office, Ward no. 18	Ω	NIT	23
15	M.C. Faridabad	3 B-Park	Ω	1,100	30
16	M.C. Faridabad	Tubewell 18/16, Labour chowk	U	43	41
17	M.C. Faridabad	Geeta Bhawan, Ashoka 1	U	75	28
18	M.C. Faridabad	Bhagat Singh Colony, Ballabhgarh	U	43	NIL
19	M.C. Faridabad	Chauhan Chakki, Jawahar Colony, Khand	U	120	NIL
20	M.C. Faridabad	15 B, 2 NIT, Mujeshar, Ward 2, Rajiv Gandhi Colony	Ω	150	NIL
Accent	Accentable limit: Not detectable Permissible Limit: Not detectable	nissible Limit. Not detectable			
dance	table minit. The accelable, I of n	IISSIDIC LIMIT. IVOL ACICCIADIC			

Appendix-17

(Reference: Paragraph 5.1.1; Page 43)

Adverse physical & chemical water sampling report by PHED laboratory

Sr.	Name of department	Name of location	Rural/ Urban (R/U)	Name parameter	Acceptable limit	Permissible limit (As per IS 10500:2012)	Results of PHED laboratory
Τ.	M.C. Faridabad	Tubewell 18/16, labour chowk	U	Total Hardness	200 mg/l	600 mg/l	620.00
2.	M.C. Faridabad	Geeta Bhawan, Ashoka-1	Ω	Total Dissolved Solids	500 mg/l	2000 mg/l	2,976.00
				Total Hardness	200 mg/l	600 mg/l	910.00
				Calcium	75 mg/l	200 mg/l	216.00
3.	M.C. Faridabad	Bhagat Singh Colony,	N	Total Dissolved Solids	500 mg/l	2000 mg/l	2,654.00
		Ballabhgarh		Total Hardness	200 mg/l	600 mg/l	750.00
4.	M.C. Faridabad	Chauhan Chakki, Jawahar	n	Total Dissolved Solids	500 mg/l	2000 mg/l	8,230.00
		Colony, Khand		Total Hardness	200 mg/l	600 mg/l	2,700.00
				Calcium	75 mg/l	200 mg/l	520.00
				Magnesium	30 mg/l	100 mg/l	336.00
				Chloride	250 mg/l	1000 mg/l	3,337.00
				Nitrate	45 mg/l	No Relaxation	55.00
5.	M.C. Faridabad	15 B, 2-NIT, Industrial Area	Ω	Total Dissolved Solids	500 mg/l	2000 mg/l	3,908.00
		Road, Mujeshar, Ward 2,		Total Hardness	200 mg/l	600 mg/l	1,370.00
		Rajiv Gandhi Colony		Calcium	75 mg/l	200 mg/l	260.00
				Magnesium	30 mg/l	100 mg/l	172.80
				Chloride	250 mg/l	1000 mg/l	1,491.00
.9	M.C. Faridabad	3 B Park		Alachlor	20 ug/l		102.00
7.	M.C. Faridabad	Geeta Bhawan, Ashoka-1		Dieldrin	0.03 ug/l		0.05

Adverse physical & chemical water sampling report by SRI laboratory

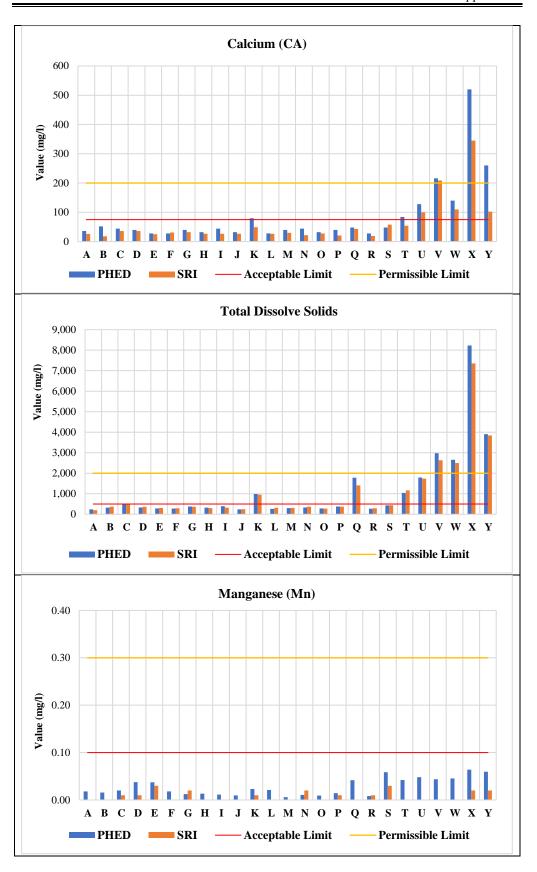
Sr.	Name of department Name of location		Rural/ Urban	Name parameter	Acceptable limit	Permissible limit (As per IS 10500:2012)	Results of SRI
			(R/U)				
1.	M.C. Faridabad	3B-Park	U	Nitrate	45 mg/l	No relaxation	70
2.	M.C. Faridabad	Geeta Bhawan, Ashoka-1	U	Total Dissolved Solids	500 mg/l	2000 mg/l	2,632
				Calcium	75 mg/l	200 mg/l	209
				Nitrate	45 mg/l	No relaxation	47
				Sulphate	200 mg/l	400 mg/l	434
3.	M.C. Faridabad	Bhagat Singh Colony,	U	Total Dissolved Solids	500 mg/l	2000 mg/l	2,500
		Ballabhgarh		Magnesium	30 mg/l	100 mg/l	129
				Nitrate	45 mg/l	No relaxation	72
				Sulphate	200 mg/l	400 mg/l	472
				Total Alkainity	200 mg/l	600 mg/l	624
				Total Hardness	200 mg/l	600 mg/l	812
4.	M.C. Faridabad	Chauhan Chakki, Jawahar	U	Total Dissolved Solids	500 mg/l	2000 mg/l	7,352
		Colony, Khand		Calcium	75 mg/l	200 mg/l	345
				Chloride	250 mg/l	1000 mg/l	3,605
				Fluoride	1.0 mg/l	1.5 mg/l	1.9
				Magnesium	30 mg/l	100 mg/l	392
				Nitrate	45 mg/l	No relaxation	155
				Sulphate	200 mg/l	400 mg/l	620
				Total Hardness	200 mg/l	600 mg/l	2,498
5.	M.C. Faridabad	15 B, 2-NIT, Industrial Area	n	Total Dissolved Solids	500 mg/l	2000 mg/l	3,845
		Road, Mujeshar, Ward 2,		Chloride	250 mg/l	1000 mg/l	1,496
		Kajiv Gandhi Colony		Magnesium	30 mg/l	100 mg/l	213
				Nitrate	45 mg/l	No Relaxation	120
				Total Alkainity	200 mg/l	600 mg/1	929
				Total Hardness	200 mg/l	600 mg/l	1,141

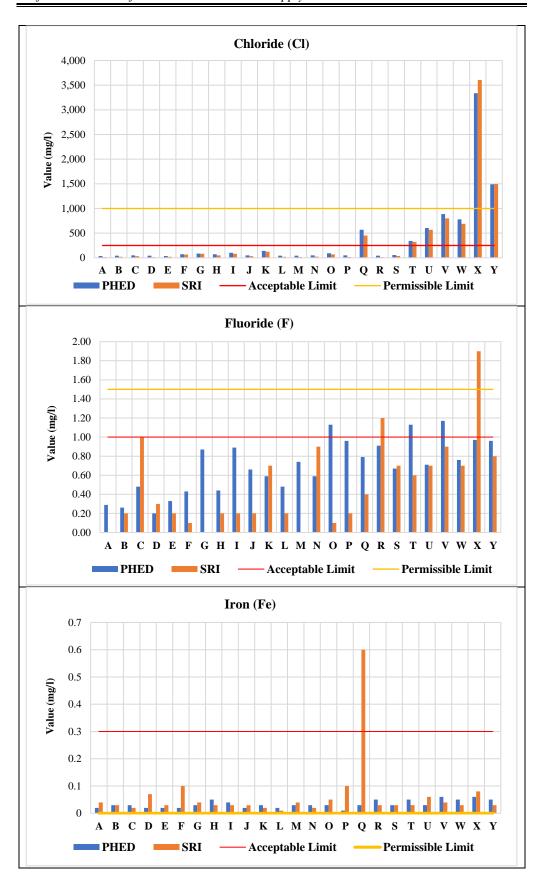
(Reference: Paragraph 5.1.1; Page 44)

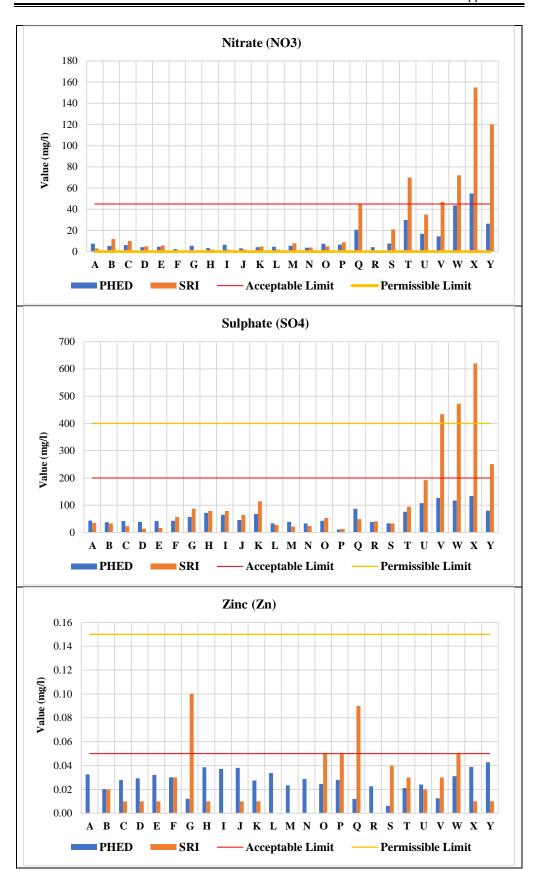
Comparison of common parameter tested in both the laboratories

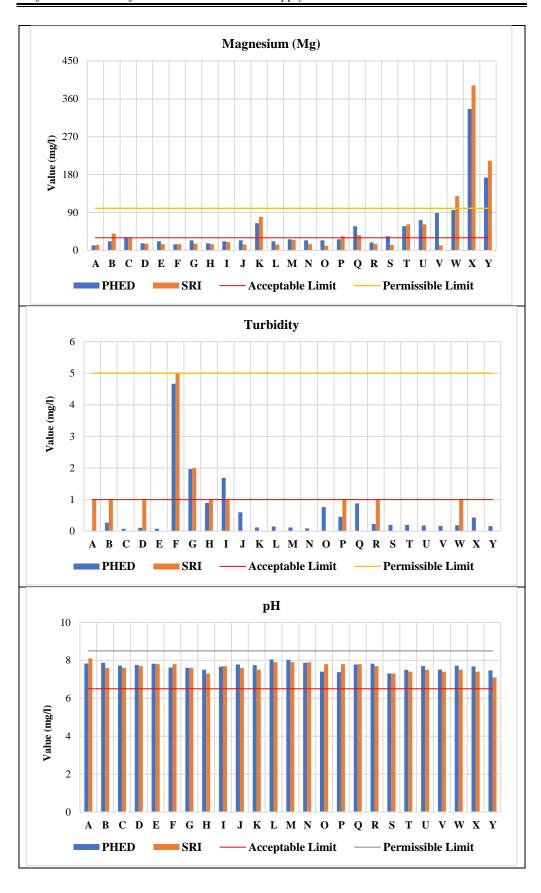
Each location depicted in Paragraph 5.1.1 has been denoted by alphabets in following charts:

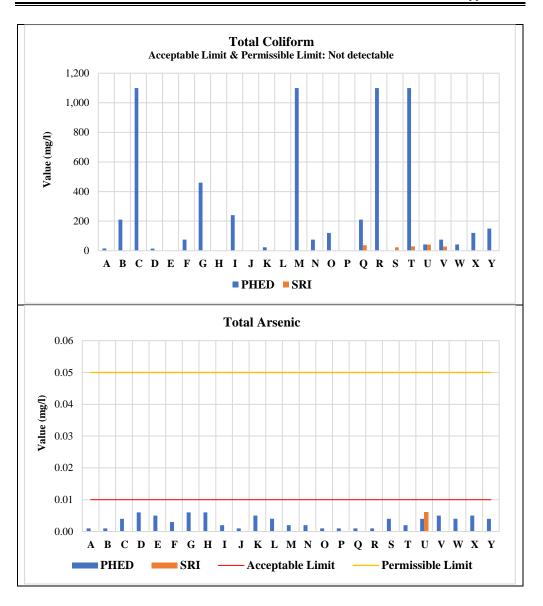
Sr. No.	Name of location	Alphabet
1.	T/w no. S-6, HSVP, Panchkula	A
2.	T/w no. KV-5, HSVP, Panchkula	В
3.	Thana, PHED, Kurukshetra	С
4.	Kalwa, PHED, Kurukshetra	D
5.	Sector-2, T/w no. 1, HSVP, Kurukshetra	Е
6.	Meham, PHED, Rohtak	F
7.	Katesra, PHED, Rohtak	G
8.	Sahu, PHED, Hisar	Н
9.	Kabrel, PHED, Hisar	I
10.	Kot Khurd, PHED, Hansi	J
11.	Mound, PHED, Karnal	K
12.	Kalsora, PHED, Karnal	L
13.	Sector-4 TN, T/w no. 1, HSVP, Karnal	M
14.	Godipur Phatak, SDO, Public Health, M.C.	N
	Karnal	
15.	Khaleta, PHED, Rewari	0
16.	Karandi, PHED, Fatehabad	P
17.	Bara Gaon (Kasturba Sewa Sadan), PHED, Faridabad	Q
18.	Khijuri, PHED, Rewari	R
19.	Vill. Anagpur Near Manoj Bhdana Office, Ward no. 18, MC Faridabad	S
20.	3 B-Park, MC Faridabad	T
21.	T/w no. 18/16, Labour Chowk, MC Faridabad	U
22.	Geeta Bhawan, Ashoka-1, MC Faridabad	V
23.	Bhagat Singh Colony, BLB, MC Faridabad	W
24.	Chauhan Chakki, Jawahar Colony, Khand, MC	X
	Faridabad	
25.	15 B, 2 NIT, Industrial Area Road Mujeshar, Ward-2, Rajiv Gandhi Colony, MC Faridabad	Y











(Reference: Paragraph 5.2; Page 44)

Details of water samples tested in selected districts

Name of laboratory		l & Chemic r the year 2			Bacteriol for the	ogical wa year 201		
	Total sample tested	Fit sample	Unfit sample	Per cent of unfit sample	Total sample tested	Fit sample	Unfit sample	Per cent of unfit sample
State lab Karnal	10,101	10,062	39	0.39	17,100	14,983	2,117	12.38
Sub-divisional lab Assandh					11,795	11,080	715	6.06
Sub-divisional lab Indri					4,968	4,619	349	7.02
District lab Panchkula	2,345	2,340	5	0.21	21,667	20,987	680	3.14
Sub-divisional lab, Kalka					22,728	22,278	450	1.98
District lab Fatehabad	461	430	31	6.72	16,323	15,504	819	5.02
Sub-divisional lab, Tohana	1,430	1,401	29	2.03	18,131	17,820	311	1.72
District lab, Rewari	2,293	1,943	350	15.26	13,011	12,720	291	2.24
Sub-divisional lab, Kosli	527	522	5	0.95	13,012	12,990	22	0.17
District lab, Faridabad	5,049	4,388	661	13.09	11,176	9,877	1,299	11.62
District lab, Rohtak	1,060	789	271	25.57	18,182	16,083	2,099	11.54
District lab, Hisar	559	424	135	24.15	20,081	17,169	2,912	14.50
Sub-divisional lab, Hansi					13,111	11,620	1,491	11.37
District lab, Kurukshetra	4,173	4,168	5	0.12	16,628	14,947	1,681	10.11
Sub-divisional lab, Pehowa	2,385	2,385	0	0	15,729	14,392	1,337	9.29

(Reference: Paragraph 5.8; Page 52)

Staff position at District Level Water Testing Laboratories

Name of post					Name of	District			
		Hisar	Kurukshetra	Rewari	Fatehabad	Rohtak	Faridabad	Panchkula	Total position
Chemist/Water	Actual	1	1	0	1	1	1	1	6
Analyst	Shortage	0	0	1	0	0	0	0	1
	Percentage of shortage		-	100	-	-	-	-	
Microbiologist	Actual	0	0	0	0	0	0	0	0
	Shortage	1	1	1	1	1	1	1	7
	Percentage of shortage	100	100	100	100	100	100	100	
Laboratory	Actual	1	0	0	0	1	0	0	2
Assistant	Shortage	1	2	2	2	1	2	2	12
	Percentage of shortage	50	100	100	100	50	100	100	
Lab Attendant	Actual	0	0	0	0	1	0	1	2
	Shortage	1	1	1	1	0	1	0	5
	Percentage of shortage	100	100	100	100	-	100	-	
Data Entry	Actual	0	0	1	0	1	0	0	2
Operator	Shortage	1	1	0	1	0	1	1	5
	Percentage of shortage	100	100	-	100	-	100	100	
Field Assistant	Actual	0	0	0	0	0	0	0	0
(task/need	Shortage	2	2	2	2	2	2	2	14
based field staff)	Percentage of shortage	100	100	100	100	100	100	100	

Staff position at Sub Divisional Level Water Testing Laboratories

Name of post				Sub-di	visiona	l labs sit	tuated at		
-		Assandh	Indri	Hansi	Kosli	Kalka	Pehowa	Tohana	Total
									position
Junior Chemist	Actual	0	0	0	0	0	0	0	0
	Shortage	1	1	1	1	1	1	1	7
	Percentage of	100	100	100	100	100	100	100	
	shortage								
Junior Microbiologist	Actual	0	0	0	0	0	0	0	0
	Shortage	1	1	1	1	1	1	1	7
	Percentage of	100	100	100	100	100	100	100	
	shortage								
Laboratory Assistant	Actual	0	0	0	0	0	0	1	1
	Shortage	1	1	1	1	1	1	0	6
	Percentage of	100	100	100	100	100	100	-	
	shortage								
Lab Attendant	Actual	0	0	0	0	0	0	0	0
	Shortage	1	1	1	1	1	1	1	7
	Percentage of	100	100	100	100	100	100	100	
	shortage								
Data Entry Operator	Actual	0	0	0	0	0	0	0	0
	Shortage	1	1	1	1	1	1	1	7
	Percentage of	100	100	100	100	100	100	100	
	shortage								
Field Assistant	Actual	0	0	0	0	0	0	0	0
(task/need based field	Shortage	1	1	1	1	1	1	1	7
staff)	Percentage of	100	100	100	100	100	100	100	
	shortage								

Note: Additional charge given to various official has not been considered as regular posting, hence shown as shortage.

(Reference: Paragraph 5.11; Page 57)

Details of quality affected habitations

Name of District	Name of Block	Name of Habitation	Parameter Name		Contan	ninated	in year	
Hisar	Adampur	Adampur	Fluoride		2018-19		2019-20	2020-21
	Adampur	Kabrel	TDS		-		2019-20	2020-21
	Adampur	Kohli	Fluoride		-		2019-20	2020-21
	Adampur	MandiAdampur	Fluoride		2018-19		2019-20	-
	Adampur	Telanwali	Fluoride		-		2019-20	2020-21
	Hansi-1	Muzadpur	Fluoride		2018-19		2019-20	-
	Narnaund	Kagsar	Fluoride		2018-19		2019-20	-
	Hansi-II	Bhaklana	Fluoride		-		2019-20	2020-21
Rewari	Bawal	Banipur	Fluoride	2016-17	2017-18	-	-	-
		Bhagwanpur	Fluoride	2016-17	2017-18	-	-	-
		Lalpur	Fluoride	2016-17	-	-	-	2020-21
		Mohmadpur	Fluoride	2016-17	2017-18	-	-	-
		Sahapur	Fluoride	2016-17	2017-18	-	-	-
		Shekhpur	Fluoride	2016-17	2017-18	-	-	-
		Suba Sheri	Fluoride	2016-17	2017-18	-	-	-
		GujarMajri	Fluoride	-	2017-18	-	-	2020-21
		Mangleshwar	Fluoride	-	2017-18	-	-	2020-21
	Khol at	Dehlawas	Fluoride	2016-17	2017-18	-	-	-
	Rewari	Nandha	Fluoride	2016-17	-	-	-	2020-21
	Rewari	Bariawas	Fluoride	2016-17	-	-	-	2020-21
		Konsiwas	Fluoride	2016-17	-	-	-	2020-21
		Nayagaon	Fluoride	2016-17	2017-18	-	-	-
		Padianwas	Fluoride	2016-17	-	-	-	2020-21
		Saharanwas	Fluoride	2016-17	-	-	-	2020-21
	Jatusana	Sihas	Fluoride	-	2017-18	-	2019-20	-

(Reference: Paragraph 5.12; Page 57)

Fluoride affected habitation with their installation and result of water testing

Sr. No.	Name of installation	Date of sample	Result	Electricity meter account no.	Electricity bill attached for the month of
1	T/W at Ajeet Nagar, Aherwan	16 February 2017	2.4	AHPW-0004-A	March 2020, March 2017, March 2019
	T/W at Ajeet Nagar, Aherwan	16 February 2018	2.4	AHPW-0004 New acc no. 769466100	March 2022
2	T/W at Majra and D/Majra	26 February 2018	2.3	MJPW-0003-A	March 2020, March 2016, March 2017, March 2019, March 2022
	T/W at Majra	29 April 2019	2.01	MJPW-0002-A	March 2017, March 2019, March 2022
3	T/W at Noorki Ahli	18 June 2018	2.49	NFPW-0002-P	March 2020, Feb 2021, March 2022
	T/W at Noorki Ahli	21 May 2021	1.6	NFPW-0001-A	March 2020, Feb 2021, March 2016, March 2022
4	T/W at Boosting Station, Daulatpur	27 November 2019	2.4	DAPH-0001-A	March 2020, March 2016, March 2017, March 2019 March 2022
				DAPH-0002-A	March 2020, March 2016, March 2017, March 2019, March 2022
5	T/W Dhani Binja Lamba	13 April 2020	1.92	JVPW-0004-L	March 2020, Feb 2021, March 2017, March 2022
	T/W Dhani BinjaLamba	15 June 2020	1.94	JVPW-0002	March 2022
6	T/W at Hanspur	21 June2018	1.88	BVPW-0002	February 2020, February 2021, May 2022
	T/W at Hanspur	04 June 2020	2.12	BVPW-0003	Information not provided.
	T/W at Hanspur Main Tube Well	21 May2021	2.1	BVPW-0004	Information not provided.
7	T/W Chanderwal Main Tube	16 June 2021	2.52	JAPH-0004A	May 2022
	Well	21 June 2021	2.52	JAPH-0004A	
		22 June 2021	2.52	JAPH-0004A	
8	T/W Hans Colony	09 April 2021	2.5	MAPH-0003A	March 2022
		04 October 2021	1.95	MAPH-0003A	
		12 October 2021	2.9	MAPH-0003A	
9	T/W Karian	18 June 2018	1.8	HKPW0002-A	March 2019, March 2020, March 2021, March 2022

Source: Laboratory reports

^{*} Fluoride (acceptable limit: 1.0 mg/l and cause for rejection: 1.5 mg/l)

(Reference: Paragraph 5.12; Page 58)

Delayed schemes relating to shifting of source

Name of project	Status as on April-May 2022	Brief summary
Estimate for providing canal based water works at village Palsar for Group of 3 nos. villages	In progress	Scrutiny of records in EE, PHED, Fatehabad, it was seen that the said work was related to providing canal based water supply to the inhabitants as the tube well based supply was not found potable as per sample testing in May 2018 and again in December 2018. The work was allotted to agency on August 2019 with scheduled completion date of April 2020. The said work was still in progress as on May 2022 and these villages were given tube well based supply till date despite the fact that the ground water had already been declared non-potable by divisional laboratories.
Providing Independent canal based water works Bhunderwas	In progress	Scrutiny of records¹, it was seen that the estimate for the work "Providing Independent canal based water works Bhunderwas" was administratively approved (February 2019) for ₹ 329.61 lakh. The village was provided tube well based supply and the estimate was framed to provide canal based water supply to the inhabitants of the village. The work was allotted (August 2019) for an amount of ₹154.42 lakh with date of commencement of 8 August 2019 to be completed in 12 months (7 August 2020). It was observed that the work was not complete even after lapse of more than 21 months from the scheduled date of completion and after incurring an expenditure of ₹ 90.02 lakh (21st RA bill). Thus, the inhabitants are deprived of the benefits of getting canal based water supply and instead of tube well based water supply.
Providing canal based water supply scheme Ibrahimpur group of 17 nos. villages in district Rewari	In progress	Para 12.3.2 states that divisional officer immediately after taking over the land shall get it mutated in favour of the department and get the entry made in jamabandi also. During scrutiny of records², it was seen that an estimate amounting to ₹ 36.02 crore was prepared for "Providing canal based water supply scheme Ibrahimpur group of 17 nos. villages in district Rewari" which was administratively approved in April 2018. The work was allotted (October 2018) for ₹ 11.71 crore with a scheduled completion date of October 2019 (12 months from date of start). Audit observed that the 65 per cent work was completed by February 2021 and ₹ 5.30 crore had been paid to the agency (November 2021). The reasons for delay was that the land on which main water works were to be constructed were relocated from proposed site of Ibrahimpur to Kheri Murar which also could not be taken on board as the land given by Panchayat in the year 2005 for construction of water works was not got mutated timely by PHED in favour of department. Resultantly the Panchayat objected and demanded to free the Panchayat land from PHED. Thus due to lackadaisical approach of the department canal based water supply could not be provided to habitants of these 17 villages despite incurring an expenditure of ₹ 5.30 crore.
Behbalpur village	In Progress	Principal Secretary to GoH, Development and Panchayats Department, Chandigarh instructed (January 2013) the Deputy Commissioners that <i>Gair Mumkin Johars</i> or water bodies were not to be diverted to any other use and should be, protected, cleaned and recharged. Scrutiny of records³, it was seen that the Behbalpur village was a water quality affected area and the underground water of tube well was found not potable (brackish) as per water sample report as of February 2016. The supply to the village was tube well based and to convert tube well based supply into canal based supply, the Gram Panchayat Behbalpur agreed to provide land free of cost to PHED. As per land record, the said land was <i>Gair mumkin Johar</i> which as per instructions was not to be transferred for any other use. The estimate was sent (July 2017) to Member Secretary, WSSB for arranging its administrative approval for ₹ 318.50 lakh. The tender for the said work was allotted (October 2018) with stipulated completion date of October 2019. Audit observed that agency could not start the work as the land on which work was to be done was not suitable and no other land was available with the Gram Panchayat. Till date, no land is available with the department where the said construction could be carried out. Had the department planned effectively and ensured availability of land for timely completion of work, safe and potable water would have been available to the inhabitants. Further it was seen that department kept on providing non-potable water supply to the inhabitants (June 2020) as the villagers/Sarpanch, GP, Behbalpur complained to the authorities about supply of non-potable water.

EE, PHED, Tohana.

² EE, PHED, Rewari.

³ EE, PHED, Fatehabad.

Appendix-24

(Reference: Paragraph 6.4; Page 63)

Details of Public Grievances/complaints attended by PHE Department

Year	Total no. of complaints	Total number of	Balance	Complaints attended	Complaints attended	Complaints attended more
	received	complaints attended		within 24 hrs	between 24 hrs to 72 hrs	than 72 hrs
2016-17*	6,903	5,872	1,031	1,863	1,909	2,100
2017-18	11,565	11,011	554	2,386	1,420	7,205
2018-19	18,054	17,931	123	2,509	12,225	3,197
2019-20	37,831	37,477	354	3,224	2,142	32,111
2020-21	83,383	83,042	341	12,643	2,755	67,644
Total	1,57,736	1,55,333	2,403	22,625	20,451	1,12,257
*Monocourt	71 3100 moon of smill of the both of division during the moon of 17 17	incion during the year 10	16 17			

*No record was maintained in Fatehabad division during the year 2016-17

Haryana Shehri Vikas Pradhikaran

Year	Total number of	Total number complaint	Balance	Complaints attended	Complaint attended between 24 Complaint attended	Complaint attended
	complaints received	attended/ resolved		within 24 hours	hours to 72 hours	more than 72 hours
2016-17	689	689	0	253	398	38
2017-18	743	743	0	210	510	23
2018-19	714	714	0	266	415	33
2019-20	576	576	0	252	304	20
2020-21	539	539	0	241	271	27
Total	3,261	3,261	0	1,222	1,898	141

Urban Local Bodies Department

Year	Total number of complaints received	Total number complaint attended/ resolved	Balance	Complaints attended within 24 hours	Complaint attended between 24 hours to 72 hours	Complaint attended more than 72 hours
2016-17	0	0	0	0	0	0
2017-18	1,505	1,505	0	505	1,000	0
2018-19	6,625	6,625	0	845	5,780	0
2019-20	2,698	7,698	0	1,198	6,500	0
2020-21	12,654	12,654	0	3,240	9,414	0
Total	28,482	28,482	0	5,788	22,694	0

Appendix-25 (Reference: Paragraph 6.5; Page 64)

Details of source testing in rural areas

Year	Total number of water sources in rural areas	Source tested	Percentage of source tested
2016-17	1,00,886	16,533	16.38
2017-18	1,00,886	10,931	10.84
2018-19	1,00,886	14,617	14.49
2019-20	1,00,886	15,456	15.32
2020-21	1,00,886	35,647	35.33

Source: E 20 format of e-jalshakti

(Reference: Paragraph 6.7.1; Page 65)

Division wise status of works (PHED)

Name of Division	Total works selected	Work completed on time	Total delayed works	Minimum delay (in months)	Maximum delay (in months)	Remarks
No.1, Hisar	8	2	6	10	31	
No.2, Hisar	18	5	7	2	42	4 works in progress and 2 works not started.
Hansi	14	3	7	2	37	2 works not started, no record in respect of 1 work and nominal delay in one work.
Fatehabad	6	1	5	0	24	
Tohana	6	0	6	10	17	
No.1, Rohtak	9	2	6	6	26	One work in progress schedule completion in July 2022.
No.2, Rohtak	10	7	3			All work in progress
Rewari	9	4	4	3	19	One work could not be started due to wrong site selection.
Bawal	20	13	7	2	29	
Kosli	18	0	17	6	14	One work schedule completion is in September 2022.
Faridabad	11	6	4	2	9	No record provided in respect of 1 work.
Kurukshetra	35	7	20	1	18	8 works not started due to site dispute, non-availability of pipes.
No.1, Karnal	20	2	15	2	15	Three works not started due to non-availability of pipes.
No.2, Karnal	18	2	16	3	14	
Panchkula	19	6	8	4	12	4 works in progress and one agreement is wrongly uploaded.
Total	221	60	131			

(Reference: Paragraph 6.7.2; Page 65)

Status of works of selected divisions of Urban Local Bodies Department, Haryana

Sr. No.	. Name of unit	Name of Project	Work started in	Schedule completion in	Delay (in months)	Status of work
	MC Hisar	Providing water supply system for Civic Amenities and infrastructure Deficient area including villages November 2018 in Hisar town along with O&M under AMRUT programme	November 2018	February 2020	Work in progress	Incomplete
2	MC Panchkula	for the augmentation of water supply in villages of Municipal Corporation (MC), Panchkula including Distribution system and installation of Tube Wells and Operation & Maintenance	February 2019	April 2020	Work in progress	Incomplete
3	MC Faridabad	The work of providing water supply for civic amenities and infrastructure deficient area in Faridabad December 2018 Town	December 2018	February 2020	Work in progress	Incomplete
4	MC Rewari	the work of providing water supply for civic amenities and infrastructure deficient area in Rewari Town	November 2018	June 2020	Work in progress	Incomplete
5	MC Rohtak	the work of providing water supply for civic amenities and infrastructure deficient area in Rohtak Town	November 2018	June 2020	Work in progress	Incomplete
9	MC Karnal	the work "Providing & Augmentation of water Supply System in 15 villages of MC Karnal including Distribution system and installation of Tube well and O & M	November 2018	November 2019	17	Complete
7	MC Faridabad	Providing & Laying water supply line in old Faridabad Town to replace the existing collapsed water supply line and new water supply line in those areas where still not provided in Ward No. 29 & 30, Faridabad	December 2018	December 2020	1	Complete
∞	MC Faridabad	Provision of 5 Nos. Tube wells bore 280 mm dia by method of (direct rotary) for various locations in Krishana Colony, Ward No.32 Faridabad,	June 2019	December 2019	11	Completed
6	MC Faridabad	Provision of 3 nos. tube wells bore 280 mm dia by method of (direct rotary) and installing of mini tube well bore 4 nos. in ward 34, Faridabad	January 2018	June 2018	23	Completed
10	MC Faridabad	Provision of 5 nos. tube wells bore by method of Engine driven bockey type machine at various places Prem Nagar of ward no. 34, Faridabad	July 2019	December 2019	1	Completed

Status of water works of selected divisions of Haryana Shehri Vikas Pradhikaran

Sr.	Sr. Name of unit	Name of Project	Work started in	Schedule completion in	Delay (in	(in Status of work
No.				ı	months)	
1	HSVP Hisar	Up-gradation of infrastructure in Industrial sector 27 & 28	January 2019	July 2019	17	Complete
2	HSVP No 1 Division, Panchkula	Providing water supply, Sewerage and SWD Scheme in new October 2020 planned area of Sector -21 (Part-III) Panchkula	October 2020	July 2021	Work in progress Incomplete	Incomplete
3	HSVP Rohtak	Construction of RCC U/G CWT, B/S in Sector-3, Rohtak	August 2016	December 2016	7	Complete
4	HSVP Rohtak	Construction. of 2 nd water works in Sector-34, Rohtak	July 2013	January 2015	19	Complete
5	HSVP Rohtak	Prov. Master W/S rising main Sec-34, Rohtak	February 2015	August 2015	19	Complete
9	HSVP Rohtak	Prov. Master W/S rising main Sec-34, Rohtak	February 2015	August 2015	19	Complete
7	HSVP Rewari	Construction of 1 no S&S Tank at water works Kalaka (Rewari) September 2016	September 2016	December 2017	Work in progress Incomplete	Incomplete

(Reference: Paragraph 6.7.2; Page 65)

Division-wise status of delayed works (selected HSVP & MCs)

Name of Districts	No of works	Delay in months	Status			
MC-Hisar,	1	Work in progress	Incomplete			
MC-Panchkula	1	Work in progress	Incomplete			
MC-Faridabad	5	Min. 1 month to a max. of 24 months	Incomplete-1, Complete-4			
MC-Rewari	1	Work in progress	Incomplete			
MC-Rohtak	1	Work in progress	Incomplete			
MC-Karnal	1	17	Complete			
HSVP-Divisions						
HSVP-Hisar, Panchkula, Rohtak and Rewari	7	Min. 7 months to a max. of 19 months	Incomplete-2, Complete-5			