



3. Water Conservation

Policy Documents for the facility

Excerpts from various G.B meetings:

- 1) Proposal for installing Rain water harvesting project (dated 4/9/15)

 BHAIRAB GANGULY COLLEGE (Government Aided) 'A' Accredited Institute by NAAC Belgharia, Kolkata-700 056 Phone : (033) 2553 2280 / (033) 2564 3191 E-mail : principal.office@bhairabgangulycollege.ac.in bhairab1968@gmail.com Website : www.bhairabgangulycollege.ac.in	
Ref. No.	Date
Excerpt from the Minutes of the meeting of the Governing Body held on 04.09.2015 Under the Item No.-1	
The Principal reported that the actions / recommendations / suggestions adopted in the meeting dated 25-07-2015 have been successfully initiated e.g.	
<ol style="list-style-type: none">Medicinal Plants Garden, e-resource zone, e-class room have been set-up.Date of inauguration of the same by Prof. Saugata Ray, Hon'ble M.P. is fixed on 17-10-2015.Work of construction of Museum is in concluding phase.Relevant papers for career advancement of Dr. Manisha Sarkar have been submitted to the H.E. Department.Five P.G. Courses under DDE, V.U. have been introduced from the current academic session.Work of installing solar power plant has been initiated following prevailing norms with Sun Power Energy Technology, a channel partner of Ministry of New & renewable Energy (MNRE), Govt. of India.The paraphernalia for formation of Employees' Co-operative Credit Society have been done and the said society is already operative.The proposal to set-up Rain Water Harvesting System by the Dept. of Geography followed by a project report of the said department is on the verge of materialization.	
Sd/-President Governing Body, Bhairab Ganguly College	
Attested  (Subhranil Som) Principal Principal & Secretary Bhairab Ganguly College Belgharia, Kolkata - 56	

- 2) Completion for setting Rain water harvesting project (dated 10/2/16)

BHAIRAB GANGULY COLLEGE



(Government Aided)

'A' Accredited Institute by NAAC

Belgharia, Kolkata-700 056

Phone : (033) 2553 2280 / (033) 2564 3191

E-mail : principal.office@bhairabgangulycollege.ac.in

bhairab1968@gmail.com

Website : www.bhairabgangulycollege.ac.in

Ref. No.

Date

Excerpt from the Minutes of the meeting of the Governing Body held on 10-02-2016

Under the Item No.-2

Principal, Dr. Ray reported that as per suggestions adopted in the G.B. meeting dated 04.09.2015, the works of Medicinal Plants Garden, e-resource zone, e-class room, construction of Museum of the Dept. of History, **installation of solar power plant**, formation of Employees' Co-operative Credit Society and **introduction of Rain Water Harvesting System by the Dept. of Geography** and Butterfly garden by the Department of Zoology have already been completed maintaining proper procedure.

Sd/-President

Governing Body, Bhairab Ganguly College

Attested

Subhranil Som


(Subhranil Som)

Principal

Principal & Secretary
Bhairab Ganguly College
Belgharia, Kolkata - 56

Excerpt from Finance and Purchase Sub-Committee meeting:

Installation of one additional reservoir in rain water harvesting project (dated 06/2/23)

BHAIRAB GANGULY COLLEGE	
(Government Aided)	
‘A’ Accredited Institute by NAAC	
Belgharia, Kolkata-700 056	
Phone : (033) 2553 2280 / (033) 2564 3191	
E-mail : principal.office@bhairabgangulycollege.ac.in bhairab1968@gmail.com	
Website : www.bhairabgangulycollege.ac.in	
<hr/>	
Ref. No.	Date
Excerpt from the Minutes of the meeting of the Finance and Purchase Sub-Committee held on 06-02-2023 under the Item No. - 3	
Item No.-3 Principal reported the House that -	
i) Foundation work of a monument/stage for the International Mother Language Day in our college campus has been continuing.	
ii) Extension works of “Heritage”, the museum of History Department has been continuing.	
iii) Work for beautification of pond side area in the campus has been continuing.	
iv) One Solar powered High Mast has been installed beside the statue of Bhairab Chandra Ganguly.	
v) To increase Rainwater Harvesting System, one additional reservoir has been installed.	
vi) Extension and up-gradation of Gymnasium has been continuing.	
vii) Some wooden works in different places of campus has to be started shortly.	
Sd/-President Governing Body, Bhairab Ganguly College	
Attested	
	
(Subhranil Som) Principal	
<i>Principal & Secretary</i> Bhairab Ganguly College Belgharia, Kolkata - 56	

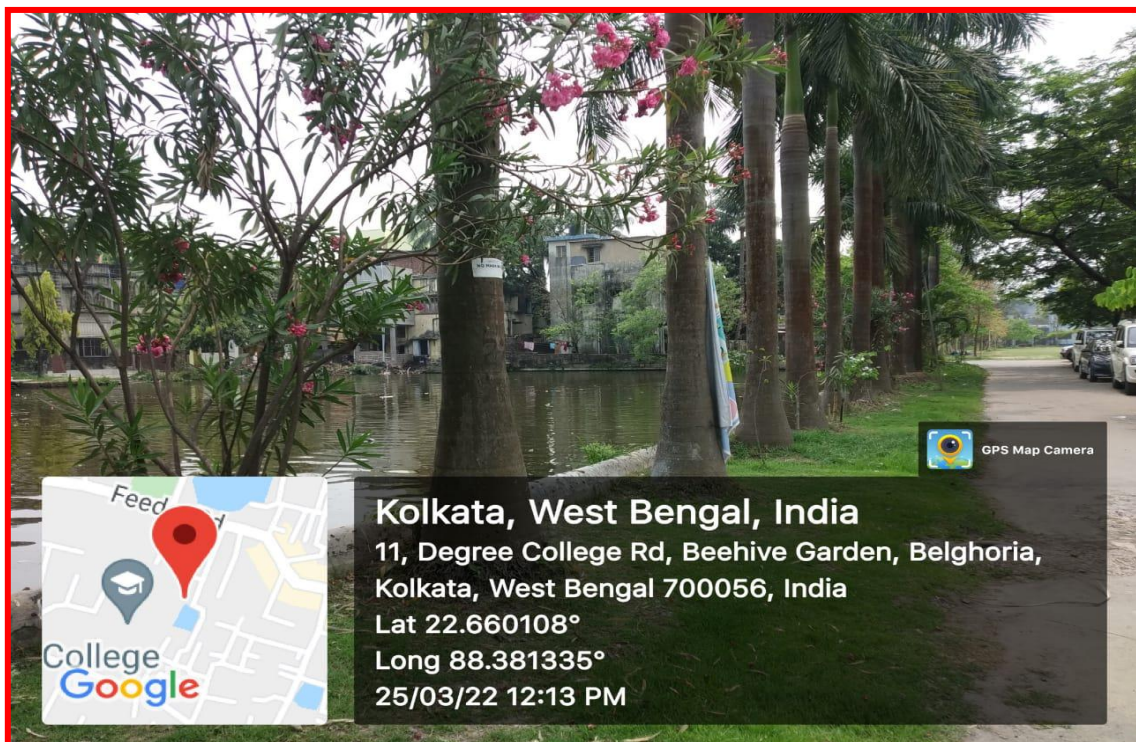
Geo tagged photographs and videos with caption

Geo tagged photographs with caption:

Rainwater harvesting



Maintenance of water bodies (adjacent pond)



Video link and GPS information related to Water Conservation (Rain Water Harvesting)

<https://bhairabgangulycollege.ac.in/wp-content/uploads/2023/04/3.Water-conservationRain-water-harvesting.mp4>



Bill for the purchase of equipment

Payment voucher and bill for Rain water harvesting project (dated 03/11/15)

BHAIRAB GANGULY COLLEGE
 Belgharia, Kolkata- 700056
 Phone: 2553-2280, 2564-3191
 www.bhairabgangulycollege.ac.in

Payment Voucher

To: _____

Voucher No.: V151622 **Date: 03-11-2015**

On A/c	Amount (Rs.)
RAIN WATER HARVESTING PROJECT	119,000.00
Rupees one lakh nineteen thousand only.	Total (Rs.) 119,000.00

Payment Mode: AXIS BANK LTD 914010021101712 **Ch No: 145711** **Ch Dt: 03-11-2015**

ENGINEERING ENTERPRISE-BEING THE EXPENSES INCURRED FOR NEW RAIN WATER HERVESTING PROJECT CONSTRUCTION IN COLLEGE AS PER BILL ENCLOSE.

[Signature]
Accountant/Cashier

[Signature]
Bursar

[Signature]
Principal

For ENGINEERING ENTERPRISE
Received Payment
[Signature]
 03/11/15

Prepared by: Supervisor Bursar Principal
 Accountant

BHAIRAB GANGULY COLLEGE
 Bhairab Ganguly College, Belgharia, Kolkata - 56

ENGINEERING ENTERPRISE
 CVT. CONTRACTOR & ORDER SUPPLIER

Old 17 New (15/12) Harisava Road
 Anandapuri, Barrackpore
 P.O. - Nona Chandanpukur
 Kolkata - 700 122
 VAT No. : 19667562085
 Email : engineering.enterprise@gmail.com

Ref. No.

Date

To The principal
 Bhairab Ganguly College
 Belgharia, Kolkata - 700056.

Sub:- Bill for Rain water Harvesting project.

earth work in excavation - - - - -	13'-2" x 2'-1" x 2'-0" = 54.74 cft. = 1.55 m ³ @ 9221.30 / m ³	₹ 142 = 93
single layer brick flat soling - - - - -	13'-2" x 2'-1" = 27.37 sqft.	
	11'-0" x 6'-7" = 72.38 "	
	99.75 = 9.27 m ² @ 277.52 / m ²	₹ 2,572 = 61
cement concrete (4:2:1) with stone chips - - - - -	13'-2" x 2'-1" x 4" = 9.03 cft. = 0.26 m ³ @ 5251.34 / m ³	₹ 1,365 = 35
brick work (4:1) in sand cement mortar - - - - -	13'-2" x 1'-8" x 6" = 10.92 cft.	
	13'-2" x 1'-3" x 6" = 8.22 "	
	13'-2" x 10" x 2'-7" = 28.18 "	
	4'-10" x 10" x 3'-2" = 12.67 "	
	16'-10" x 10" x 3'-2" = 44.14 "	
8" thick brick work (4:1) with sand cement mortar - - - - -	104.13 cft. = 2.95 m ³ @ 4751.83 / m ³	₹ 14,017 = 90
4'-10" x 6" = 2.41 sqft. = 0.22 m ² @ 783.00 / m ²		₹ 172 = 26
cement concrete (4:2:1) for base - - - - -	11'-0" x 6'-7" x 10" = 60.07 cft. = 1.70 m ³ @ 5251.34 / m ³	₹ 8,927 = 28
yellow sand filling in plinth - - - - -	10'-0" x 4'-9" x 3'-0" = 142.50 cft. = 4.03 m ³ @ 1200 / m ³	₹ 4,836 = 00
supplying fitting fixing well sining - - - - -	for 2 nos well - - - - - 14 nos @ 450/- Each	₹ 6,300 = 00
supplying fitting fixing well cover - - - - -	2 nos - - - - - @ 1250/- Each	₹ 2,500 = 00
plaster to wall (4:1) with sand cement - 20 mm thick - - - - -	1 x 30'-0" x 3'-0" = 90.00 sqft.	
	1 x 12'-0" x 6'-7" = 78.96 "	
	2 x 2 x 9'-4" x 6'-0" = 223.92 "	
neat cement punning 1.50 mm thick - - - - -	392.08 sqft. = 36.50 m ² @ 161.22 / m ²	₹ 5,884 = 53
Area same as sl no (10) of plastered surface = 36.50 m ² @ 90 / m ²		₹ 3,285 = 00
R.C.C. slab casting (4 nos)	4 nos x 4'-0" x 1'-8" x 3" = 6.64 cft. = 0.19 m ³ @ 5251.34 / m ³	₹ 997.75
Reinforcement for R.C.C. slab - - - - -	15 kg @ 55/- Per kg.	₹ 825 = 00
Thanking you.	(Rupees fifty one thousand ^{Eight} three hundred _{fifty four only})	₹ 51,353 = 99
Yours faithfully	Twenty Six	₹ 51,826 = 61

Thanking you.
 Yours faithfully

ENGINEERING ENTERPRISE
DVT. CONTRACTOR & ORDER SUPPLIER

Old 17 New (15/12) Harisava Road
Anandapuri, Barrackpore
P.O. - Nona Chandanpukur
Kolkata - 700 122
VAT No. : 19667562085
Email : engineering.enterprise@gmail.com

Sl. No.

Date

To The Principal
Bhaimbanganjuly College.
Belgharia, Kolkata - 700056

Sub-Bill for Rain Water Harvesting project.

brick work (4:1) with sand cement-mortar - - - - -	
2 NOS X 14'-3" X 2'-7" X 6" = 36.76 cft. = 1.04 M ³ @ 4751 = 83/M ³	₹ 4941 = 90
5mm (5") thick brick work (4:1) with sand cement-mortar - - -	
2 NOS X 10'-6" X 6" = 10.50 stt. = 0.97 M ² @ 783/- / M ²	₹ 759 = 51
ement concrete (4:2:1) with stone chips. - - - - -	
ax - 2 NOS X 14'-3" X 5'-3" X 10" = 124.19 stt. = 3.51 M ³ @ 5251 = 34 / M ³	₹ 18432 = 20
ngle layer brick flat-soling - - - - -	
ase - 2 NOS X 14'-3" X 5'-3" X = 149.62 stt. = 13.90 M ² @ 277 = 32 / M ²	₹ 3857 = 53
ster to wall (4:1) 20mm thick - - - - -	
Wall - 2 NOS X 2'-7" X 14'-3" = 73.53 stt.	
" - 2 NOS X 5'-3" X 6'-0" = 63.00 "	
Well - 2 NOS X 2 X 9'-4" X 6'-0" = 223.92 "	
<u>360.45 stt. = 33.48 M² @ 161 = 22 / M²</u>	₹ 5397 = 64
heat cement-punning over plastered surface - - - - -	
Area same as sl no (5) - - - - -	33.48 M ² @ 90/- / M ²
	₹ 3013 = 20
ellow sand filling in foundation & plinth. - - - - -	
2 NOS X 4'-2" X 4'-3" X 2'-0" = 70.72 cft. = 2.00 M ³ @ 1200/- / M ³	₹ 2400 = 00
Supplying, fitting, fixing well ring concrete - - - - -	
for 2 NOS well - - - - -	14 NOS @ 450/- Each
	₹ 6300 = 00
Supplying, fitting, fixing well cover - - - - -	
for 2 NOS well - - - - -	2 NOS @ 1250/- Each
	₹ 2,500 = 00
plumbing works. - - - - -	X/S
	₹ 18,000 = 00
Name plate on the granite Marble - - - - -	
	₹ 4,000 = 00

(Rupees Sixty Nine Thousand Six Hundred Two only)

69,601 = 98
51,826.61

Thanking you.
Yours faithfully,

Total (Rs. One Lac Twenty One Thousand Four Hundred Twenty Eight Only)

Total ₹ 1,21,428.59

Less: TDS 2% 2428.56

Net Amount Pay. 1,19,000.00

The enclosed amt may be paid
4-11-15
Bursar
GANGULY COLLEGE
Belgharia, Kol-56

(Pay) Accordingly
Principal
Bhaimbanganjuly College
Kolkata - 56

₹ 4/11/15
Principal
Bhaimbanganjuly College
Kolkata - 56

B. Prasad 3/10/2015
Accountant
Bhaimbanganjuly College

Brief Report

Bhairab Ganguly College introduced the Rain Water Harvesting Project titled “MEGH-KALASH” for conserving rain water. We can explain briefly its effectiveness by the following way:

Christening: Clouds in the sky bring rain and Kalash, the earthen pot, or the earth itself, holds the rain water. So, the name is “Megh Kalash” after Tagore’s one of the verses.

Defining: Rain water harvesting is a very effective method of water management and its conservation. This refers to collection and storage of rain water for use in times of needs of human, animal and plant.

Purpose of the Project:

- To utilize rain water and in the process lessen dependence on municipal supply
- Conservation of water resources in consequent to the govt. policy “Jal Dharo Jal Varo”.
- To irrigate the garden area and if necessitates, use of this water for the toilets.
- To create conservation awareness among college students and others about water.
- To recharge ground water through recharge pits.
- To improve garden ecology by promoting vegetation cover and thus attracting birds, butterflies and others.

Location of the Project: Bhairab Ganguly College Garden sides, beside the main building where rain water come down through the rain pipes.

Details of the Project Plan:

No. of Tanks: 4

Catchment Area:

Tanks 1 & 2. -- 2476.9 square ft. (For Paired Tanks)

Tanks 3 & 4-- 2420 square ft.

Transfer Channel Length: Rain water pipe length 40 ft. approx. from the roof to the tank for each of the sites.

Storage Capacity: Average storage capacity: 1000 litres for each of the tanks.

Total Capacity : 4000 litres when full.

Harvesting Scheme:

Step I: Collection

Step II: Transfer through pipelines

Step III: Storage Tanks

Step IV: Distribution through pipes for watering nearby garden supply water to the adjacent toilets

Step V: Recharge with excess water for underground through Recharge Pits/Recharge Trench/Tube-well.

Recharge Pits are intended to be the size of 1 to 2 metres wide and 2 to 3 metres deep each; back filled with gravels/broken bricks (5—20 cm), gravels (5—10 mm) and coarse sand (1.5 – 2 mm).

Rather the college also maintain water bodies in adjacent pond in a good manner.