

## Project Rajghat



## The Issue:

About 50km away from Tajmahal at Agra, lies Rajghat and many such Villages in the interiors of Dholpur in Rajasthan, on the border of Madhya Pradesh and Rajasthan. As part of Dholpur Nagar Panchayat in Chambal ki Ghaati (Chambal river basin) region, they fall under National Chambal Sanctuary.

Rajghat village is devoid of all basic amenities of life. It has no source of clean drinking water. It has no electricity.

Besides being heavily polluted, there is also an added risk of being attacked by Gharials (crocodiles) and encountering human corpses that sometimes come floating in by the river bank. **There have been incidents of men and children being dragged away by crocodiles.** In the absence of an alternate source of water, villagers continue to risk their lives.

There haven't been any weddings in the village in over 20 years now. There have been only two weddings in the village in two decades. It is popular as the village of bachelors. They have heard of things like fridges, air conditioners, and washing machines, but the mere thought of using them is a distant dream. A few have mobile phones. They have to walk 2 km to nearest town to get them charged,"

Authorities have their explanations ready for leaving Rajghat devoid of any development efforts. 'It lies in National Chambal Sanctuary especially earmarked by the government for protection of critically endangered gharial and the Ganges river dolphin. Being in forest area, there can be no construction within 500 meters of the river. No roads can be built'.

Authorities also fail to give a satisfactory reply on why people are allowed to stay there, "They have been staying for years! Ideally, the government should be rehabilitating those staying near the forest area. But in their case, there is no such proposal on the table"

Authorities say they would provide pumped water to villagers in next few months. But villagers say, they have been hearing same promises for decades now! Time and again people come, say things will happen. "Neta log aate hain aur vote leke chale jaate hain. Film directors film bana ke chale jaate hain. But koi kuch nai karta. Dekhte dekhte mujhe 50 saal ho gaye, says a local resident Prabhu Dayal"

See more: <https://www.facebook.com/milaap/videos/10155999704601495/>



“52 families living in a village very close to Delhi plead for your help as they have been drinking water from a polluted river, and living without electricity for decades.”



“A village that has never seen light after dawn, or tasted clean hygienic drinking water - basic necessities that we take for granted needs your HELP!”



## Project Brief:

- In the absence of power supply, solar power would be the only dependable source for functioning of filtration systems and UV bulbs would need power source.
- Filtration systems would need to be rugged & sturdy and require minimal maintenance.
- Fortunately, being surface water source in a rocky terrain, Chambal River water is low on dissolved salts. Just filtration and control of microbial contaminations would make it fit for human consumption.
- Removal of suspended particulate, colour, smell etc and hedging it against microbial contamination would be able to make water fit for human drinking.
- The daily drinking water need for the entire village is estimated to be about 1200-1500lph.
- It is proposed to design, supply and install a 200lph solar based filter backed by UV radiation facility. System would be skid mounted, have multi grade sand filter (to remove coarse particulate), activated charcoal filter (to remove color, smell or odor from water), micron cartridge filter (to remove fine suspended particulate). At the end of it all there will be a UV tube to radiate purified clean water to check microbial contamination.
- A solar power pump having capacity to produce about 500lph backed by solar panels would be included in the scope of supplies besides the skid mounted product water tank.

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जुलै 25, 2017

# तैरती हुई लाशें हटा कर पानी भरता है राजघाट, मूलभूत सुविधाओं का अभाव

## सुविधाओं के नाम पर पांचवी तक का विद्यालय और खारे पानी का हैडपम्प

**कमल फिलोस**

धौलपुर। 21 वीं सदी में भी धौलपुर जिले में ऐसा गांव था है जहाँ लोग पानी में तैरती लाशों को हटाकर पीने का पानी भर कर लेते हैं। यह गांव देश की आबादी के सात दशक और धौलपुर जिले बनने के 35 साल बाद भी पिछलेपन का दर्जा भोग रहा है। पहले यह एक गांव नहीं है बल्कि नगर परिषद के वार्ड 15 में आता है। धौलपुर जिले में चम्बल नदी के किनारे इस गांव का नाम कहने की तो राजघाट है लेकिन वहाँ सुविधाओं के नाम पर मात्र पांचवी तक का विद्यालय और एक खारे पानी का हैडपम्प है यहाँ पहुँचने का कोई पक्का रास्ता भी नहीं है।

यस गांव की लाशें हटाने के बाद राजघाट





## Action Plan:

KarmaKonnnect Foundation had taken up the cause to provide safe water and electricity to Rajghat, and thereby show a model of citizen-funded empowerment initiative to inspire the Gov. to undertake the same for many such neighbouring villages.

After extensive research on various low-cost and sustainable solution for safe drinking water and power, we proposed a plan of action for Rajghat.

The Project aimed to ensure provision of safe drinking water & solar lamps in Rajghat and nearby villages – where villagers were forced to drink water from open-river stream carrying among other things - dead bodies and is house to crocodiles.

Further, the project also aimed to setup a home solar lighting system for each of the homes of these villages and few street lights for night-time accessibility.


**AQUACHEK**  
 THE WATER TESTING FACILITY  
 FROM EUREKA FORBES LTD.


### TEST REPORT

Report Number: AQWL-002/Oct./2017      Sample Code: P-002  
 Date of Sample Received: 10.10.2017      Date of Report: 14.10.2017  
 Source: Chambal River (Rajghat Dholpur, Raj.)      Page 01 of 01 Page

Customer's Name :		M/S Karma Konnect Foundation			
Address :		404, Ormer Arcade			
		Ahmedabad, Gujarat			
		7043650180			
Sr. No.	PARAMETER TESTED	UNITS	RESULT	IS: 10500-2012 Drinking Water Specification (Second Revision)	
				Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate source
<b>PHYSICO-CHEMICAL</b>					
1.	Odour	-	Disagreeable	Agreeable	-
2.	Taste	-	Disagreeable	Agreeable	-
3.	Turbidity	NTU	5.9	1	5
4.	pH value	-	6.89	6.5-8.5	No relaxation
5.	Total Dissolved Solids	mg/l	168	500	2000
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	88.4	200	600
7.	Calcium as Ca <sup>++</sup>	mg/l	14.1	75	200
8.	Magnesium as Mg <sup>++</sup>	mg/l	12.9	30	100
9.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	79.2	200	600
10.	Chloride as Cl <sup>-</sup>	mg/l	9.9	250	1000
11.	Total Iron as Fe	mg/l	0.28	0.3	No relaxation
12.	Nitrate as NO <sub>3</sub>	mg/l	1.1	45	No relaxation
13.	Sulphate as SO <sub>4</sub>	mg/l	1.8	200	400
14.	Fluoride as F <sup>-</sup>	mg/l	0.92	1.0	1.5
15.	Free Residual Chlorine	mg/l	ND	0.2	1.0
<b>BACTERIOLOGICAL</b>					
16.	Total Coliform (MPN/100ml)		11	Requirement Shall not be detectable in any 100 ml sample	
17.	Faecal Coliform (MPN/100ml)		Not Detected	Shall not be detectable in any 100 ml sample	
18.	E. coli in 100 ml of sample		Not Detected	Shall not be detectable in any 100 ml sample	

Sample collected and submitted by customer.  
 Remarks: The above sample does not conform to IS: 10500-2012 – Drinking Water specification (Second Revision) with respect to Odour, Taste, Turbidity and Total Coliforms.

Lab Address :  
 51/1, Ground Floor  
 Shipra Path, Mansarovar, Jaipur  
 Tel. 0141- 5130002

  
 Authorised Signatory

<b>Corporate Office:</b> B1/B2, 701, Marathon Innova Off Ganpatrao Kadam Marg, Lower Parel, Mumbai – 400013 India	<b>Phone :</b> +91-22-30449700 <b>Fax :</b> +91-22-30449701 <b>Website :</b> <a href="http://www.eurekaforbes.com">http://www.eurekaforbes.com</a>	<b>Mailing Address :</b> P.O. Box 936 G.P.O., Mumbai-400001 India	<b>Regd. Office :</b> 7, Chakraborty Road (South) Kolkata-700025, India Phone : +91-33-24755402
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## PROVISION OF SAFE DRINKING WATER AT RAJGHAT VILLAGE

The daily drinking water need for the entire village is estimated to be about 1200-1500 lpd.

Fortunately, being surface water source in a rocky terrain, Chambal River water is low on dissolved salts. Just filtration and control of microbial contaminations would make it fit for human consumption.

Water tests were conducted by a professional agency – Eureka Forbes at their Jaipur office. Based on the test results the KarmaKonnnect team decided between 2 home-based water filters for each of the 50 homes:

### Eureka Forbes Water Filters (Approx.: Rs. 3000 each)

- Virus kill – Total protection from Virus, Bacteria & harmful chemicals
- 1 Year Cartridge life – India's first storage water purifier with 4000 litres of cartridge life
- Auto Shut Off – For your safety stops flow of water at the end of the cartridge life. Ensures "Safe water No water" for your family
- Genuine Safety – Contains U.S.E.P.A. registered disinfection resin technology for the safest drinking water purification
- Toughened Body – This product comes to you with a high quality food grade and toughened body, ready to take on day to day rigors of your life.
- No need to boil water - No running water, no electricity required.



## SOLAR HOME LIGHTING SYSTEMS FOR ELECTRIFICATION

For Rajghat, which has been devoid of any development, this project means cheap quality power at home and relief from kerosene, which is pollutant and health hazard, for which, often they have to pay the expensive price due to black marketing.

For the villagers it is just more than light, it is an opportunity to do more after the dark. Keeping in mind long-term sustainability and needs of Rajghat, KarmaKonnnect researched and reviewed various electrification alternatives.

We narrowed down to using a home lighting system that provides a cheap, safe and ready-to-install and use alternative to the conventional off-grid setup.



- ✓ Portable battery with Digital display
- ✓ **Light for multiple rooms**, extended upto 4 rooms. All bulbs with extra wire and switches.
- ✓ 1 portable solar lamp Free with D20
- ✓ **> 10 x brighter than kerosene lamps**
- ✓ 2 Brightness Settings
- ✓ Build in perform in extreme conditions
- ✓ Best performing Lithium Ferro phosphate (LFP) battery (life >5yrs)
- ✓ Dual Charging (Solar & AC)
- ✓ Tough & high efficiency solar panel



Light	Setting	Bulb hrs	Portable light hrs
2 bulbs + 1 portable	High Setting	7 hrs	5 hrs
	Low Setting	15 hrs	10 hrs
3 bulbs + 1 portable	High Setting	4.5 hrs	5 hrs
	Low Setting	12 hrs	10 hrs
4 bulbs + 1 portable	High Setting	3.5 hrs	5 hrs
	Low Setting	9 hrs	10 hrs

### Approx Cost of Water and Light Resource:

Items	Cost per household	No. Of Households	Total Amount
Solar Home Lighting System for each home	Rs. 4200/-	52	Rs. 2,18,400
Water Purifier for each home*	Rs. 3000/- approx.	52	Rs. 1,56,000
<b>Total (approx.)</b>	<b>Rs. 7200/home</b>		<b>Rs. 3,74,400</b>



## Implementation Timeline:

- Your donation helped us deliver first five sets of solar Kits to those homes that have educated a daughter. We were still working on getting them a clean drinking water solution, but were overjoyed with the happiness we brought them - all THANKS to your generosity!!!
- For completing our solar setups for all homes, we procured the new powerful innovation <http://billionsinchange.in/en/solutions/energy>, which brought down our cost of installation considerably.

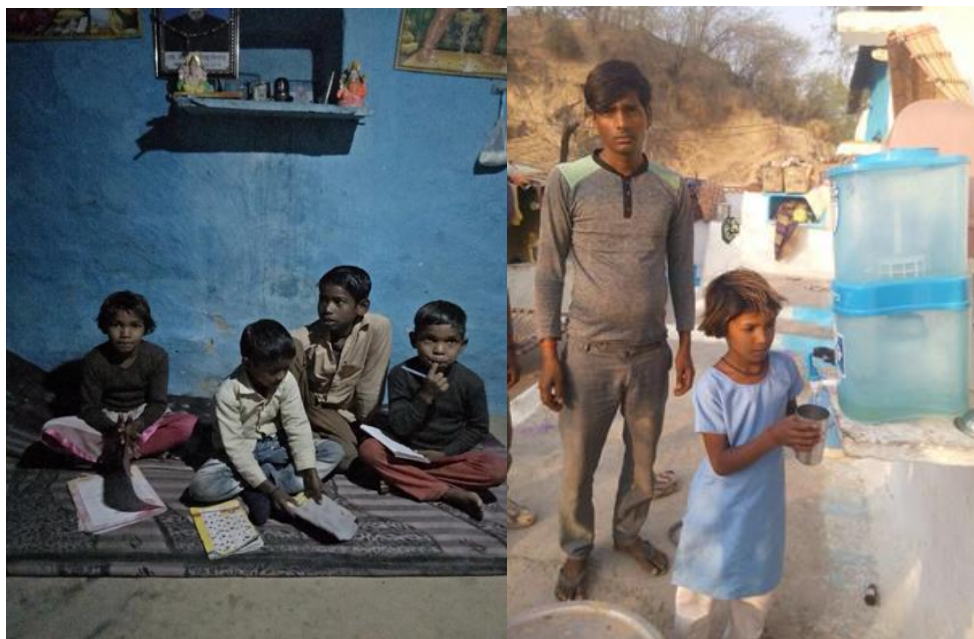


- We conducted a river water quality test from Eureka Forbes Lab. The results of the water quality test showed bacterial, and faecal matter.
- We evaluated proposals from various water filter providers including JalKalp-Sehgal foundation and Eureka Forbes to ensure the filters shall work as required.
- Once we had enough funding to carry out the water solution for all homes and solar installations, we resumed our outreach. (The village faces unrest if we do not give it to all).
- After rigorous water quality tests to ensure that the solution we provide helps them with purifying all impurities of the river water, we finally decided to install Eureka Forbes Maxima 4000 to each home in the village with a one year supply of filter/cartridge.





- In addition, we continued to supply solar home kits to houses from Frontier Markets and scheduled to get all homes illuminated by December 15th. Our team also gave training on water filtration and solar maintenance during the installation on December 9th.
- We were happy to note that we completed the installation of HANS™ PowerPack 150 - Solar Home Electric System and met our commitment to provide life-changing LIGHT to the entire village. This was graciously sponsored by private donor Shri Surenderjee from Delhi, in addition to the funds from Milaap.
- In the next week, Eureka Forbes water purification kits were delivered to the village with one-year replacement cartridge.
- After the successful installation of solar electricity for each household of the village, we installed clean water Eureka Forbes filter in 25 households of the village. This ensures purification of water from the nearby river and prevention of diseases and deaths in the village.



“Bringing Light and Hope to this Forgotten Village”



“After thorough water tests, we have finally started delivering water filters to rural areas in the interiors Of Chambal valley forest area. This shall not only help protect the residents from crocodile attacks, but also solve water-borne diseases that commonly plague these areas.”



“Village Rajghat finally witnessed life-transforming change this New Year !

We are happy to complete installation of solar Power in the ENTIRE village - thanks to our generous supporters !”



## Project Monitoring:

Installation of Drinking Water and Electricity solutions was initiated and completed as soon as we started receiving funds, in batches of 10 each. (To save on installation and training costs)

KarmaKonnnect monitors the functioning of both the solutions and the stories of change and development are communicated regularly to donors periodically.

Any additional funds from the project shall be used to help health emergencies or providing the same solutions to neighbouring villages. Detailed accounts from the project will be promptly given to all donors.

Water quality will be monitored every year by taking water samples and getting them tested to make sure the filters are effective. Any corrective steps if needed will be instantly taken. Yearly filter changes shall be managed by KarmaKonnnect

KarmaKonnnect team trained the local youth in the maintenance of the solar/water units. The youth shall also be trained/encouraged to sell these units in neighbouring villages in the future as an entrepreneurship venture.



## Way Forward:

We have now started to help other villages around Rajghat with solar lights and water filters. We aim to develop those villages in the same way as Rajghat.

After successful installations of solar lights and water filters, the residents have developed some interest in working for a living. We are helping them connect with livelihoods and sponsoring kids' education in nearby town schools.

KarmaKonnnect team trained the local youth in the maintenance of the solar/water units. The youth shall also be trained/encouraged to sell these units in neighbouring villages in the future as an entrepreneurship venture. This not only helps them earn livelihood, but also positively influences them to take leadership.

Seeing the need in and around this area, KarmaKonnnect has started a similar project in the surrounding villages.





## Donations and Financials:

Rajghat and many other villages around, need your hand hold to eradicate myriad problems such as poor living conditions, dependence on Gov. development, lack of opportunity or poor wages, ignorance from officials, malnutrition, poor implementation of government schemes and lack of access to quality healthcare and education facilities.

Category / Item	Amount
Water Filter per house	3000
Solar Light Panel per house	4200
Livelihood/Education needs per house	2,500-3,000
<b>Total (approx.)</b>	<b>9,700-10,200 (approx.)</b>

ALL DONATIONS ARE 50% tax-exempted under the KarmaKonnnect Foundation vide its 80(G) certificate.

Follow this link to know more about the campaign: <https://milaap.org/fundraisers/saverajghat>

You can also do a bank transfer to the below mentioned account setup for this fundraising campaign:

Account number: 80808080101022146

Account name: KarmaKonnnect Foundation

IFSC code: YESB0CMSNOC

Contact: Drumi Bhatt - +91 7043650180