Supplementary Materials



Figure S1. RBF well in Village 3 during logger data retrieval by co-author Mrs. K. Patil (Source: T. Boving).

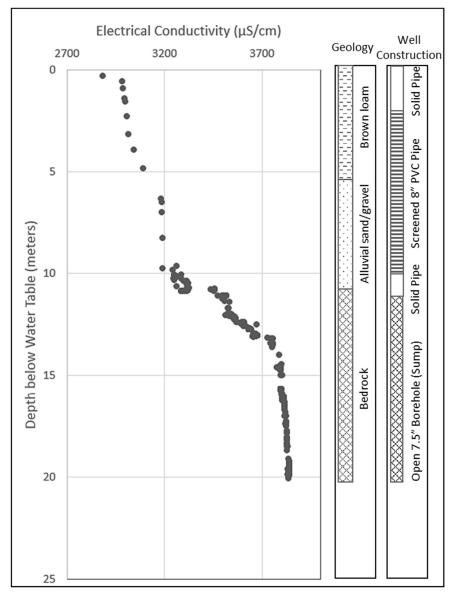


Figure S2. Vertical EC profile measured in RBF2 well at Village 4 in relation to the geologic profile and the well construction diagram. Reference level: Water table. At this location, the depth from the surface to the water table was 4.6 m. The brown loam above the alluvial sediment continued to the surface.

Table S1. Methods used for analysis of water samples. IS 3025–Bureau of Indian Standards (BIS) (Part 45) Method of Sampling and Test (Physical and Chemical) for Water and Wastewater (First Revision). APHA: Standard Methods for the Examination of Wastewater, America Public Health Association. Washington, DC, USA.

	LIST OF PARA	METER	
Sr.No	PARAMETER	UNIT	TEST METHOD
1	Potassium as K	mg/ltr	IS 3025: Part 45
2	Sodium as Na	mg/ltr	IS 3025: Part 45
3	Calcium as Ca	mg/ltr	IS 3025: Part 40
4	Magnesium as Mg	mg/ltr	IS 3025: Part 46
5	Ammonium as Ammoniacal Nitrogen	mg/ltr	IS 3025: Part 34
6	Boron as B	mg/ltr	IS 3025: Part 57
7	Chlorides as Cl	mg/ltr	IS 3025: Part 32
8	Sulphates as SO4	mg/ltr	IS 3025: Part 24
9	Carbonates as CO3	mg/ltr	IS 3025: Part 51
10	Bicarbonates as HCO3	mg/ltr	IS 3025: Part 51
11	Fluorides as F	mg/ltr	APHA 22 nd Edition
12	Phosphates as PO4	mg/ltr	IS 3025: Part 31
13	Nitrates as No3	mg/ltr	APHA 22 nd Edition
14	Nitrites as NO2	mg/ltr	IS 3025: Part 34
15	Bio-Chemical Oxygen demand (3 days at 24°C)	mg/ltr	IS 3025: Part 44
16	Chemical Oxygen Demand	mg/ltr	APHA 22 nd Edition
17	Residual Chlorine	mg/ltr	IS 3025: Part 26
18	Total Suspended Solids	mg/ltr	IS 3025: Part 17
19	Fixed Solids	mg/ltr	IS 3025: Part 18
20	Alkalinity to Phenolpthalein	mg/ltr	IS 3025: 1964
21	Reactive Silica	mg/ltr	IS 3025: Part 35
22	Toatal Dissolved Solids	mg/ltr	IS 3025: Part 16
23	Total Alkalinity as CaCO3	mg/ltr	IS 3025: Part 23
24	Total Hardness as CaCa3	mg/ltr	IS 3025: Part 21
25	Manganese as Mn	mg/ltr	APHA 22 nd Edition
26	Iron as Fe	mg/ltr	IS 3025: Part 53
27	Total Organic Carbon	mg/ltr	APHA 22 nd Edition 5310B

Table S2. Water quality parameters analyzed and BIS (2012) drinking water quality standards, where available. ND = Not defined.

		IS 1050	0:2012
Parameter	Unit	Acceptable	Permissible
		Limits	Limits
Major ions			
Calcium as Ca	mg/L	75	200
Magnesium as Mg	mg/L	30	100
Sodium as Na	mg/L	ND	ND
Potassium as K	mg/L	ND	ND
Boron as B	mg/L	0.5	1
Reactive Silica	mg/L	ND	ND
Bicarbonates as HCO3	mg/L	ND	ND
Carbonates as CO3	mg/L	ND	ND
Chlorides as Cl	mg/L	250	1000
Sulfates as SO4	mg/L	200	400
Fluorides as F	mg/L	1	1.5
Nitrates a NO3	mg/L	45	45
Nitrites as NO2	mg/L	ND	ND
Phosphates as PO4	mg/L	ND	ND
Ammonium		0.5	0.5
as Ammoniacal Nitrogen	mg/L	0.5	0.5
Bacteria			
E.coli	MPN/100 ml	0	0
Total Coliform	MPN/100 ml	0	0
Other Parameters			
рН		6.5-8.5	6.5-8.5
Conductivity	μS/cm	ND	ND
Dissolved Oxygen	DO	ND	ND
Temperature	°C	ND	ND
Turbidity	NTU	1	5
Biohemical Oxygen Demand (BOD: 3 days at 27°C)	mg/L	ND	ND
Chemical Oxygen Demand (COD)	mg/L	ND	ND
Total Organic Carbon (TOC)	mg/L	ND	ND
Total Suspended Solids (TSS)	mg/L	ND	ND
Total Dissolved Solids (TDS)	mg/L	500	2000
Total Alkalinity as CaCO3	mg/L	200	600
Total Hardness as CaCO3	mg/L	200	600

Table S3. Sampling results for major ion concentrations in RBF wells, the Krishna River, and groundwater (mg/L). HP: Handpump, BW: Borewell. The listed data only include samples that passed quality control.

Location	Date	Ca	Mg	Na	к	в	HCO3	соз	СІ	SO4	F	NO3	NO2	PO4	SIO2
RBF Wells	Date	ca	1115	140	R I		neos	005	CI J	504	•	NOS	1102	104	5102
Village 1 RBF1+2	11-Jan-17	40.1	91.2	283.0	2.5	0.0	440.8	71.7	159.8	163.9	0.5	14.4	NA	0.7	24.1
Village 1 RBF1+2	16-Feb-17	52.1	75.4	301.0	6.0	0.0	492.0	48.0	170.4	239.9	0.4	13.5	0.0	0.9	28.1
Village 1 RBF1+2	17-Mar-17	60.1	99.7	297.0	7.0	0.0	434.0	70.0	138.5	188.9	0.4	36.0	0.0	0.7	21.5
Village 1 RBF1+2	19-May-17	40.1	102.1	360.0	2.5	0.0	478.0	30.0	213.0	189.6	0.4	33.5	0.0	0.5	20.7
Village 1 RBF1+2	4-Jul-17	32.1	94.4	347.0	2.6	0.0	478.0	70.0	220.1	144.3	0.3	34.8	0.0	0.4	55.6
Village 1 RBF1+2	25-Jul-17	28.9	100.2	344.0	2.0	0.0	462.0	70.0	205.9	343.4	0.4	41.3	0.1	0.6	46.2
Village 1 RBF1+2	23-Jul-17 24-Aug-17	32.1	113.8	326.0	0.8	0.0	402.0	118.0	216.6	164.0	0.5	38.2	0.1	0.0	40.2
Village 1 RBF1+2	24-Aug-17 28-Sep-17	33.7	81.8	363.0	2.2	0.0	445.0	90.0	564.5	104.0	0.5	21.0	0.0	0.1	49.6
Village 1 RBF1+2															
	24-Oct-17	43.3	36.0	311.6	2.3	0.0	424.0	64.0	92.3	75.7	0.6	47.8	0.0	0.8	48.8
Village 2	16-Feb-17	88.2	299.1	556.0	6.0	0.0	430.0	50.0	582.2	996.9	0.9	11.5	0.0	1.1	35.3
Village 2	17-Mar-17	80.2	359.9	573.0	8.0	0.0	252.0	96.0	646.1	876.5	1.0	22.4	0.1	0.9	63.8
Village 2	19-May-17	128.3	367.2	405.5	3.2	0.0	434.0	10.0	752.6	553.6	1.0	30.6	0.0	0.7	28.7
Village 2	25-Jul-17	40.1	216.0	700.0	2.6	0.0	358.0	102.0	518.3	848.3	0.9	35.2	0.0	1.0	64.6
Village 2	24-Aug-17	48.1	161.5	506.0	0.1	0.0	368.0	64.0	450.9	358.8	0.9	31.4	0.0	0.7	67.3
Village 2	28-Sep-17	20.8	217.9	470.0	2.3	0.0	422.0	86.0	468.6	355.2	1.0	32.7	0.0	1.0	64.8
Village 3	11-Jan-17	60.1	124.0	376.0	4.0	0.0	234.0	25.2	426.0	238.3	0.6	47.8	NA	0.2	73.0
Village 3	17-Mar-17	100.2	75.4	304.0	5.0	0.0	304.0	28.0	319.5	422.9	0.4	33.8	0.0	0.2	67.7
Village 3	19-May-17	48.1	99.7	630.0	2.2	0.0	224.0	40.0	344.4	656.1	0.6	41.9	0.0	0.1	28.0
Village 3	4-Jul-17	33.7	132.3	462.0	2.3	0.0	342.0	52.0	489.9	172.5	0.6	52.4	0.0	0.0	77.1
Village 3	25-Jul-17	24.1	106.0	404.0	2.2	0.0	256.0	44.0	408.3	379.3	0.5	51.6	0.0	0.1	68.7
Village 3	24-Oct-17	78.6	101.2	309.6	1.8	0.0	268.0	32.0	379.9	175.5	0.7	44.4	0.0	0.0	94.8
Village 3	11-Jan-17	56.1	116.7	260.0	3.0	0.0	271.1	19.6	319.5	264.0	0.6	39.7	NA	0.3	77.1
Village 3	17-Mar-17	72.1	94.8	267.0	5.0	0.0	306.0	10.0	273.4	241.9	0.4	31.5	0.0	0.2	70.1
Village 3	2-May-17	80.2	111.9	386.0	2.5	0.0	328.0	11.2	447.3	178.6	0.5	24.5	0.0	0.1	51.6
Village 3	4-Jul-17	70.5	166.4	430.0	2.3	0.0	422.0	14.0	568.0	252.4	0.5	61.5	0.0	0.0	79.0
Village 3	25-Jul-17	41.7	106.0	387.0	2.3	0.0	234.0	42.0	429.6	510.0	0.6	54.8	0.0	0.0	67.9
Village 3	23-Jul-17 24-Aug-17	67.3	108.0	404.0	0.4	0.0	447.0	42.0	429.6	246.0	0.6	54.8 60.6	0.0	0.1	71.6
Village 3	28-Sep-17	80.2	88.5	179.0	2.1	0.0	412.0	32.0	230.8	140.8	0.4	35.9	0.1	0.1	45.8
Village 3	24-Oct-17	89.8	124.5	325.0	1.9	0.0	164.0	24.0	440.2	183.0	0.7	50.7	0.0	0.0	70.8
Village 3	15-Dec-17	68.1	138.6	411.0	6.8	0.0	154.0	16.0	394.1	1209.7	0.2	42.7	0.1	0.0	64.3
Village 4	1/11/2017	100.2	170.2	248.0	2.0	0.0	190.9	22.7	532.5	264.0	0.6	65.9	NA	0.0	11.7
Village 4	3/17/2017	128.3	26.8	246.0	4.0	0.0	316.0	36.0	404.7	215.0	0.5	60.8	0.0	0.1	46.1
Village 4	5/2/2017	136.3	145.9	297.0	1.7	0.0	190.0	224.0	447.3	266.5	0.4	73.3	0.0	0.1	27.2
Village 4	5/19/2017	132.3	150.8	289.0	1.5	0.0	116.0	0.0	443.8	410.0	0.6	57.3	0.0	0.0	20.1
Village 4	7/4/2017	142.7	153.7	262.0	1.6	0.0	332.0	10.0	486.4	194.5	0.5	70.6	0.0	0.0	42.6
Village 4	7/25/2017	75.4	146.9	293.0	1.8	0.0	242.0	52.0	479.3	576.6	0.5	91.7	0.0	0.1	38.0
Village 4	8/24/2017	75.4	180.0	289.0	0.3	0.0	305.0	22.0	461.5	156.3	0.5	66.1	0.1	0.0	41.7
Village 4	9/28/2017	78.6	123.6	227.0	0.8	0.0	118.0	38.0	458.0	195.4	0.4	49.3	0.1	0.1	41.1
Village 4	10/24/2017	24.1	173.2	260.8	1.8	0.0	142.0	38.0	493.5	175.5	0.6	33.5	0.0	0.0	40.5
Village 4	5/2/2017	160.3	209.2	233.0	2.6	0.0	130.0	3.8	571.6	253.7	0.4	129.5	0.1	0.2	33.3
Village 4	5/19/2017	216.4	211.6	243.0	2.6	0.0	48.0	0.0	699.4	194.8	0.6	237.5	0.3	0.0	21.9
Village 4	7/4/2017	43.3	256.8	207.0	2.3	0.0	314.0	0.0	504.1	131.5	0.4	77.0	0.0	0.0	53.7
Village 4	7/25/2017	62.5	228.6	192.0	2.4	0.0	256.0	0.0	518.3	284.5	0.5	71.3	0.1	0.0	44.3
Village 4	8/24/2017	81.8	245.2	182.0	0.8	0.0	300.0	0.0	532.5	164.0	0.3	63.1	0.0	0.0	46.8
Village 4	9/28/2017	57.7	200.0	201.0	1.9	0.0	272.0	0.0	529.0	130.0	0.4	69.6	0.0	0.2	44.3
Krishna River	5/20/2017	57.7	200.0	201.0	1.5	0.0	272.0	0.0	525.0	150.0	0.4	05.0	0.0	0.2	
	46 5-1 47	10.0	26.8	1110	3.0	0.0	115.0	14.0	00.0	98.9	0.3	33.4	0.0	0.1	42.0
Village 1	16-Feb-17	16.0		114.0		0.0	146.0		88.8					0.1	13.6
Village 1	2-May-17	24.1	17.0	39.0	2.2	0.0	83.0	14.0	32.0	16.2	0.1	1.4	0.0	0.0	11.9
Village 1	19-May-17	24.1	29.2	31.0	1.8	0.0	100.0	8.0	49.7	64.1	0.3	2.2	0.0	0.0	11.6
Village 1	4-Jul-17	14.4	5.8	15.1	2.0	0.0	40.0	0.0	21.3	12.1	0.1	11.0	0.0	0.0	17.1
Village 1	25-Jul-17	17.6	2.9	11.2	1.7	0.0	64.0	0.0	17.8	27.7	0.1	6.8	0.0	0.1	0.2
Village 1	28-Sep-17	35.3	22.4	31.7	3.5	0.0	92.0	20.0	42.6	27.0	0.2	9.7	0.0	0.3	20.3
Village 1	24-Oct-17	50.3	20.4	46.8	3.6	0.0	136.0	8.0	63.9	33.5	0.4	17.2	0.0	0.3	28.7
Village 1	15-Nov-17	44.9	21.4	64.9	2.9	0.0	122.0	14.0	81.7	27.0	0.8	12.5	0.1	0.0	8.4
Village 2	11-Jan-17	48.1	7.3	100.0	2.0	0.0	122.3	16.0	106.5	51.8	0.3	4.7	NA	0.0	4.0
Village 2	19-May-17	28.1	34.1	40.0	1.8	0.0	134.0	10.0	46.2	148.6	0.2	2.0	0.0	0.0	9.5
Village 2	4-Jul-17	9.6	9.7	13.0	1.6	0.0	38.0	0.0	21.3	15.1	0.1	9.6	0.0	0.0	14.4
Village 2	25-Jul-17	17.6	10.7	14.2	12.0	0.0	50.0	10.0	14.2	27.7	0.2	6.8	0.1	0.1	16.7
Village 2	24-Aug-17	14.4	10.7	20.2	0.8	0.0	60.0	0.0	21.3	5.6	0.1	3.1	0.0	0.0	14.7
Village 2	28-Sep-17	40.1	14.6	65.7	4.5	0.0	94.0	30.0	53.3	18.5	0.2	10.1	0.0	0.1	22.5
Village 2	24-Oct-17	12.8	46.7	37.6	0.0	0.0	126.0	18.0	60.4	21.1	0.4	15.9	0.0	0.0	28.9
Village 2	15-Nov-17	43.3	23.4	64.8	3.0	0.0	112.0	16.0	78.1	24.2	0.8	12.0	0.1	0.0	18.4
Village 3	17-Mar-17	76.2	75.4	208.0	6.0	0.0	148.0	20.0	234.3	215.0	0.4	2.5	0.02	0.0	11.5
Village 3	2-May-17	20.0	21.9	46.2	1.8	0.0	78.0	20.0	39.1	17.4	0.4	0.1	0.02	0.0	10.7
Village 3	2-10/dy-17 4-Jul-17	19.2	4.9			0.0	44.0			17.4	0.2	10.1	0.0	0.0	10.7
				16.0	1.8			0.0	17.8						
Village 3	25-Jul-17	16.0	2.3	11.1	1.7	0.0	36.0	0.0	10.7	29.2	0.0	6.8	0.0	0.1	15.7
Village 3	24-Aug-17	16.0	13.6	20.1	0.8	0.0	64.0	0.0	17.8	7.9	0.2	4.8	0.0	0.0	17.1
Village 3	28-Sep-17	40.1	15.6	36.2	3.2	0.0	110.0	22.0	52.3	21.4	0.2	10.9	0.0	0.2	25.2
Village 3	24-Oct-17	40.1	30.2	44.5	3.0	0.0	122.0	14.0	67.5	34.5	0.4	14.2	0.0	0.3	27.5
Village 3	15-Nov-17	52.9	23.4	73.1	3.2	0.0	114.0	26.0	88.8	32.7	0.7	13.6	0.1	0.0	23.7
Village 4	1/11/2017	80.2	58.4	206.0	2.0	0.0	96.8	10.3	284.0	220.7	0.4	2.6	NA	0.0	21.7
Village 4	3/17/2017	124.3	107.0	326.0	8.0	0.0	136.0	20.0	447.3	343.4	0.5	3.3	0.0	0.0	11.5
Village 4	7/4/2017	20.8	3.9	15.5	1.9	0.0	42.0	0.0	17.8	15.6	0.1	11.1	0.0	0.0	14.9
Village 4	7/25/2017	19.2	6.8	11.3	1.4	0.0	48.0	4.0	10.7	30.5	0.2	6.4	0.0	0.1	14.5
Village 4	8/24/2017	19.2	12.7	23.9	0.9	0.0	64.0	0.0	32.0	7.9	0.1	4.0	0.0	0.0	17.0
Village 4	9/28/2017	25.7	16.5	21.4	2.1	0.0	80.0	8.0	24.9	19.6	0.0	2.5	0.0	0.0	17.9
Village 4	10/24/2017	20.8	43.8	49.1	3.3	0.0	110.0	22.0	74.6	49.7	0.0	14.2	0.0	0.0	25.1
			43.0	+7.1	5.5	0.0	110.0	22.0	/4.0	43.7	0.4				20.1

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Location	Date	Ca	Mg	Na	к	В	HCO3	CO3	CI	SO4	F	NO3	NO2	PO4	SIO2
Village 1 BW	21-Dec-17	100.2	73.0	440.0	9.7	0.0	124.0	6.0	362.1	211.1	1.2	77.6	0.0	0.0	29.3
Village 1 HP	15-Feb-18	112.2	289.4	841.0	4.2	0.0	230.0	0.0	653.2	952.3	1.4	211.0	0.1	0.0	47.0
Village 2 HP	21-Dec-17	280.6	359.9	939.0	9.5	0.0	66.0	4.0	731.3	1117.1	0.9	221.2	0.1	0.0	66.0
Village 2 BW	15-Feb-18	300.6	518.0	844.0	4.0	0.0	190.0	0.0	639.0	1513.5	1.1	209.4	0.1	0.0	66.1
Village 2 HP	21-Dec-17	188.4	138.6	443.0	20.6	0.0	108.0	12.0	411.8	741.3	0.5	19.5	0.0	0.0	22.2
Village 4 HP (120 ft)	21-Dec-17	180.4	272.4	456.0	6.0	0.0	64.0	46.0	745.5	178.1	0.4	480.0	0.1	0.0	41.5
Village 4 HP (120 ft)	15-Feb-18	216.4	313.7	436.0	6.9	0.0	170.0	10.0	738.4	227.8	0.5	330.5	2.6	0.0	37.0
Village 4 HP (70 ft)	10-Feb-17	36.9	297.7	310.0	2.0	ND	292.0	20.0	727.8	170.4	0.5	287.5	0.5	0.1	49.4
Village 4 HP (70 ft)	21-Dec-17	300.6	228.6	293.0	8.1	0.0	60.0	0.0	809.4	128.7	0.3	377.0	4.0	0.1	31.5
Village 4 HP (70 ft)	15-Feb-18	96.2	452.4	424.0	4.1	0.0	230.0	0.0	710.0	870.0	0.7	503.5	0.0	0.0	47.2

Table S4. Field parameter and *E. coli* concentrations in RBF wells, the Krishna River, and groundwater (mg/L). EC: electrical conductivity, DO: Dissolved Oxygen, T: Temperature, HP: Handpump, BW: Borewell.

Location	Date	pН	EC (µStcm)	50	Turbidity Turbidity	E.coli MPN/100 ml E.coli
KBFaliveNs Village 3	Date 23-May-16	рН 7.67	(μ S/cm) 2511	(mg/L)	(NTU)	MPN/100 ml
RBF Wells	73-May-Th	/ h/	7511		1.75	
Willagge BRBF1+2	51-Jam-1176	7.878	22094655	4560	80928	4.10
Willagge BRBF1+2	118Fabr-107	77.8971	280688	5584	1.195	10
Willage BRBF1+2	1193-Jam-1176	77.8 9 5	128036	463.7	008799	00
Willage 13RBF1+2	220-Jam-127	8.09	2864	5625	1103?	00
Willage BRBF1+2	310-Jam-117	77.7561	280991.	4792	1228.2	00
Village BRBF1+2	544301-126	77,937;	2 <u>11</u> 9/	468)	240 2 6	0
Village BRBF1+2	11±9€e9b}+117€	77833	2982()	666	4 1.8 1	814
Willage BRBF1+2	1294301-126	77,992;/	20090	543()	0.51	150
Willage BRBF1+2	29-Aang-117	77996	2 04<u>0</u>;	565()	12.71	110
Willage BRBF1+2	31-500-112	77,664;	23335	4662	8323:1	0(
Willage BRBF1+2	87-F984p-1176	77,9574 873911	201666	7447 5480	01351	2(
(////1800002 13RBF1+2	154-5984p-117	87,991 87,997	1923/ 1982)	54 <u>7</u> 9 653	2 <u>2772:1</u> 3108:1	0
Village BRBF1+2	2129-FSEEp-1176	7.18	2040	7437	1,9053	
(illinge BRBF1+2	8440901-117	7799	292408	665;		1
(illinge BRBF1+2	16540801-17	77882	21586	567/	09785	6.3
(illinge BRBF1+2	2219ABrt 17	77878	2368	5674		0
(illinge 1gRBF1+2	27440941476	7772	2099	664	11086	3.1
(illinge 1gRBF1+2	12=Ni0%-116	77682	24597	6567	01985	0
(iii) age 13RBF1+2	13-NOV-12	77752	25316	662;		0
(illegge 13RBF1+2	12-NIOV-17	77842	256798	569:		30
(ill age 13RBF1+2	29 MRW-17	775972	2845	6466		
(ill Bee 13RBF1+2	176Mayc176	7.83	2254	643;	02863	0
(ill Bage 13RBF1+2	1970686-176	77956	25499;	5460	1110-1	Q
/ille ትRBF1+2	22300000-176	7 ,91 8	2668	5649	12596	Q
Willing BRBF1+2	31900000-176	7793	28257	5712	21886	O
(illinge 1 RBF1+2	71147-17	7782	25,7,81	459	1,55	Q
(ill Bage BRBF1+2	1301477	77762	45982	5568	0.869	O _l
(illingen 1 RBF1+2	1971 Hin-17	7.86	4689	4690	1 , 2 ₈	O _l
(illinge 1,RBF1+2	29-440-17	7.84	4473	5 ₄ 1;	0 ,94 1	0,
(illege 1RBF1+2	1478547	7,76	2453	551	2 <u>1</u> 188	0
(illege 1 RBF1+2	17. Jul 17	7,78%	2544	5,3,	1,28;	0 ₁
(illage 1RBF1+2	24-14-17	7,8 2 , 7,52,	2 <u>43</u> 321	5551		0, 3.1,
(개월동 3 ^{RBF1+2} (개월동 3 ^{RBF1+2}	24-1441-17 72-1448-17	7752	2 <u>45</u> 3 2798;	558/1 558/1	6 <u>9127</u> 7 0x690	5.1 0
(illage 1RBF1+2	161-1015r-177	7981	2394		1.32.7	1
(illage 1 RBF1+2	16-Mar-17	7,89	25110	4,8,	0,89,1	2
/illage 1RBF1+2	23rAvg=17	7,75	2766	5,5,	0.650	6.3
(iiiiage 3 (iiiiage 1aRBF1+2	247Aug-17	7,57	2590	5 ₆ 2	1,06,1	2
(illage 1 RBF1+2	30-Aug-17	7,55	3551	4,9	1,77,1	9.6
(illage 1 RBF1+2	51Sep-17	7,64	2649	4,7	9.17.	0,
(illage 1,RBF1+2	12-Sep. 17	7,79	2354	562	1.63	
(illage 1 RBF1+2	18-SAR-17	7.8	2453	5,1	6.63.	e.
(illage 1 RBF1+2	30-Sep. 17	7,33	2629	650	1,73.	0.
(illage 1,RBF1+2	22-Oct-17	7.51	2806	4,9	5.42	21.6
(illage 1,RBF1+2	27-Oct-17	7,34	2472	6,1,	1,54.,	1,
(illage 1,RBF1+2	12-Oct-17	7,97	3120	4,7	3.71	0,
(illage 1 RBF1+2	17-Oct-17	7,51	3316	5,6.	4.46.	0,
/illage 1RBF1+2	24-Oct-17 20-Jun-17	7.8	5337	5,2	1,73 0.67	2
/illage 1 RBF1+2	3-Nov-17 27-Jun-17	7,48	3159	5,6	5,51	0,
/illage 1 RBF1+2	8-Nov-17	7,31,	3355	5.7	4,29	
/illage 1 RBF1+2 Village 1 RBF1+2 /illage 1 RBF1+2	15-Nov-17 17-Jul-17 22 Nov-17	8,01	3414 3414 2021	5,6	$\frac{1.1}{3.71}$	3.1
village 3	22-Nov-17 1-Aug-17 28-Nov-17 8-Aug-17	8,07.	-3414 3021 3610	5,0 4.0	4,62	0
111462 7	28-NOV-1/ 8-Aug-1/ 29-Nov-17	7,92	2668 3517 2413	5.4	1,35,	0
/////ape 1///RBF1+2 /////ape 1//RBF1+2 ////ape 1/RBF1+2 ////ape 1/RBF1+2	29-100-17 15-000-17 16-000-17 23-000-17 23-000-17 23-000-17 24-000-17	0,33	2413	4,5	1,44 0,66	
Village 1 RRF1+2	22-Aug-17 13-Dec-17	8,47 8,47 8,4	2492	4,8 6,3	0,88,0,62,	0
/illage 1 RBF1+2	24-Aug-17 20-lan-18	7.81	2780 2472 2551	4.7	0.68	0
/illage 1 RBF1+2	29-Aug-17 21-Jan-18	7.87 8.11, 7.57	2609 2197	4,7 4,9 4,6	0,68 0,62 9,99	0
Village 3 Village 1 RBF1+2	5-Sep-17 26-Jan-18	7.57 8.11 7.44	2197	4.6	-9.99 0.85	0
village 3	12-Sep-17		2472 2688	4,5 4.9	0,85 4.41	
/illage 3	19-Sep-17	7.33	2963	5.1		(
/illage 3	26-Sep-17	7.46	2982	5.6		(
Village 3	3-Oct-17	7.41	2963	5.7	3.21	
Village 3 Village 3	10-0ct-17	7.51	2413	5.0		
Village 3 Village 3	17-Oct-17 24-Oct-17	7.63	2766			
Village 3 Village 3	24-Oct-17 3-Nov-17	7.28	3002	5.2		
Village 3 Village 3	3-Nov-17 7-Nov-17	7.79 7.59	2472 3355	5.5		
Village 3	14-Nov-17	8.23	2531	4.7		
Village 3	21-Nov-17	8.25	2331	5.8		
Village 3	28-Nov-17	7.81	2923	5.7	1.44	
Village 3	5-Dec-17	8	2551	5.5		(
Village 3	12-Dec-17	8.15	3296			
Village 3	21-Dec-17	8.11	2590	4.8		
Village 3	26-Dec-17	7.68				

Location	Date	рН	EC (μS/[ggm)	DO (mgg/g)	Turbidity (NiTH)dityMP	E.coli N/ £90011 1
RBF Wells	1-Jun-16	7.5	2649	4.0	2.75	. (
VINABLE WRAF1	255440:46	7.5 7,60	2045			(
Willage-4 RBF1	14-1HA-16	7.520		7.1	- 27.4.4	6.2
Village 4 DDE1	24-Jun-16	7,7,	2629			(
Village 2 Village 4 RBF1	30-lun-16	7.9	3061		0 1.03.2 3 88.4 1 11	17.
Village 2 Village 4 RBF1	15-Jul-16 1-Aug-16	7.23	3434	4.5	1.11	
Village 4 RBF1 Village 4 RBF1 Village 4 RBF1 Village 4 Village 4 Village 4 RBF1 Village 4 RBF1	15 Jul 16 1 Aug-16 29 Aug-16 29 Aug-16 29 Jug-16 29 Jug-16	7.23 7.23 7.4	2649		9 1.13.7	
	29-sep-18	7.51	2845	/ /3	0 145,03	(
Village ² 4 RBF1	17-Sep-16	ŤĤ	3865	58	9 450,04	30.1
WINGe 4 RBF1	12 off 16	7.42	NA 478	43		
VVIA6ge24 RBF1	22 001 16	7.5	NA 5101	3.8	4 17.1 2	3.1
WHEE 24 RBF1	28 dtl 16	7.50			8 27 ¹ 3 ⁵⁶	8.5
VVIA8ge24 RBF1 VVIA8ge24 RBF1	120 AUR: 16 266 AUR: 16	7.56			4 230993 0 5.0755	
VVIABGe24 RBF1 VVIABGe24 RBF1	30-Aug-16	7/88			5 26.4.9	(
VVIAgge24 RBF1	19-Nep-16	78,724				
VVIlligge24 RBF1	27-Sep-16	77565		6.5		
Willigge24 RBF1	5-Det-16	77565		4.5		
VIII Been RBF1	18-001-16	7.79		4.6		1
VYILLER 24 RBF1	18-0€€-16	7/894		4.9	8 1.9758	(
Willage 74 RBF1	32:PR4:16	7,6,	28961	6.2	6 136439	1
Willage 4 RBF1	28-1986-16	7.30	3459/	7.7	4 1.8675	4.1
Village,4 RBF1	7 ⁶ N80-17	7,46	3921	7.4	2,9,7	7.3
Willage, 4 RBF1	11. Jan-17	7,66,	2923.	5.9	7 8.41 2	0
	20.Jan-17 21.Nov 16 27.Jan-17 28.Nov 16 31.Jan-17	Z,55,	3139,	. 5.2	- 6.54	(
Village 2 RBF1 Village 4 RBF1 Village 4 RBF1 Village 4 RBF1 Village 4 RBF1	27-Jan-17 28-Nov-16	Z,56.	2433 2551	. 5.5	2 9.26	(
Villäge 4 RBF1	31-Jan-17 5-Dec-16	7.62 7.69	2551	4.1	2 10.2 4 29.6 7 - 2 11	3.1
Village 2	9-FEB-19 18-FEB-19		2688 3061	4.1 4.5 6.1	29.6 7 17.5 ³¹	
Village 4 RBF1 VVIII6ge 4 RBF1	16-Feb-17 23-Feb-19	8.08 7.65	3061 2829	6.1 5.2	175-	(
Village 4 RBF1 VVIllage 4 RBF1	23-Feb-17 39:NGS-19	7.65	2829	5.2 4.8	1.73 ³³ 0 7.28 ³²	2
VINage-4 RBF1 VVIAge-4 RBF1	91/10-17	7.64	2825	4.6	8 5.\$405	2
VVIA8ge24 RBF1	18:Mar-17	7.7%		4.6	4 1.8976	1
VVIASge24 RBF1	191/00-17	7.26				6.2
VVIIIIgge24 RBF1	28-West-17	7.29				5.1
VVIIIgge24 RBF1	30-1/an-17	78139				1
VVIIIigge24 RBF1	6-Pept-17	77,450				(
WHILE BER 24 RBF1	13-Peb-17	7.96			3 1.4576	(
Willigge24 RBF1	28-Peb-17	7.5/				(
Willage24 RBF1	10-JMai:17	7,64		5.6	5 1.34 1	(
Willage 4 RBF1	18:M8¥:17	7,96	3296	7.‡	3 1.8971	2
Willage 4 RBF1	25:MBY:17	7,65	3934	5.2	0.541	(
Willage_4 RBF1	161NHP-17	7,77,	2766	5.g	1 7.8900	(
	20 Mar 17	7.82 7.82	2413	4.9	5 6.16	0
Village 2 Village 4 RBF1	15-Jun-17 27-Mar-17	7.194.,	2329.) ^{6.} 3	1 1.2	(
Village 2 Village 4 RBF1 Village 2 RBF1 Village 2	23-Jun-17 29-Jun-17	7,29	2433 3237	6.6 6.4	4 1.89 1	(
Village 2 Village 4 RBF1	11-Apr-17 4-Jul-17	8.08	3198	6.4 4.7	4 14.4 8.29 ⁵⁵	
Village 2 Village 2 4 RBF1	18/001-17	6.99	3139	4.2	4 23 ² 8 ⁰⁸	(
Village 4 RBF1	-19-ABG-17	7.31	3296	4.8	6 12 ⁵⁷	(
VVIASEe24 RBF1	10 Max 17	7.99	3439	3.5	9 8.3723	
VUIASEe24 RBF1	10-Mag-17	7.65	3294	5.5	3 0.9834	(
VVIASge24 RBF1	154 May 17	7.98	3239		1 1.3631	1
VVIABge24 RBF1	19:Mag=17	19:421	3492	5.4	9 0.4231	
VVIIIage24 RBF1	228/slay-17	77.596				(
VVIIIage24 RBF1	293\\$lay-17	77,428				(
VVIIIigge24 RBF1	25-Sep-17	77,481				(
VVIIIgge24 RBF1	22-Sep-17	77.135				(
Willege24 RBF1	28-Sen-17	77,265				0
Willege24 RBF1	25:961-17	7.82				(
Willage 4 RBF1	112.961:17	733				
Willage-4 RBF1	18:061-17 24-0ct-17	7,724:			5 9.61.;1 2.2	(
VILLage_4 RBF1	247-961-17	7987			1 2.2.1 1 11.2 3	
Willage,4 RBF2	29-Jan-17 11-Jan-17	7.4	3375 3355	6.4	1 21 3	
Village 4 RBF2	11-Jan-17 20-Jan-17	7.26	2963	5.6	1 21,3 ,4 2.37	- (
Village 4 RBF2 Village 4 RBF2	27-Jan-17	74 7,26 7,25	2963 455 3610	5.0	2.37 8 0.36 10.29	Č
Village 4 RBF2	31418-17	9.3	3512	-3	3 070'3	
Viffage 4 RBF2	29-468-17	7.43	3041	° 51	21415	
VVIASE 4 RBF2	46-788-17	8.61	2708	57	16435	(
Wingge 4 RBF2	23-74B-17	7.41	3599	58	9 10g/3	(
VUIASge24 RBF2	2:669:17	7.54		4.9	6.2104	(
VVIASge24 RBF2	13:669:17	7.95		4.4	4 <u>0</u> 198	(
VVIABge24 RBF2	18-19ap-17	7.380				
VVIABge24 RBF2	25-161ap=17	7.74				
VVIIIigge24 RBF2	25240act-17	77.360				42.5
VVIllage24 RBF2	26-0ct-17	7.7/2				42.2
VVIIIigge24 RBF2 VVIIIigge24 RBF2	29-0ct-17	77,626 77,980				/2./
VMIB2824 RBF2	1640kt=17 2420kt=17	7/980				
WILLBER 4 RBF2	24/(301=17)	7,047	3235:			3.1
WILLBERGARBF2	10:10:18:17	7,047			5 6.46.16	5.1
Willage ₂ 4 RBF2	17:AH8:17	7,62			2 0.61 1	
Willage-4 RBF2	24-AHE-17	7,22	3355	5.2	0 0.8197	1
Village 4 RBF2 Village 2 Village 2 Village 4 RBF2	31-Aug-17	7.90 743 7.80 7.59	3512	5.3		2.1
Village 4 RBF2	27 Nov 17 28 Sep 17 13 Sep 17 21 Sep 17 21 Sep 17	7,59	3473	5.2	4 0.66 4 0.66	1
Village 4 RBF2	13-Sep-17	173 / 35	3532 3649	5.3 5.4	4 4.59 5 0.36 1.95	(
Village 2 Village 4 RBF2 Village 2 Village 2 Village 2 Village 2	21-Sep-17	1,35	3649	5.3	1.95	(
Village 4 RBF2	23-Sep-17	6.98	3649	-3	о _с <u>н</u> р/	(
Viflage 4 RBF2	26-Sep-17	6.79	3512	57	1 94 "	(
VVIASEe24 RBF2	27-sep-19	7.55	3493	5.4	8 3.69 9	(
Willege24 RBF2	26-9an-18	77598			9 2.1121	(
Village 4 RBF2	29-Sep-17	7.54	3473	3.7	3.12	(
Village 4 RBF2	30-Sep-17	7.45	3414	4.0	1.72	(
Village 4 RBF2	1-Oct-17	8.2	3610	4.9	2.19	
Village 4 RBF2 Village 4 RBF2	5-Oct-17	7.7	3237	4.4	6.25	(
	11-Oct-17	7.27	3159	4.5	2.24	1
Village 4 RBF2	18-Oct-17	7.92	2609	5.9	1.19	(

Water 2018, 7, 12

Location	Date	рH	EC (µS/cm)	DO (mg/L)	Turbidity (NTU)	E.coli (MPN/100 ml)	
River Village 1	1-Dec-15	8.6	824	8.89	9.1		
Village 1 Village 1	9-Dec-15 16-Dec-15	8.6 8.7	844 903	9.72 6.82	9.5 10.23	24.3	
Village 1	22-Dec-15	8.5	1001	7.82	9.54	43.5	
Village 1	30-Dec-15	8.5	1040	7.04	12.6	48	
Village 1 Village 1	5-Jan-16 13-Jan-16	8.5	1040	6.52 7.8	7.82	131.4	
Village 1 Village 1	13-Jan-16 20-Jan-16	8.5	1099	7.8	9.24	17.5	
Village 1	29-Jan-16	8.5	1236	7.14	11.31	39.3	
Village 1	3-Feb-16	8.5	1275	7.09	12.4	45.2	
Village 1 Village 1	10-Feb-16 17-Feb-16	8.3 8.4	1354 1628	5.46 5.84	17.6 15.1	336	
Village 1	25-Feb-16	8.3	2354	6.74	17.7	2851	
Village 1	2-Mar-16	8.09	3669	5.87	NA	52.9	
Village 1	10-Mar-16	8.2	2982	5.89	NA	44.1	
Village 1 Village 1	16-Mar-16 22-Mar-16	7.6 7.8	1903 1884	6.83 7.75	NA	8.6	
Village 1	22-Mar-16	7.7	1707	6.47	NA	2	
Village 1	5-Apr-16	8.1	2747	6.53	7.19	238.2	
Village 1	13-Apr-16	8.6	3728	5.95	10.7	186	
Village 1 Village 1	20-Apr-16 28-Apr-16	8.1 7.8	2139 1177	5.49 6.11	4.31	1011.2	
Village 1	4-May-16	8.5	1177	10.74	5.89	21.6	
Village 1	11-May-16	8.3	1354	7.09	8.01	53.7	
Village 1	18-May-16	8.4	1628	6.8	17.9	17.6	
Village 1	25-May-16	8.3	2354 746	4.75	57.7	549.3	
Village 1 Village 1	2-Jun-16 7-Jun-16	8.5	746 510	4.15 4.41	23 9.65	1011.2	
Village 1	15-Jun-16	8.57	647	7.67	32.6	333.3	
Village 1	22-Jun-16	9.1	667	6.92	15.2	1011.2	
Village 1	29-Jun-16 6-Jul-16	8.75 8.26	922 216	8.3 8.47	21.1 43.3	1011.2 549.3	
Village 1 Village 1	6-Jul-16 13-Jul-16	8.26 8.26	216 353	8.47 5.81	43.3	549.3	
Village 1	23-Jul-16	7.61	373	6.12	11.5	549.3	
Village 1	28-Jul-16	8.21	392	5.5	10.5	165.8	
Village 1	3-Aug-16	8.4	294	5.68	28.3	1011.2	
Village 1 Village 1	19-Aug-16	8.22	334	5.75	8.19	456.9	
Village 1 Village 1	26-Aug-16 30-Aug-16	7.28	294 334	7.98	9.31	44.3	
Village 1	8-Sep-16	8.62	353	6.13	4.59	517.2	
Village 1	17-Sep-16	5.55	549	6.47	5.16	109.5	
Village 1	20-Sep-16	8.04	NA	4.87	16.2	108.1	
Village 1 Village 1	27-Sep-16 5-Oct-16	8.55	NA	6.87 4.38	40.5	145.9	
village 1 Village 1	14-Oct-16	8.22	NA	4.38	9.77	44.8	
Village 1	22-Oct-16	8.4	373	5.68	28.3	3.1	
Village 1	26-Oct-16	8.3	294	5.88	3.06	5.1	
Village 1	3-Nov-16	8.83	589	7.97	3.77	4.1	
Village 1 Village 1	9-Nov-16 16-Nov-16	8.92 8.35	510 667	7.23	17.3 19.8	68.2	
Village 1	23-Nov-16	8.23	824	6.18	20.9	30.5	
Village 1	30-Nov-16	8.27	667	6.51	6.2	7.3	
Village 1	7-Dec-16	8.29	667	5.50	2.43	2	
Village 1 Village 1	16-Dec-16 21-Dec-16	8.4 8.5	706 746	4.66	3.47	2419.6	
Village 1	30-Dec-16	8.45	746	5.55	18.2	9.6	
Village 1	4-Jan-17	8.3	785	4.88	2.17	8.4	
Village 1	11-Jan-17	8.47	824	6.58	7.39	10.9	
Village 1	19-Jan-17	8.2 8.57	824 863	6.56 6.86	5.97 3.64	0.5	
Village 1 Village 1	27-Jan-17 31-Jan-17	8.57	863	5.97	4.12	2419.6	
Village 1	8-Feb-17	8.54	785	7.42	3.6	17.3	
Village 1	15-Feb-17	8.44	903	5.39	1.23	6.3	
Village 1	22-Feb-17	8.44 8.41	981 883	7.70	6.1	5.2	
Village 1 Village 1	1-Mar-17 8-Mar-17	8.41	883 981	6.77	4.09	116.2	
Village 1	16-Mar-17	7.97	1275	5.69	0.78	32.3	
Village 1	22-Mar-17	8.26	1334	7.45	3.37	13.2	
Village 1	27-Mar-17	8.12	1138	6.37	2.21	0.5	
Village 1 Village 1	5-Apr-17	8.21	1177	5.96	8.31	20.6	
village 1 Village 1	13-Apr-17 19-Apr-17	8.3 7.99	1373 1079	6.27 6.29	15.4 24.4	25.9	
Village 1	1-May-17	8.58	451	7.03	12.6	31.8	
Village 1	17-May-17	8.27	549	6.34	5.31	13.2	
Village 1	19-May-17	8.26	726	5.18	9.54	9.6	
Village 1 Village 1	24-May-17 31-May-17	8.5 7.92	726 863	6.02 5.59	7.95	119.8	
Village 1	7-Jun-17	8.34	687	5.63	12.3	4.1	
Village 1	14-Jun-17	8.31	726	5.71	7.65	9.6	
Village 1	19-Jun-17	8.25	785	2.57	12.7	4.1	
Village 1 Village 1	29-Jun-17 4-Jul-17	8.36 8.13	942 491	5.54 5.38	17.1	408.3	
village 1 Village 1	4-Jul-17 15-Jul-17	8.13	491 235	5.38	13.3	67.7	
Village 1	17-Jul-17	8.19	334	3.07	33.7	84.7	
Village 1	24-Jul-17	8.47	530	5.88	25	248.1	
Village 1	2-Aug-17	7.77	235	4.94	15.1	1046.2	
Village 1 Village 1	9-Aug-17 16-Aug-17	7.93	196 785	5.02 4.67	11 8.52	76.3	
Village 1 Village 1	16-Aug-17 23-Aug-17	7.92	785	4.67	8.52		
Village 1	24-Aug-17	8.36	628	5.08	0.69	126.8	
Village 1	30-Aug-17	7.62	1177	5.09	2.69	2419.6	
Village 1 Village 1	5-Sep-17 12-Sep-17	7.97	824 549	5.26 5.31	9.93 2.71	365.4	
/illage 1 /illage 1	12-Sep-17 19-Sep-17	8.32	549 608	5.31	2.71		
Village 1	30-Sep-17	7.56	706	4.95	9	517.2	
Village 1	2-Oct-17	8.36	746	5.23	4.16	290.9	
Village 1	7-Oct-17	7.5	647	5.15	7	866.4	
Village 1	12-Oct-17	8.31	1236 1001	4.99	6.26	10.2	
Village 1 Village 1	17-Oct-17 24-Oct-17	8.69 8.36	1001 746	5.88 5.10	13.2 3.86	9.6 126.8	
village 1 Village 1	24-Oct-17 3-Nov-17	8.35	1059	5.10	3.86	4.1	
Village 1	8-Nov-17	8.61	863	5.63	9.36	113	
Village 1	15-Nov-17	8.27	804	5.62	4.79	44.3	
Village 1	22-Nov-17	8.39	824	5.50	6.76	101.7	
Village 1	28-Nov-17	8.41	863	5.69	10.2	21.1	
Village 1 Village 1	29-Nov-17 6-Dec-17	8.93 8.7	1020 1001	5.78 4.90	3.06	31.8	
Village 1	13-Dec-17	8.74	922	4.90	8.33	45.7	
	20-Dec-17	8.43	961	5.26	3.14	19.7	
Village 1 Village 1	21-Dec-17	8.57	1020	4.89	1.25	16	

Location	Date	рН	(µS/cm)	(mg/L)	(NTU)	E.coli (MPN/100 ml)
River Village 2	11-Nov-15	8.9	804	9.08	9.49	NZ
Village 2	1-NOV-15 1-Dec-15	8.1	804	9.08	9.49	N/
Village 2	9-Dec-15	8.5	804	10.05	9.33	44.1
Village 2 Village 2	16-Dec-15 22-Dec-15	8.8 8.7	824 942	7.56	9.59	23.
Village 2	30-Dec-15	8.6	1020	7.76	10.81	6.3
Village 2	5-Jan-16	8.6	1001	7.62	10.9	4.:
Village 2 Village 2	13-Jan-16 20-Jan-16	8.5 8.6	1079 1118	7.98	12.9 6.89	20.:
Village 2 Village 2	20-Jan-16 29-Jan-16	8.6	1118	7.04	9,79	4.
Village 2	3-Feb-16	8.6	1197	7.74	7.94	9.5
Village 2	10-Feb-16	8.6	1256	7.35	10.7	3
Village 2 Village 2	17-Feb-16 25-Feb-16	8.5	1334 1315	7.86	13.5	10
Village 2	3-Feb-16	8.3	1510	7.77	10.4	5.3
Village 2	10-Mar-16	8.1	1785	6.55	9.12	27.
Village 2	16-Mar-16 22-Mar-16	8.2 8.1	1197	7.9 5.12	7.03	13.
Village 2 Village 2	22-Ivial-16 27-Mar-16	7.9	1354	6.57	7.41	17.
Village 2	2-Apr-16	8.1	3139	6.78	7.65	378.4
Village 2	9-Apr-16 20-Apr-16	8.2	2943 2747	5.57	4.78	184.
Village 2 Village 2	20-Apr-16 26-Apr-16	7.9	1785	6.29	4.78	1011.2
Village 2	4-May-16	9.1	844	9.5	6.05	19.9
Village 2	11-May-16	9.2	589	6.55	7.71	5
Village 2 Village 2	18-May-16 25-May-16	8.7	216 275	6.97 4.66	23.6	26.9
Village 2	25-Way-16 2-Jun-16	9.2	314	4.00	9.98	4
Village 2	7-Jun-16	9.21	432	5.45	6.93	32.1
Village 2 Village 2	15-Jun-16 22-Jun-16	9.16 9.04	549 530	8.34 7.58	32.4	43.
Village 2 Village 2	22-Jun-16 29-Jun-16	9.04 8.99	530 608	7.58 9.13	7.86	4.
Village 2	6-Jul-16	8.22	196	7.73	42.2	574.
Village 2	15-Jul-16	8.17	196	10.11	75.3	183.
Village 2 Village 2	23-Jul-16 28-Jul-16	7.35	353 353	5.56 5.6	7.22	140.
Village 2	3-Aug-16	8.21	275	5.67	22.4	960.
Village 2	19-Aug-16	8.35	353	6.13	21.3	913.9
Village 2 Village 2	26-Aug-16 30-Aug-16	7.61	275 255	7.61	8.34	40.
Village 2 Village 2	30-Aug-16 8-Sep-16	8.46	255 314	5.85	6.49	129.0
Village 2	17-Sep-16	7.28	589	6.22	3.05	6.3
Village 2	20-Sep-16	7.9 8.28	NA	7.74	17.2	281.
Village 2 Village 2	27-Sep-16 5-Oct-16	8.28	NA NA	5.98	36.5 6.89	34
Village 2	14-Oct-16	8.3	NA	5.51	9.45	4.:
Village 2	18-Oct-16 28-Oct-16	8.66	412	5.91	3.65	5.3
Village 2 Village 2	28-Oct-16 3-Nov-16	8.72 8.23	569 451	6.48	5.26	4.:
Village 2	7-Nov-16	9.34	491	7.15	4.48	
Village 2	14-Nov-16	8.12	1040	6.02	0.84	0.9
Village 2 Village 2	21-Nov-16 28-Nov-16	8.34 8.34	667 667	6.95 7.08	4.59	5.
Village 2	5-Dec-16	8.8	706	5.73	4.08	14.
Village 2	16-Dec-16	8.53	746	5.74	3.12	93.3
Village 2	23-Dec-16 30-Dec-16	8.3 8.9	687 765	5.42 5.37	4.86	8.
Village 2 Village 2	30-Dec-16 4-Jan-17	8.9	667	5.37	9.89	15.
Village 2	11-Jan-17	8.4	785	6.85	5.97	10.
Village 2	19-Jan-17	8.03	746	4.40	1.89	0.5
Village 2 Village 2	23-Jan-17 30-Jan-17	8.48	883 863	5.47 6.29	3.12	2419.
Village 2	6-Feb-17	8.6	804	6.34	4.37	2423.
Village 2	13-Feb-17	8.43	844	7.48	7.98	111.0
Village 2 Village 2	20-Feb-17 27-Feb-17	8.2 8.46	824 903	6.25	0.67	9.4 2419.0
Village 2	6-Mar-17	8.68	1099	7.26	6.86	77.:
Village 2	13-Mar-17	7.96	1491	4.89	6.81	:
Village 2 Village 2	16-Mar-17 20-Mar-17	8.12	1295 1373	4.42	2.07	235.
Village 2	27-Mar-17	8.24	1236	7.19	1.78	7.
Village 2	3-Apr-17	8.5	1118	6.35	5.08	6.3
Village 2 Village 2	11-Apr-17 18-Apr-17	8.18	1315 1275	5.44	1.55	41.
Village 2 Village 2	18-Apr-17 24-Apr-17	8.02	628	4.92	3.13	5.3
Village 2	1-May-17	8.63	471	6.71	6.89	10.2
Village 2	10-May-17	8.5 8.36	785 549	6.16	9.32	7.
Village 2 Village 2	15-May-17 19-May-17	8.36 8.31	549 608	5.56 5.46	6.47	7.:
Village 2	22-May-17	8.34	569	4.94	1.53	6.3
Village 2	29-May-17	8.35	647	5.80	8.62	19.
Village 2 Village 2	5-Jun-17 12-Jun-17	8.35	687 765	5.50 5.96	2.31	10.1
Village 2	12-Jun-17 19-Jun-17	8.29	903	5.52	28	9.1
Village 2	28-Jun-17	8.24	824	5.62	18.2	10.3
Village 2 Village 2	4-Jul-17 15-Jul-17	8.83 7.81	294 334	4.93 5.88	7.23	74.
Village 2	13-Jul-17 17-Jul-17	8.1	255	5.64	9.51	40.
Village 2	24-Jul-17	8.6	412	5.70	21	80.9
Village 2 Village 2	31-Jul-17 7-Aug-17	8.06	510 235	5.15 4.81	27.7	770.
Village 2 Village 2	7-Aug-17 14-Aug-17	8.46	235	4.81	20.9	30.:
Village 2	21-Aug-17	7.98	569	5.21	4.02	45.
Village 2	24-Aug-17	7.82	628	5.70	1.05	128.
Village 2 Village 2	28-Aug-17 4-Sep-17	8.33 8.41	1491 1020	6.30 4.67	0.96	82.0
Village 2	11-Sep-17	8.33	647	5.54	2.04	1299.
Village 2	18-Sep-17	8.29	687	2.58	1.08	410.
Village 2 Village 2	25-Sep-17 2-Oct-17	8.2 8.16	785 765	5.78 5.23	18.3	22.
Village 2 Village 2	6-Oct-17	7.89	765 530	5.23	9.26	686.
Village 2	9-Oct-17	8.21	647	5.63	9.21	17.:
Village 2	16-Oct-17 24-Oct-17	8.26 8.18	981	5.30 4.92	12.6	33.
Village 2 Village 2	24-Oct-17 3-Nov-17	8.18	667 706	4.92	2.54	7.:
Village 2	8-Nov-17	8.26	1040	6.04	9.31	50.4
Village 2	13-Nov-17	8.45	1373	5.38	7.92	3.:
Village 2 Village 2	20-Nov-17 27-Nov-17	8.35 8.81	922 961	5.04	1.17	72.
Village 2 Village 2	27-NOV-17 28-Nov-17	8.81	961	6.12	6.82	50.1
Village 2	4-Nov-17	8.45	981	5.06	7.65	4.:
Village 2	11-Dec-17	9.05	1059	6.44	8.64	18.9
Village 2	18-Dec-17	8.71	1177	5.39	4.27	52.9
Village 2	21-Dec-17	9.19	1059	5.18	1.86	28.

Water **2018**, 7, 12

Location	Date	рН	EC (µS/cm)	DO (mg/L)	Turbidity (NTU)	E.coli (MPN/100 ml)
Village 3	22-Nov-15	8.63	1844	7.94	19.4	
Village 3 Village 3	30-Nov-15 7-Dec-15	8.89 8.6	981 1020	9.1 7.94	12.8 8.11	263.8
Village 3	14-Dec-15	8.6	981	10.9	12	93.3
Village 3	21-Dec-15	9	981	7.72	10.2	5.2
Village 3 Village 3	28-Dec-15 4-Jan-16	8.3 8.5	1373 1452	6.61	12.2	8.6
Village 3	11-Jan-16	8.8	1413	8.16	13.1	50.4
Village 3	19-Jan-16	8.7	1530	8.34	14.3	28.5
Village 3 Village 3	27-Jan-16 2-Jan-16	8.3 8.6	1746 1785	7.6	11.4 10.2	13.1
Village 3	8-Feb-16	8.7	1805	6.96	9.01	30
Village 3	14-Feb-16 22-Feb-16	8.5	2040 2119	7.34	16.4 5.75	20
Village 3 Village 3	22-Feb-16 29-Feb-16	8.1	2119	4.57	5.75	41
Village 3	7-Mar-16	8.5	2001	6.98	5.72	75.4
Village 3 Village 3	14-Mar-16 21-Mar-16	8.7 8.6	2158 2158	6.18 5.58	6.62 7.69	10.9
Village 3	21-IMar-16 28-Mar-16	8.3	2158	6.65	9.03	396.8
Village 3	4-Apr-16	7.7	2943	5.1	4.36	71.4
Village 3 Village 3	11-Apr-16 18-Apr-16	7.5	2747 2080	5.46	6.32	29.2
Village 3	27-Apr-16	7.6	1099	5.41	4.26	871.4
Village 3	2-May-16	8.4	2943	9.69	2.8	78.4
Village 3 Village 3	9-May-16 16-May-16	9.2 8.6	491 216	6.59	7.71	55.6
Village 3	23-May-16	8.8	235	7.35	8.21	3.1
Village 3	30-May-16	8.9	392	5.14	3.5	343
Village 3	6-Jun-16	9.1	647	5.04	6.87	0.5
Village 3 Village 3	13-Jun-16 20-Jun-16	8.4 8.25	471 451	7.12	14.6 4.24	64.6
Village 3	30-Jun-16	9.28	647	7.47	10.8	360.9
Village 3	4-Jul-16	8.5	216	10.51	31.4	280.9
Village 3 Village 3	16-Jul-16 19-Jul-16	8.04 8.14	196 275	8.14	25.2 21.8	1011.2
Village 3	29-Jul-16	8.14	373	6	10.1	62
Village 3	5-Aug-16	8.25	275	6.14	52.2	689.3
Village 3 Village 3	8-Aug-16 19-Aug-16	7.82	255 334	6.67	39.8 11.3	396.8
Village 3	23-Aug-16	7.84	353	6.35	13.9	64.1
Village 3	2-Sep-16	8.36	353	6.28	2.69	31.5
Village 3 Village 3	7-Sep-16 14-Sep-16	8.65	314 353	7.22	6.85	17.3
Village 3	19-Sep-16	8.13	314	4.77	7.32	9.7
Village 3	1-Oct-16	8.02	NA	6.1	5.35	30.3
Village 3 Village 3	4-Oct-16 14-Oct-16	7.74	NA 412	5.46 7.1	7.55	42.5
Village 3 Village 3	14-Oct-16 19-Oct-16	8.59	530	7.24	5.57	9.7
Village 3	24-Oct-16	8.12	451	5.43	2.47	0.5
Village 3	2-Nov-16	8.69 8.93	471	8.70	2.54	8.6
Village 3 Village 3	8-Nov-16 14-Nov-16	8.93	824	5.45	3.1	4.1
Village 3	22-Nov-16	8.24	706	7.09	4.89	4
Village 3	29-Nov-16	8.49	765	5.05	3.16	4.1
Village 3 Village 3	6-Dec-16 17-Dec-16	8.5 8.52	785 883	5.03	2.39	8.3
Village 3	23-Dec-16	8.57	903	7.14	1.96	2
Village 3	29-Dec-16	8.2	1020	7.36	3.44	3
Village 3 Village 3	3-Jan-17 11-Jan-17	8.2 8.29	1040 1040	7.77	2.16	15.8
Village 3	20-Jan-17	8.33	1158	6.88	10.3	2
Village 3	27-Jan-17 31-Jan-17	8.25 8.31	1118 1256	7.43	3.2	13.1
Village 3 Village 3	7-Feb-17	8.48	1256	5.73	3.26	93.6
Village 3	14-Feb-17	8.6	1059	6.30	8.23	8.4
Village 3	21-Feb-17	8.77	1315	5.77	5.88	7.5
Village 3 Village 3	28-Feb-17 7-Mar-17	8.52 8.39	1295 1432	5.82	5	11
Village 3	14-Mar-17	8.02	1491	6.01	72.9	62
Village 3	16-Mar-17	8.04	1884	6.86	6.67	2
Village 3 Village 3	22-Mar-17 31-Mar-17	8.21 8.31	1805 1844	6.99 6.54	14.8 7.41	57.1
Village 3	7-Apr-17	8.14	1903	6.81	5.36	19.3
Village 3	12-Apr-17	8.07	1884	6.30	3.47	12
Village 3 Village 3	21-Apr-17 1-May-17	8.12 8.59	1805 510	6.37 7.14	9.41 6.08	22.3
Village 3	16-May-17	8.3	863	6.92	14.7	0.5
Village 3	18-May-17	8.29	863	5.15	9.8	14.8
Village 3 Village 3	23-May-17 30-May-17	8.5 7.99	1197 1236	5.73 4.81	10.6 13.1	7.3
Village 3	6-Jun-17	8.67	412	5.20	14.1	0.5
Village 3	13-Jun-17	8.44	412	5.48	12.2	365.4
Village 3 Village 3	20-Jun-17 27-Jun-17	8.46 8.44	863 647	5.61	13.8 69.4	0.5
Village 3	4-Jul-17	8.23	549	6.34	35.3	44.3
Village 3	17-Jul-17	7.88	196	5.59	19.3	123.6
Village 3 Village 3	1-Aug-17 8-Aug-17	8.23 7.85	255 804	4.80	20.2	547.4
Village 3 Village 3	8-Aug-1/ 15-Aug-17	7.85	804 589	5.13	42.1 20.1	60.9
Village 3	22-Aug-17	7.96	785	5.42	18.9	34.5
Village 3 Village 3	24-Aug-17 29-Aug-17	7.92 7.91	667 785	4.85 5.31	10.12 18.4	54.5 344.8
Village 3 Village 3	29-Aug-17 5-Sep-17	7.91	255	5.31	18.4	344.8
Village 3	12-Sep-17	8.1	373	4.98	6.85	21.6
Village 3	19-Sep-17	8.16	432	5.13	8.61	51.2
Village 3 Village 3	26-Sep-17 3-Oct-17	8.24	412	5.63 5.78	6.24	22.8
Village 3	10-Oct-17	8.19	373	5.78	8.23	22.3
Village 3	17-Oct-17	8.1	412	5.85	10.1	26.9
Village 3	24-Oct-17	7.45	863	5.04	5.71	51.2
Village 3 Village 3	3-Nov-17 7-Nov-17	8.65 8.13	589 824	5.64 5.79	9.46 10.2	613.1 360.9
Village 3	14-Nov-17	8.98	883	6.37	3.21	26.5
Village 3	21-Nov-17	8.49	922	6.56	4.14	18.7
Village 3 Village 3	28-Nov-17 5-Dec-17	8.09 8.91	922 903	7.09	11.8 4.09	10.7
Village 3	12-Dec-17	8.25	1216	6.23	4.09	100.7
Village 3	21-Dec-17	8.72	1275	5.11	1.23	10.9

Location	Date	pН	EC (µS/cm)	DO (mg/L)	Turbidity (NTU)	E.coli (MPN/100 ml)
River Village 4	22-Nov-15	8.54	1825	8.36	9.37	
Village 4 Village 4	30-Nov-15	8.57	1903 2158	11.3	35	104.2
Village 4 Village 4	7-Dec-15 14-Dec-15	8.4	2158	8.19	17.1	53.5
Village 4	21-Dec-15	8.6	2354	7.56	14.6	135.4
Village 4 Village 4	28-Dec-15 4-Jan-16	8.4	2551 2747	7.51	12.9 14.9	129.6
Village 4	11-Jan-16	8.2	2747	5.76	3.03	56.8
Village 4	19-Jan-16 27-Jan-16	8.7	1452 1962	7.2	13.2	83.9
Village 4 Village 4	27-Jan-16 2-Jan-16	8.3	2551	7.32	15.2	21.6
Village 4	8-Feb-16	8.3	3139	7.19	19.3	31
Village 4 Village 4	15-Feb-16 22-Feb-16	8.1	2747	5.71	6.86	158
Village 4	22-Feb-16	8.2	2276	3.98	5.74	908
Village 4 Village 4	7-Mar-16	8.8 8.6	4120 3728	4.68	6.88 7.34	83.6
Village 4 Village 4	15-Mar-16 21-Mar-16	8.6	3728	5.25	9.62	4.1
Village 4	28-Mar-16	8.7	4513	6.47	10.3	689.3
Village 4 Village 4	4-Apr-16 11-Apr-16	7.6	2747 2551	6.52	10.9	119.6
Village 4	18-Apr-16	8.6	2747	7.6	1.38	4.1
Village 4 Village 4	27-Apr-16 2-May-16	7.6	2158 3335	6.18 10.68	2.32	1011.2
Village 4	2-Iviay-16 9-May-16	8.2	2158	8.24	7.68	95.5
Village 4	16-May-16	8.2	235	7.74	26	36.4
Village 4 Village 4	23-May-16 1-Jun-16	8.8	608 824	5.93 4.86	19.5 13.6	13.1
Village 4	9-Jun-16	9.1	961	4.6	10.6	46.4
Village 4	14-Jun-16	9.2	589	7.93	15.2	53.6
Village 4 Village 4	21-Jun-16 30-Jun-16	9.12 9.14	530 1099	7.97	12.1 19.1	23.8
Village 4	9-Jul-16	8.61	196	7.89	14.4	74.3
Village 4 Village 4	13-Jul-16 18-Jul-16	8.5 8.41	235 275	8.1	78.2	214
Village 4	26-Jul-16	8.75	746	6.74	6.51	18.3
Village 4 Village 4	1-Aug-16	9.06 7.65	412 294	7.54	6.13	12.8
Village 4 Village 4	8-Aug-16 20-Aug-16	7.65	294 412	5.72	36	1011.2
Village 4	29-Aug-16	8.43	922	6.49	13.6	7.4
Village 4 Village 4	7-Sep-16 17-Sep-16	8.9 8.11	353 687	5.71	4.76	95.9
Village 4	19-Sep-16	8.76	706	5.93	96.8	28.
Village 4	1-Oct-16	8.12	NA	6.26	11.6	21.:
Village 4 Village 4	4-Oct-16 13-Oct-16	8.01 8.61	NA	5.5 7.16	13.8 12.7	13.9
Village 4	20-Oct-16	8.26	687	6.4	8.61	0.5
Village 4 Village 4	24-Oct-16 3-Nov-16	8.07 8.62	2394 608	4.72	6.68 NTU 3.77	8.
Village 4	10-Nov-16	7.32	844	5.31	14.2	4
Village 4	17-Nov-16	8.49	903	6.05	64	6.
Village 4 Village 4	24-Nov-16 1-Dec-16	8.49	981 1079	4.88	11.2	3.
Village 4	8-Dec-16	8.43	1216	5.54	3.33	4.:
Village 4	17-Dec-16 22-Dec-16	8.22	1432 1432	7.04	8.11	10.9
Village 4 Village 4	22-Dec-16 28-Dec-16	8.52	1432	7.33	9.4	24.9
Village 4	6-Jan-17	8.37	1609	7.45	2.9	7.
Village 4 Village 4	11-Jan-17 20-Jan-17	8.5 8.51	1491 1589	7.17	9.44 5.31	23.1
Village 4	27-Jan-17	8.47	1472	6.79	0.89	0.
Village 4 Village 4	31-Jan-17 9-Feb-17	8.5 8.2	1550 1589	7.35	0.9	0.
Village 4 Village 4	16-Feb-17	8.66	1569	6.77	8.46	8.: 14.!
Village 4	23-Feb-17	8.11	1609	4.08	1.43	31.
Village 4 Village 4	2-Mar-17 9-Mar-17	8.3 8.5	1687 1707	5.96 5.11	19.3 9.78	7.
Village 4	16-Mar-17	8.34	1766	6.86	12.4	58.3
Village 4 Village 4	17-Mar-17 24-Mar-17	8.15 8.2	1746 1687	5.95 7.28	5.58 17.4	62.
Village 4 Village 4	24-Mar-17 30-Mar-17	8.2	1687	6.22	17.4	53.
Village 4	6-Apr-17	8.12	1785	5.16	21.4	
Village 4 Village 4	13-Apr-17 18-Apr-17	8.06 8.18	1884 1766	6.45	13.4	9.
Village 4	1-May-17	7.53	1766	6.70	0.32	7.4
Village 4	10-May-17	7.53	1766	6.70	0.32	7.
Village 4 Village 4	18-May-17 25-May-17	8.03	628 1177	5.66 5.95	33.4	46.
Village 4	1-Jun-17	8.56	589	5.75	28.7	2419.
Village 4 Village 4	8-Jun-17 15-Jun-17	8.36	726	6.00	26.7	3.:
Village 4	23-Jun-17	8.56	608	4.92	19.5	55.4
Village 4	29-Jun-17	8.69	392	5.70	12.6	35.9
Village 4 Village 4	4-Jul-17 17-Jul-17	8.1 7.86	314 235	6.14	28.5 23.2	15.
Village 4	3-Aug-17	8.35	177	5.01	14.4	83.0
Village 4 Village 4	10-Aug-17	7.88 8.22	1158 1040	5.04 5.54	9.69	27.
Village 4 Village 4	17-Aug-17 24-Aug-17	8.2	1040 844	NA	4.57	3.
Village 4	31-Aug-17	8.16	353	5.74	19.1	204.
Village 4 Village 4	8-Sep-17 13-Sep-17	8.24	491 647	5.77	14 7.34	117.
Village 4	21-Sep-17	7.81	804	5.62	6.39	2419.
Village 4 Village 4	23-Sep-17 27-Sep-17	7.55	451 824	4.89 5.94	11 8.21	17.
Village 4 Village 4	27-Sep-17 28-Sep-17	8.34 8	824	5.94	8.21	5.
Village 4	29-Sep-17	8.16	510	5.78	8.92	:
Village 4 Village 4	30-Sep-17 1-Oct-17	8.19 8.79	726 706	5.69 5.38	11.2 6.29	4.:
Village 4	5-Oct-17	8.1	1491	4.98	13.5	12.
Village 4	11-Oct-17	8.24	1354	5.05	4.03	62.4
Village 4 Village 4	18-Oct-17 24-Oct-17	8.21	1040 981	5.78	13.2	22.
Village 4	3-Nov-17	8.5	1197	6.05	10.3	6.3
Village 4 Village 4	7-Nov-17 16-Nov-17	8.67 8.15	844 785	6.67	5.52	49.9
Village 4 Village 4	16-NOV-17 23-Nov-17	8.15	1256	5.72	12.6	3.1
Village 4	28-Nov-17	8.46	1707	6.23	9.21	16.6
Village 4 Village 4	30-Nov-17 7-Dec-17	8.45 8.14	1923 1452	5.64 5.43	8.88	686.1
Village 4	14-Dec-17	8.54	1452	6.61	6.82	25.3
Village 4	21-Dec-17	8.62	1609	5.04	1.39	5.2

Water 2018, 7, 12

Location	Date	рН	EC	Т	Turbidity	E.coli
Shallow Groundw	ater		(µS/cm)	(°C)	(NTU)	MPN/100 ml
Village 1 HP	12/21/2017	8.1	8692	25°C	3.1	2.0
Village 1 BW	12/21/2017	8.6	3198	25°C	1.0	0.0
Village 1 BW	2/15/2018	7.7	5297	25°C	2.0	0.0
Village 2 HP	12/21/2017	8.2	6416	25°C	11.9	2.0
Village 2 HP	2/15/2018	7.0	6475	25°C	11.1	0.0
Village 2 BW	12/21/2017	8.5	3865	25°C	3.6	17.3
Village 2 BW	2/15/2018	7.5	2963	25°C	9.3	5.2
Village 4 HP	12/21/2017	8.0	4925	25°C	0.9	0.0
Village 4 HP	2/15/2018	7.3	4336	25°C	2.2	0.0
Village 4 HP	2/10/2017	7.6	3178	27°C	2.5	0.0
Village 4 HP	12/21/2017	8.0	4513	25°C	2.8	0.0
Village 4 HP	2/15/2018	7.3	5023	25°C	2.6	1.0