



Village Water Security Plan, Bhagwanpur Kamla

Gram Panchayat - Bhagwanpur Kamla

(Block Ujiarpur, District Samastipur)

Bihar

Plan prepared by

Bhagwanpur Kamla Gram Panchayat, July 2019

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Inner Page: World Water Day 2018 celebration in Bhagwanpur Kamla

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July 2019

I. GRAM PANCHAYAT APPROVAL OF THE PLAN	6
II. BACKGROUND	7
III. PARTICIPATORY PLANNING PROCESS	7
IV. WATER SECURITY PLAN COMPONENTS	8
V. VILLAGE PROFILE	8
1. Name of the GP - Bhagwanpur Kamla	8
2. Total current population in the GP and number of households.....	8
3. Number of villages/habitations/wards in the GP	8
4. Names of villages in the GP.....	8
5. Wards being proposed for coverage.....	8
6. Population of these villages/wards and number of households	9
7. Ward wise population details	9
8. Description of the water system.....	9
9. Key issues	11
VI. SERVICE IMPROVEMENT AND O & M PLAN	12
1. Hand pumps operation and maintenance	12
2. Piped Water Supply System	12
VII. WATER SAFETY PLAN	14
VIII. SOURCE SUSTAINABILITY PLAN	15
1. Description of the source(s).....	15
2. Geo-hydrological characteristics.....	16
3. Land use	16
4. Average water quality	16
5. Average water table.....	16
6. Water balance	17
7. Problems with source sustainability and strategy	17
8. Water Source Plan	18
ANNEX I PRA resource map of Bhagwanpur Kamla village	20
ANNEX II Land use map of Bhagwanpur Kamla village.....	21
Annex III Map showing Static Water Levels during (A) Pre-monsoon season and (B) post monsoon season in village Bhagwanpur Kamla during year 2018.....	22
Annex IV Map showing Iso Reduced Water Level Zones during (A) Pre-monsoon Season and (B) Post Monsoon Season in Village Bhagwanpur Kamla during year 2018 - arrows show direction of groundwater flows.....	23
Annex V Map showing surface drainage pattern derived from satellite data and position of permanently dry or seasonally dry borewells in and around Bhagwanpur Kamla.....	24

Annex VI List of wells and seasonally/permanently dry private borewells in and around Bhagwanpur Kamla village for possible conversion to recharge borewells after consultation with owners	25
Annex VII Map showing zone wise groundwater management strategies for Bhagwanpur Kamla	27
Annex VIII. List of village representatives attending meeting for land use mapping held on 23 January 2019 in Bhagwanpur Kamla	28
Annex IX: List of village representatives attending meeting on water security planning held on 12 June,2019 in Bhagwanpur Kamla.....	29
Annex X	30

I. GRAM PANCHAYAT APPROVAL OF THE PLAN

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1. पुरीब्या

2. कौरन लाहनी, वार्ड सदस्य, वार्ड नं- 9 - बशील लाहनी

3. दीपक कुमार वार्ड सदस्य वार्ड नं. 14 दीपक कुमार

4. विभा कुमारी - वार्ड सदस्य वार्ड नं- 11 - विभा कुमारी

5. जयनारायण सिंह - वार्ड सदस्य - 08 जयनारायण सिंह

6. रंजू देवी वार्ड सदस्य - वार्ड नं. - 10 - रंजू देवी

श्रीमती
(निर्मला सुमन)
मुखिया
ग्राम पंचायत 113 अमरापुर बल्लार
ब्लॉक अमरापुर जिला - सुपौल

II. BACKGROUND

The National Rural Drinking Water Programme prescribes the preparation of village water security plans for safeguarding the sustainability of drinking water services in villages. This water security plan has been prepared by the Gram Panchayat and Ward Implementation and Management Committees of Bhagwanpur Kamla Gram Panchayat, Ujiarpur block, Samastipur District, Bihar in keeping with the guidelines issued by the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India in its Handbook for Gram Panchayats¹ to help village institutions plan, implement, operate, maintain and manage drinking water supplies and ensure its sustainability.

Technical support for water point and household surveys, dug well surveys and water regime mapping, land parcel mapping, Participatory Rural Appraisals, identification of WASH (Water, Sanitation and Hygiene) and source sustainability issues and possible water security interventions among other things was provided by the Watershed India Programme. The programme focuses on improved management and governance of water and sanitation services and water resources they depend upon. The programme is being implemented in Samastipur District in Bihar. The programme details are given in the Annex X.

III. PARTICIPATORY PLANNING PROCESS

Baseline assessments of WASH and water resources was carried out in Bhagwanpur Kamla using the following tools

- 1) Secondary data collection from existing government records
- 2) Key Informant Interviews
- 3) Survey of all public water points in the villages
- 4) A sample household survey
- 5) Focal Group Discussions (FGD) and Participatory Rural Appraisals

WASH planning - Community participation at various levels was ensured through Focal Group Discussions (FGD), participatory mapping exercises. Ward wise meetings with ward members, women and marginalised communities were held to capture water and sanitation issues and identify priorities with respect to drinking water, sanitation and hygiene services.

Source security planning - FGDs and key informant interviews helped outline historical trends in water regimes. Remote sensing and GIS (Geographic Information System) mapping technology were used to understand surface water flows and its pathways and map hydrological structures. SRTM Digital elevation Model (DEM) was used to derive surface drainage networks and understand water flow pathways. This was ground checked using mobile GIS mapping technologies.

The finer natural and man made drainages not captured through Remote Sensing data in and around village was digitised using mobile based applications, Google Earth. Remote Sensing and GIS tools were also used for water body mapping, analysis of land use and land cover changes over time. Indian Meteorological Department (IMD) data was used to understand rainfall variation.

To capture the groundwater dimensions and see its behaviour *vis a vis* geology and landform dug well inventorisation of sample wells and borewells in the village and its surrounding areas was conducted during pre and post monsoon season in 2018 after a training of Watershed India landscape implementation partners, Panchayat and ward members on its methodology. This led to mapping for geology, generation of sub-surface geo-hydrological profiles across the watersheds and

¹ https://jalshakti-ddws.gov.in/sites/default/files/GPHandbook_0.pdf

development of groundwater level maps i.e. Iso Reduced Water Level (RWL) maps for flow direction and Iso Static Water Level (SWL) maps for occurrences of groundwater at different depth.

Village meeting on 23rd January 2019 was held to conduct parcel wise land use mapping, survey of defunct borewells, calculation of water balance based on local water demand and supply with the participation of ward members, women, Village Panchayati Raj Institution head (Mukhiya), local key informants and youth. Appropriate source security interventions and sustainable land and water management activities were discussed and framed as part of this meeting.

The water source interventions, the service improvement, operation and maintenance and water safety interventions were presented, discussed and finalised in a Panchayat meeting held on 12th June 2019 (see Annex IX).

IV. WATER SECURITY PLAN COMPONENTS

This water security plan contains

- Water balance estimates
- Source sustainability interventions
- Water safety interventions
- Service improvement measures for hand pumps and piped water supply schemes

V. VILLAGE PROFILE

1. Name of the GP - Bhagwanpur Kamla

State Code	State Name	District Code	District Name	Sub District Code	Sub District Name	CD Block Code	CD Block Name	GP Code	GP Name	Village Code	Village Name
10	BIHAR	221	Samastipur	01298	Ujiarpur	0286	Ujiarpur	0007	Bhagwanpur Kamla	237096	Bhagwanpur Kamla
10	BIHAR	221	Samastipur	01298	Ujiarpur	0286	Ujiarpur	0007	Bhagwanpur Kamla	237098	Saidpur Zahid

2. Total current population in the GP and number of households

Total population of GP – 15592

Total Households of GP – 2781

3. Number of villages/habitations/wards in the GP

Total number of villages in GP – 2

Total number of wards in the GP – 14

4. Names of villages in the GP

Bhagwanpur Kamla, Saidpur Jahid

5. Wards being proposed for coverage

Ward no. 8 – ward no. 14, total seven wards falling under Bhagwanpur Kamla revenue village

6. Population of these villages/wards and number of households

Total population of the village – 8753

Number of households – 1601

7. Ward wise population details

Village	Tola Name/Ward No	Households	Population	SC population	OBC population
BHAGWANPUR KAMLA	SAHANI TOLA, Ward 9	421	2315	35	2280
BHAGWANPUR KAMLA	DHUNIYA TOLA, Ward 10	12	127	0	127
BHAGWANPUR KAMLA	RAM TOLA, Ward 10	53	398	398	0
BHAGWANPUR KAMLA	PASWAN TOLA EAST, Ward 10	23	133	133	0
BHAGWANPUR KAMLA	PASWAN TOLA WEST, Ward 10	37	241	241	0
BHAGWANPUR KAMLA	NONFAR TOLA BHAGWANPUR KAMLA DIH, Ward 8	143	849	0	798
BHAGWANPUR KAMLA	BRAHMAN TOLA NORTH, Ward 11	66	477	0	0
BHAGWANPUR KAMLA	BRAHMAN TOLA SOUTH, Ward 11	79	451	0	0
BHAGWANPUR KAMLA	BHAGWANPUR KAMLA Andaha Kamla, Ward 14	239	1158	273	885
BHAGWANPUR KAMLA	ANDAHA KAMLA (MIDDLE) Ward 13	220	1017	78	939
BHAGWANPUR KAMLA	ANDAHA KAMLA (NORTH) W.N. 12	308	1587	0	1587
Total		1601	8753	1158	6616

Population is based on lists available at Panchayat level, Source: Mukhiya, Bhagwanpur Kamla Panchayat and ward members, 2019

8. Description of the water system

100 % sampling of all waterpoints (safe and unsafe) including hand pumps, wells, public stand posts, tap inside house was done for the village. All the water points were geolocated and photographed.

The baseline figures were updated to arrive at current figures. The water point survey covers the following topics – Information about the type of water point

- Functionality and service levels
- Users per water point and water usage
- Installation, O & M of water points
- Response of service providers for O & M
- Seasonality and sufficiency of water supply
- Water quality and existing monitoring mechanisms
- Drainage and water safety
- Perceptions about water quality
- Institutions responsible for O & M
- User tariffs

Fund utilization and management S.No.	Type of waterpoints	Number	Functional	Dysfunctional (Not working since over a year)	Not working since few days/months
1.	Type and number of public water source				
	Mark II Hand pumps	30	0	8	22
	Nonspecific Hand pumps	7	7		
	PHE6 Hand pumps	88	0	26	62
	Pipeline/tap (inside the house)	2			2
	Public tap/stand post	6	1	2	3
	Unprotected/Open Dug Well	2	2		
	HH Connection	350			
	Overhead tanks	2			
	No. of tube wells pumping water in piped water supply schemes	4			
2.	Families using public water source	1024²			
3.	Families using private water source	577			

² These numbers are subject to change as the rural piped water schemes will get implemented

The figures are based on water point surveys of all public water points in September –October 2017. The number and status of hand pumps has been updated based on inputs from Panchayat and WIMC members in meeting held on 12th June 2019, Source: Panchayat and ward members

9. Key issues

Till June 2019, public hand pumps are the major source of drinking water in all wards except 12 and ward 13 where household piped water supply schemes catering to around 350 households have been initiated. Uniform access is being ensured in these newly established schemes. Though no major service improvement issues was perceptible for piped water schemes as these are new and still in various stages of implementation. However, newly constructed remote houses in few cases are being left out of the reach of piped schemes because of cost considerations. The main issues observed in hand pumps and the piped water schemes are listed below.

S.No.	Issues	Units
1.	Service improvement issues hand pumps	
	Newly constructed households away from main habitation have poor access to hand pumps	20
2.	Service improvement issues household piped water scheme	
3.	Water safety issues household piped water schemes	
	Non availability of information on water quality of new pipe water borewells at Panchayat and ward level	
4.	Water safety issues hand pumps	
	Hand pumps and public stand posts with no platforms	58 (55,3)
	Hand pumps and public stand posts with cracked/broken platforms	36 (35,1)
	Fecal matter presence near water points	63
	Hand pumps and wells with toilets at a distance of less than 10 metres	54(52, 2)
	No drainage around Water points	38
	Run off from water point flows in to waterbody	6
	Coliform presence	30/74 public water points
	Hand pumps with Iron in excess of acceptable limits of 0.3 mg/litre	40/74 public water points
5.	Operation and maintenance issues hand pumps	
	Hand pumps requiring repair	98
	➤ Broken handles of hand pumps	➤ 14
	➤ Handle is too tight	➤ 15
	➤ Hand pumps with damaged water pipes	➤ 33

The figures are based on water point surveys of all public water points in September –October 2017. The number of hand pumps, operation and maintenance issues, platform and drainage around hand

pumps has been updated based on inputs from Panchayat and WIMC members in meeting held on 12th June 2019. Source: Panchayat and ward members

VI. SERVICE IMPROVEMENT AND O & M PLAN

1. Hand pumps operation and maintenance

Type of service Improvement/ O & M	Units	Priority (Immediate/ This year/Next year/Later/ Not required)	Cost
Installation of new hand pumps for communities with poor access to water	20	Next year	
Procurement of spare parts (cylinders) to repair hand pumps	84	Immediate	Rs 6000/unit
Administrative tasks	Keeping ledgers on hand pumps, functionality and records	This year	

2. Piped Water Supply System

This lists down the training requirement and operational activities for piped water supply connections in the wards.

Type of Service Improvement/ O & M	Action proposed	Responsibility, and how frequently	Priority (Yes/ No) (Immediate/ /Next year)	Cost if any
Contract management capability for ward committee members	Training to ward committee members		Immediate	
Operation and maintenance capability	Design terms of reference or basic service agreement for operator	Ward committee	Immediate	
Household Connections	Subsidizing connection cost for SC, ST or BPL households, women headed households	Ward committee	Yes	
Spare part management	Procurement of spare	Operator	Yes	
Regular operation and maintenance	Pump operation	Operator	Yes	
	Checking of valves	Operator		

	Flow, pressure, electric panel, wiring check	Operator		
Storage tank maintenance	Tank cover	Operator, Monthly	Yes	
	Regular cleaning of tanks	Operator, Three months		
	Any other	Operator		
Pipe network (leakage)	Leak detection and repair	Operator, monthly	Yes	
Water quality	Sanitary surveys, Sample collection for regular testing at district laboratories	ASHA/ WIMC members, Half yearly	Yes	
	Chlorine check	ASHA/WIMC members Weekly	Yes	
Customer Service	Setup a customer complaints recording system and set response time	Ward committee	Yes	
Accounts and Bookkeeping	Keep ledgers for operational and financial records	Ward committee, monthly	Yes	
Customer database, billing and collection arrangements	<ul style="list-style-type: none"> ✓ Procedures for new connection ✓ Application ✓ Billing and tariff collection ✓ Disconnection policy 	Ward committee, monthly	Yes	
	Maintenance of record of houses with a connection Record of non-payment	Ward committee member/Operator , monthly	Yes	

VII. WATER SAFETY PLAN

Risks	Control measures	Units	Priority (Immediate/ This year/Next year/Later /Not required)	Costs per unit if any
Hand pumps, wells and stand posts				
Area around water points is muddy and poorly drained	Construction of raised platform around hand pumps and public stand posts	58 (55,3)	Next year	Approx. Rs 3000/unit (actual estimates to be prepared)
	Repair of existing platforms around hand pumps and public stand posts	36 (35,1)	Next year	Approx. Rs 500 -1000 /unit
	Construction of wastewater drains to take water away from water points under the the <i>Har Ghar Nali Gali scheme</i>	38	Next year	Estimates need to be prepared
Livestock encroachment and animal feces	Fencing	-	Not required	
Risk of contamination from toilet effluents	Relocate latrines at least 10 meters away	54	Not possible due to space constraint	
Fecal matter around water points	Public awareness through in Panchayat meetings, Use of IEC signboards	Monthly Nukkad Sabha		
Livestock effluents	Public awareness for construction of Nullahs by livestock owners to relocate effluent pathways away from hand pumps in consultation with livestock owners	Monthly Nukkad Sabha		
Treatment systems				
Chemical and bacteriological contamination	Monthly ward meetings with participation of ASHA workers to take stock and to ensure that	-		

	bleaching is done every three months by ASHA workers			
	Pre monsoon and post monsoon sample collection by WIMC members and sending to District laboratories for testing	-		
Household storage and handling				
Unclean storage container, absence of lid on storage container, no handwashing with soap	Public awareness/IEC and empower women groups to advocate for personal hygiene and proper storage and handling	Discussion on water handling, health and hygiene in monthly Nukkad Sabha		
Drinking water does not meet potable standards	Household drinking water purification – IEC on household water treatment measures	Discussion on water handling, health and hygiene in monthly Nukkad Sabha		
Household solid waste management				
Risk of contamination of water points, nitrification and dumping in open water bodies	Awareness generation through proper use of IEC materials to promote waste segregation practice	-		
	Training on vermicomposting	1		

VIII. SOURCE SUSTAINABILITY PLAN

1. Description of the source(s)

Water sources	Number	Use			Average depth
		Domestic	Irrigation	Groundwater recharge	
Open Wells	43	12	None	None	25-30 feet
Bore wells	Estimated to be at least 150-200. One government borewell	Many new private borewells but number not estimated.	150-200	None	Average depth of private borewells 70-80 feet. One government

					borewell has 350 feet depth
Pond	2	No	1	-	
River	None			-	
Chaur, Maun, Jheel	3 (Debkhal Chaur, Annapurna Chaur, Bahira Chaur)	No	1	-	1-6 feet

2. Geo-hydrological characteristics

Clayey silt soils are found from 0 to 5 feet below ground level. A layer of clay is encountered at 5-12 feet. Kankar layer is found at around 18-24 feet. A sandy layer at 25-30 feet forms the shallow aquifers.

3. Land use

Land use	Area in ha
Agriculture in one season by groundwater	68.89
Agriculture in one season by surface water	31.43
Agriculture in two season by groundwater	95.48
Agriculture in three season by groundwater	90.16
Fishpond	2.05
Settlement	29.36
Road	5.34
Waterbody	40.84
Total	363.55

4. Average water quality

Average TDS levels in observed dug wells was found to be mostly below 500 mg/l (Acceptable limits for drinking water) to a maximum of 1000 mg/l throughout the year.

5. Average water table

Average water levels during post monsoon season ranges from 1 to 5 m below the surface. That depletes up to 9 m during pre-monsoon season. The southern portion of the village area shows maximum depletion in water level during pre-monsoon which rises in post monsoon season i.e. up to 6 to 7 m.

To understand groundwater flow Reduced Water Level (RWL) maps have been prepared. These maps (Annex IV) reveal that the groundwater flow during pre-monsoon season is from south to north direction while during post monsoon season central portion of the village shows maximum

height of water level and it divides the groundwater flows in two opposite directions. This indicates central portion of the village acts as sub surface ridge line for groundwater and therefore, this area can be considered as recharge area for groundwater.

6. Water balance

Water demand estimation has been done using area cultivated under different crops in the current year and domestic water consumption. Rainfall and run off estimates were used to calculate water supply.

Water balance of the village is negative (-1.937) and this calls for employing water efficient irrigation techniques, less intensive agriculture, suitable water conservation and recharge measures and preservation of existing wetlands.

Annual Water balance estimation for Bhagwanpur Kamla village ³		
Annual water demand (MCM)	Agricultural (Based on gross sown area of different crops)	3.079 to 5.452
	Domestic (@ 70 litres per capita/day)	0.224
Annual water supply (MCM)	Surface	3.739
	Groundwater	Not calculated
Water balance (MCM)		0.437 to -1.937

7. Problems with source sustainability and strategy

Depletion of shallow aquifers and lowering of water tables was found to be a major issue in the village. This is a major factor responsible for non-functionality of water points. The underlying factor for this is loss of wetlands that stored water and aided in groundwater recharge as a result of conversion for settlement or permanent agriculture.

The area of the Annapurna and Bahira Chaur is mostly privately owned. Constructions are taking place in the Chaur area. Saving further development in Chaur area and its rejuvenation would require consensus building with land owners.

Based on groundwater flow behavior the village area has been categorized into three zones (01) Recharge areas (02) highly depleted area and (03) Discharge areas. It is important to undertake the following measures with respect to the zone characteristics.

- a. Recharge area - Recharge measures and judicious use
- b. Discharge area - Water sharing and conservation technologies
- c. Depleting Area - Use of groundwater based on amount of recharge. Promote conjunctive use strong groundwater use protocols

³ Note: The water balance estimation is subject to refinement after taking into consideration the groundwater component and also riverine inflows. Livestock water requirement being a very small fraction of overall water use has not been added. However the estimates here roughly capture the water balance situation

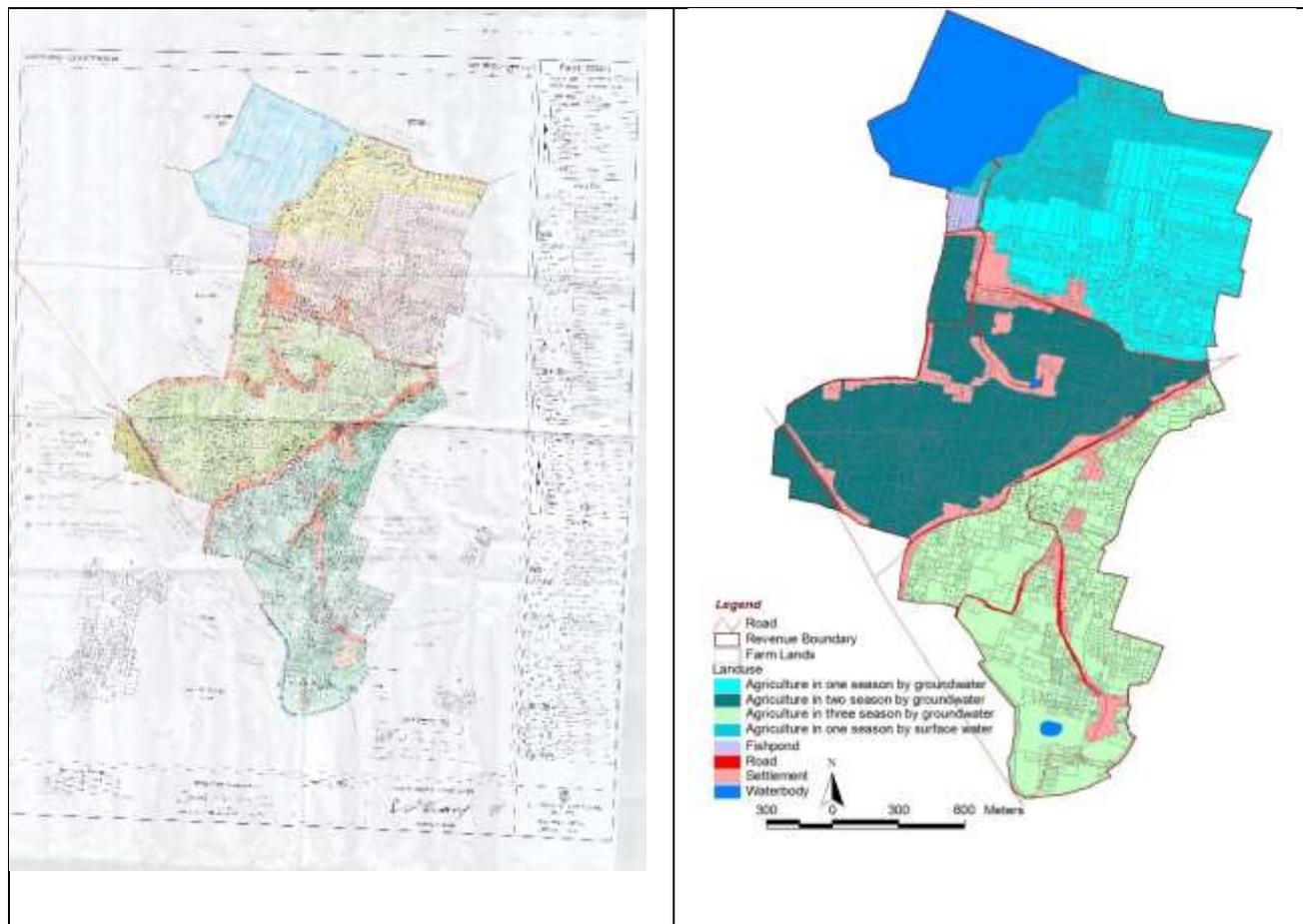
8. Water Source Plan

Accordingly the following strategies have been proposed for water management in the village

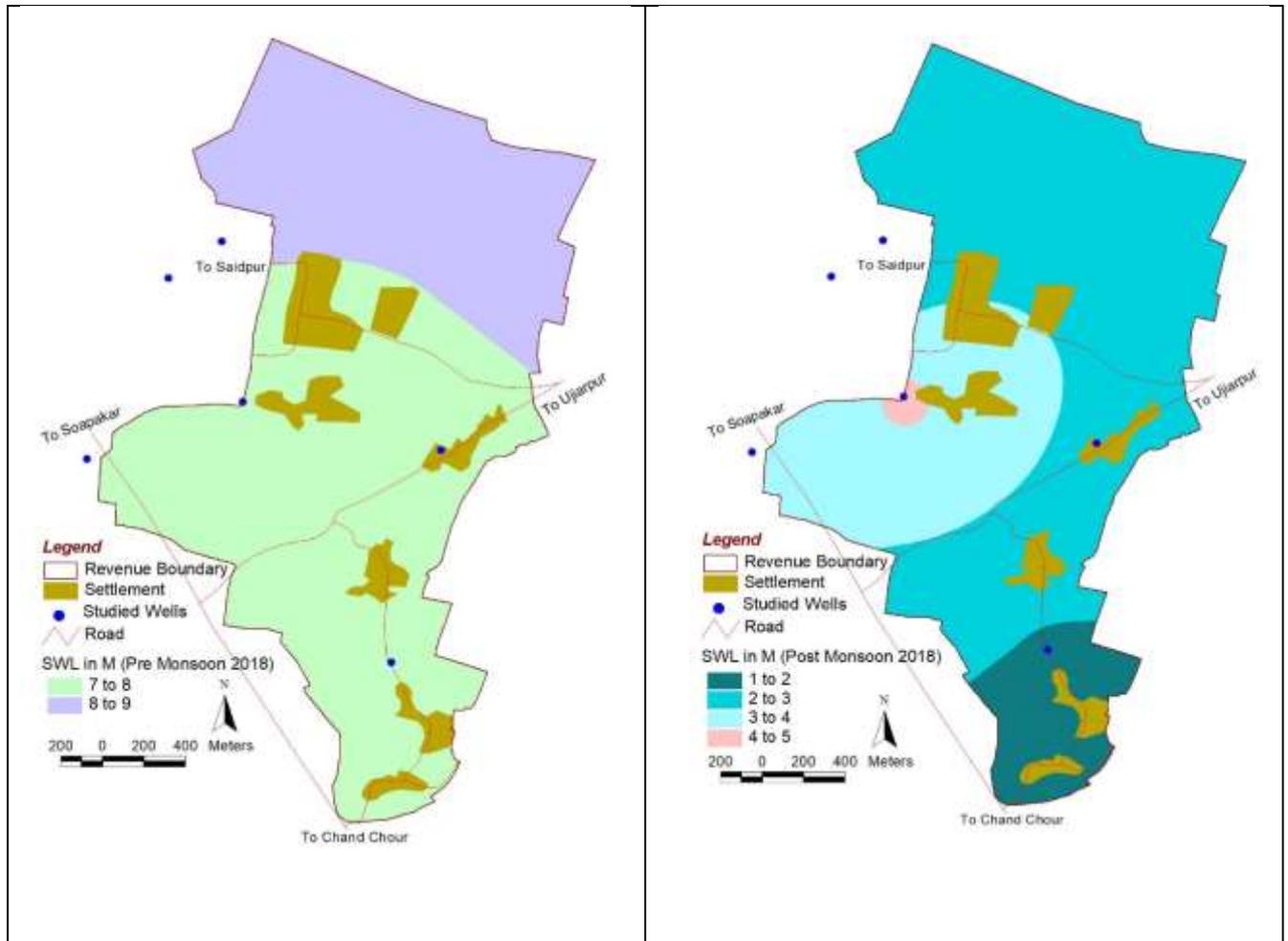
S No.	Sustainability strategies	Units	Priority (Immediate/ This year/Next year/Later /Not required)	Cost per unit
Improvement of surface water storage				
1.	Rejuvenation of Saiba Pokhar as water storage structure	1	This year but subject to availability of funds	
2.	Monthly awareness meetings through Nukkad Sabah for maintenance of water channels in the village and removal of encroachments/obstructions to water flow		This year subject to availability of funds	
3.	Awareness meetings through Nukkad Sabah for conservation of and rejuvenation of water regimes in Annapurna chaur and Bahira Chaur by maintaining connectivity with village channels		This year	
4.	Training on agroforestry practices for maintenance of buffer zone around water bodies for soil conservation	1	Next year	
Groundwater recharge in recharge zone				
1.	Demonstration on conversion of borewells in to recharge structures	1	Immediate	
2.	Awareness meetings to promote uptake by borewell owners Conversion of abandoned borewells into recharge borewells		This year	
3.	Training on use of dug wells in to recharge structures	1	This year to next year	
4.	Use of dug wells as recharge structures <ul style="list-style-type: none"> ✓ Cleaning of wells ✓ Cover the dug wells ✓ Construction of roof water harvesting structures and diverting the flows to dugwells 	-	This year to next year subject to availability of funds	

Water conservation in farming practices				
1.	Trainings to facilitate uptake of water conserving irrigation practices such as micro irrigation methods	-	This year	
2.	Awareness generation through Nukkad Sabha for promoting conjunctive use of groundwater and surface water for agriculture		Yes	
3.	Awareness generation through Nukkad Sabha for promoting water demand side management measures		Yes	
4.	Knowledge dissemination through IEC on less water intensive crops		This year	
Monitoring of water regimes				
1.	Monitoring of water levels and water quality in dugwells through survey in pre and post monsoon season		Next year	
2.	Training on mapping and monitoring of water bodies – including permanent and seasonal extent of water bodies (ponds and chaur area), water levels, water usage etc		Next year	
3.	Maintaining village level records on status of water sources integrating inputs from dugwell surveys and wetland mapping that gets updated annually	-	Next year	

Land use map of Bhagwanpur Kamla village



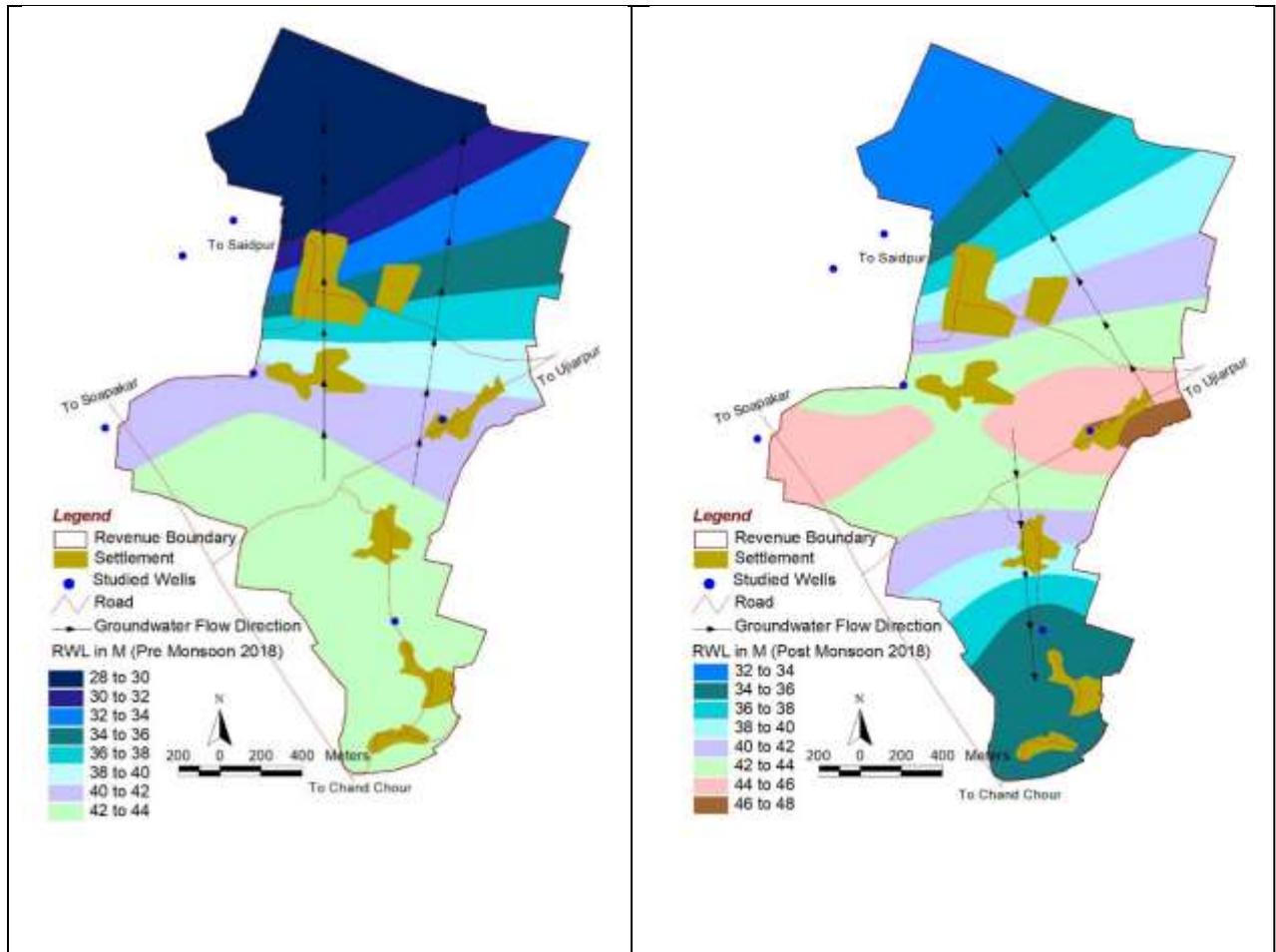
Map showing Static Water Levels during (A) Pre-monsoon season and (B) post monsoon season in village Bhagwanpur Kamla during year 2018



A

B

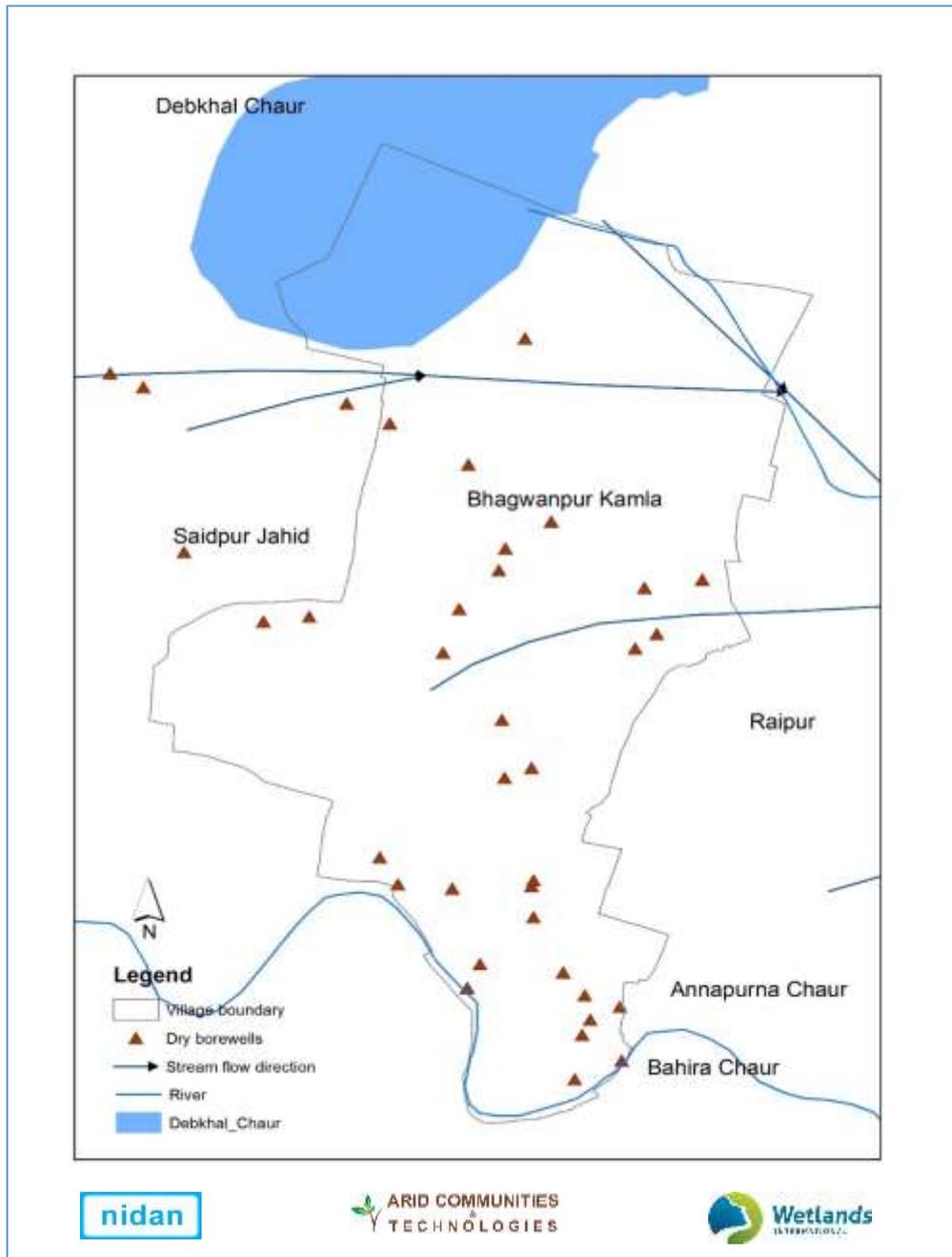
Map showing Iso Reduced Water Level Zones during (A) Pre-monsoon Season and (B) Post Monsoon Season in Village Bhagwanpur Kamla during year 2018 - arrows show direction of groundwater flows



A

B

Map showing surface drainage pattern derived from satellite data and position of permanently dry or seasonally dry borewells in and around Bhagwanpur Kamla

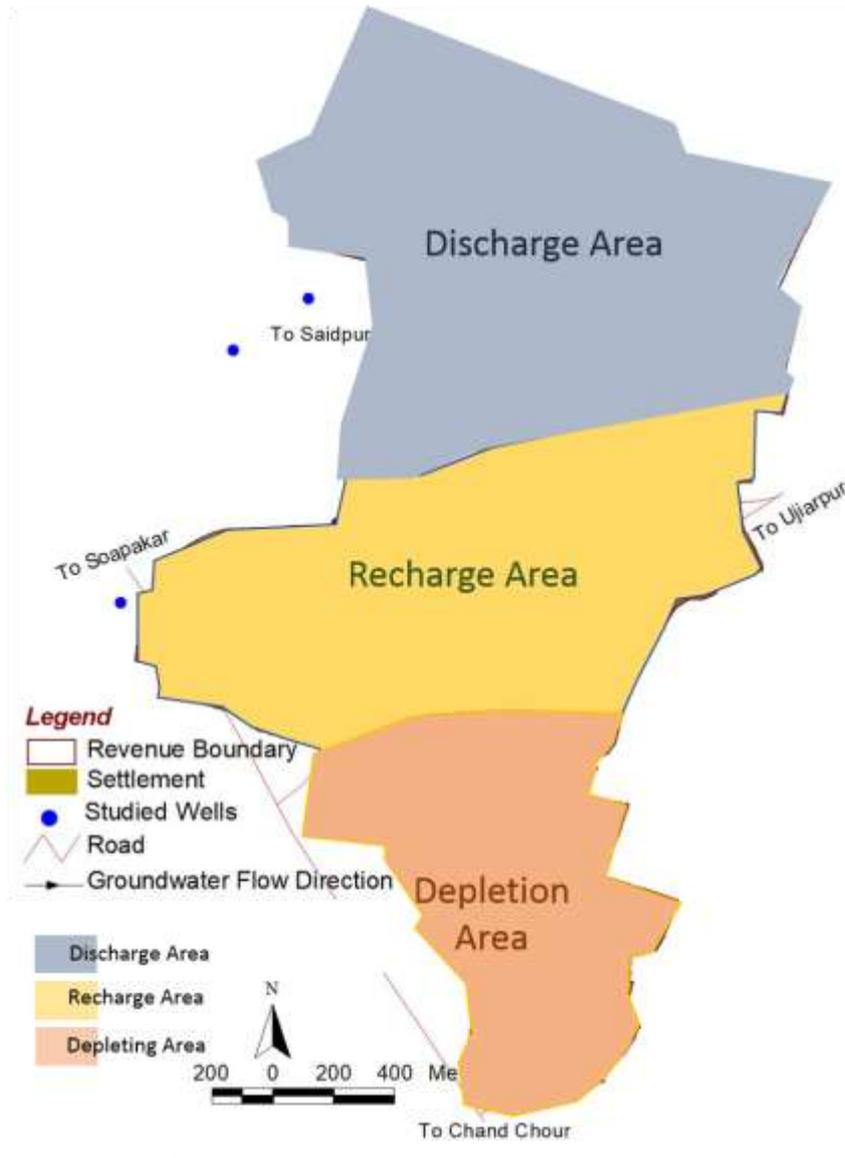


List of wells and seasonally/permanently dry private borewells in and around Bhagwanpur Kamla village for possible conversion to recharge borewells after consultation with owners

Name owner	Latitude	Longitude	Ward No.	Type of borewell source	Depth of borewell (feet)
Chalitar Mahto	25.768	85.791	12	Borewell	80
Arun Singh	25.769	85.787	9	Borewell	110
Manoj Singh	25.769	85.785	11	Borewell	70
Pramod Singh	25.768	85.785	11	Well	25
Jaynath Singh	25.767	85.784	11	Well	30
Lalan Singh	25.765	85.783	11	Borewell	60-70
Sanjiv Kumar Singh	25.763	85.799	11	Borewell	60-70
Nand Kishor Singh	25.766	85.778	10	Borewell	70-80
Bhola Prasad Sah	25.766	85.779	10	Borewell	70-75
Kushi Manto	25.766	85.79	12	well	30-35
Kushi Manto	25.767	85.79	12	Borewell	90-95
Dr. Chaitar Manto	25.765	85.789	12	Well	35-40
Uday Shankar	25.761	85.786	13	Borewell	80-85
Rajendra Prasad	25.761	85.785	13	Well	30-35
Ranjit Manto	25.757	85.786	13	Borewell	100-110
Vishnath Manto	25.754	85.788	14	Well	60-65
Chalitar Thakur	25.753	85.788	14	Well	25-30
Kailash Bhandari	25.753	85.788	14	Well	45-50
Adv. Pradeep Kumar	25.753	85.789	14	Well	30-35
Thakurbari Campus	25.755	85.787	13	Well	30
Vinod Mahto	25.751	85.788	14	Well	23
Sogarath Mahto	25.756	85.786	13	Borewell	70-80
Sarvan Mahto	25.758	85.786	13	Borewell	70-80
Upendra Mahto	25.757	85.784	13	Borewell	70-75
Sogarath Mahto	25.757	85.782	13	Borewell	70-80
Tejnarayan Mahto	25.758	85.782	13	Borewell	70-75
Harish Chand Mahto	25.755	85.785	13	Borewell	60-65
Arun Mahto	25.754	85.784	13	Borewell	60-65
Kaplishwar Prasad Singh	25.752	85.789	14	Borewell	120

Sri Nivas Prasad Singh	25.771	85.784	8	Borewell	110
Sharigram Singh	25.776	85.786	9	Borewell	80
Rajesh Singh	25.773	85.782	5	Borewell	60
Mintu Singh	25.773	85.78	5	Borewell	80-90
Kailash Sahni	25.774	85.774	5	Borewell	80-90
Lalu Sahni	25.774	85.773	5	Borewell	80
Ansharul Haq	25.768	85.775	4	Borewell	80-90
Ashish Singh	25.763	85.785	12	Borewell	70-75

Map showing zone wise groundwater management strategies for Bhagwanpur Kamla



List of village representatives attending meeting for land use mapping held on 23 January 2019 in Bhagwanpur Kamla

Sl. No.	Name	Designation	Ward No.
1.	Nirmala Suman	Mukhiya	
2.	Hemandra Pandit	Community leader	
3.	Subhash Singh	Farmer	1
4.	Sushil Paswan	Ward Member	2
5.	Siya Lal Sahani	Ward Member	3
6.	Munnilal Sah	Ward Member	4
7.	Ramdev Sah	Ward Member	5
8.	Batoran Sahani	Ward Member	6
9.	Shashikant Rajak	Ward Member	7
10.	Deepak Kumar	Ward Member	8
11.	Nathuni Paswan	Ward Member	9
12.	Sanjeet Ram	Ward Member	10

List of village representatives attending meeting on water security planning held on 12 June,2019 in Bhagwanpur Kamla

Sl. No.	Name	Designation	Ward No.
1.	Jai Narayan Singh	Ward member	8
2.	Subhash Kumar Singh	Farmer	11
3.	Batoran Sahni	Ward member	9
5.	Deepak Kumar	Ward member	14
6.	Sushil Paswan	Ward member	7
7.	Rekha Devi	Ward member	1
8.	Sushil Paswan	Ward member	7
9.	Krishna Devi	Ward member	3
10.	Ramdev Sah	Ward member	3
14.	Hemendra Pandit	Community leader	
15.	Ranju Devi	Ward member	10
16.	Nirmala Suman	Mukhiya	

This water security plan has been prepared by the Bhagwanpur Kamla Gram Panchayat and village communities with the support of Wetlands International South Asia, Nidan and Arid Communities and Technologies (ACT) under the Watershed India programme.

Watershed India is a strategic partnership programme of the Dutch Ministry of Foreign Affairs, Wetlands International, IRC and Akvo. The programme is being implemented in Debkhal Chaur wetland basin in Samastipur District, Bihar in partnership with Nidan and in Tampara wetland basin, Ganjam District, Odisha in partnership with Gram Utthan.

Working through pilot locations where water resources are scarce or contested and where environmental management is at the core of the WASH sustainability challenge, the programme aims to deliver improvements in the governance and management of water, sanitation and hygiene services and ensuring sustainability of water resource they depend on. More about the programme can be accessed from the website <https://watershed.nl/>.

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