

Government of West Bengal
Department of Science & Technology and Biotechnology (DSTBT)
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-I
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): *Workshop organised by Colleges*
I) Beating plastic from Water bodies; Strategies for removal.
II) Restoration of Local Water bodies for Day II.
2. Title of the proposed Programme: *Prevention and Sustainable Management for Day I.*
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): *Faculty, College Students*
4. Duration (days): *2 days*; Tentative Dates of the proposed Programme: *1) 9/03/2026
2) 14/12/2026*
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): *Separate sheets are attached.*
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach, separate sheet, if necessary): *Separate sheets are attached.*
7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ ITI/ Autonomous body/ registered NGO/ Trust etc.): *Government aided College.*
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): *Separate sheets are attached.*
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: *Kolkata Nivedita Shakti. 1) They will provide speaker from National and international experts. 2) To link the programme with other initiatives in India.*
10. Expected number of participants and list of Resource Persons/ Invited Speakers: *Expected Number of participants - Around 70 to 100. Resource Person: Dr. Pritha Bhattacharjee. Experts from different fields.*
11. Give details of the grant received from DSTBT in last three Financial Years, if any alongwith the date of submission of UC, Audited SoE, Report etc.: *NA.*
12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: *Dharuba Chand Halden College, Dakshin Barasat, South 24 Parganas. pin-743372.*
13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):
D: ₹ 1,50,000(max.) = (A: ₹ 1,50,000/- - B: ₹ 15,000/- - C: ₹ NA)
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: Rupamita Sarkar

Date: 10/12/2025

Name of Programme Coordinator:

Dr. Rupamita Sarkar

Designation: Assistant professor

Address: 412 paramhansa DevRoad, Chetla, Kolkata-700027. (Office Seal)

Signature:

Date: 10/12/2025

Name of Head of the Institution:

principal

Address: Dakshin Barasat, South 24 parganas, West Bengal, pin-743372.

Signature
PRINCIPAL
Dhruba Chand Halder College
P.O.D. Barasat, P.S.-Jaynagar
Dist. 24 Parganas (S), Pin-743372

Signature
Dhruba Chand Halder College
P.O.D. Barasat, P.S.-Jaynagar
Dist. 24 Parganas (S), Pin-743372

RECOMMENDATION
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (₹)
1.	Honorarium to Resource Persons/ Experts	20,000/-
2.	Study materials, Consumables expenses	8,000/-
3.	Hall rent, if any	NA
4.	Publicity materials	5,000/-
5.	Travel expenses	10,000/-
6.	T.A. to the external Resource Persons/ Experts	NA
7.	Documentation expenses including audio-visual	8,000/-
8.	Light refreshments	19,000/-
9.	Auditors' fee	5,000/-
10.	Other expenses, if any (please specify)	NA
Grand Total Expenditure (₹):		75,000/- (approx.)

For 2 days Workshop $75,000 \times 2 = 1,50,000/-$. proposed total budget with Break-up for 2 days is attached in separate sheet.

Please mention: B. Institution/ Organization Contribution* in ₹ 15,000/-

C. Contribution from any other sources (with name & Address) in ₹ NA

D. Grant expected from DSTBT (₹) = (A-B-C) 1,35,000/-

Signature of Authorised Personnel with seal

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P.O.-D. Barasat, P.G.-Jaynagar
Dist.-South 24 Parganas

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

Signature of Authorised Personnel with seal

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*At least 10% of the total budget contribution from the Institute/ Organization is desirable



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Ref. No.

Date 20

DETAIL PROGRAMME SCHEDULE: (AIMS AND OBJECTIVES) FOR DAY I AND DAY II

Beating plastic from water bodies: Strategies for removal, prevention and Sustainable Management

Plastic pollution has become one of the most significant global environmental threats. Rivers, lakes, ponds and oceans accumulate plastic waste originating from improper disposal, industrial discharge, urban runoff and human activities. This plastic harms aquatic organisms, disrupts ecosystems and enters the food chain as microplastics. This work aims to explore practical, cost-effective and sustainable strategies for removing plastic waste (beating plastic) from water bodies and preventing future pollution. Single-use plastics such as bottles, bags, straws contribute heavily to soil, water and air contamination. These plastics take hundreds of years to decompose and release toxic microplastics, harming humans, animals and ecosystems. Our community depends on disposable plastic products due to convenience and lack of awareness. This type of study is needed to reduce plastic use, improve waste management and eco-friendly alternatives. To design and implement a community /campus - based strategy that significantly reduces single use plastic consumption and promote sustainable alternatives. On the other hand, water scarcity is becoming a growing challenge due to rapid urbanization, climate change and inefficient water usage. Effective water management and rain water harvesting (RWH) provide sustainable approaches to conserve water recharge groundwater and ensure availability during dry seasons.

Details of the Programme:

Participants:

School/College Students

Teachers

Community Members

NGOs

Significance of the Workshop

- 1) This workshop will help policymakers and environmental groups to improve water management
- 2) Support the UN Sustainable Development Goals

- 3) Contribute scientific findings on emerging solutions like bioremediation
- 4) Provide a replicable model for community –based plastic clean up

One-Day Workshop Plan: Beating plastic from water bodies: Removal, prevention and Sustainable management

Duration: one full Day (DAY – I)

Target Participants:

Students of different semesters

Community Volunteers

Local NGOs

Waterside Community membrane

Objectives:

- 1) Create awareness about threats of plastic pollution in rivers, ponds,lakes and canals
- 2) Train participants on scientific and safe methods of plastic removal
- 3) Demonstrate low-cost tools for plastic collection
- 4) Encourage behavioral change and long term prevention
- 5) Develop community –led monitoring and reporting systems

Detailed Schedule (Time-Wise)

9.00-9.30 AM/ Registration and Pre-Assessment:

- 1) Participant registration
- 2) Distribution of workshop kits
- 3) Baseline questionnaire on plastic knowledge

9.30 – 10.00 AM / Inaugural Session:

Topics:

- 1) Welcome speech
- 2) Importance of clean water bodies
- 3) Brief introduction to plastic pollution crisis (local examples)

10:00-11:00 AM/SESSION 1: Understanding plastic pollution

Content:

- 1) Types of plastic commonly found in water bodies
- 2) Sources of plastic leakage (urban runoff, rituals, fishing nets, dumping)

- 3) Effect on aquatic biodiversity, water chemistry, human health and local livelihoods

Activities:

- 1) Display of real samples of plastic waste
- 2) Short video screening

11:00- 11:15 AM / TEA BREAK

11: 15 AM-12:30 PM /SESSION 2: Field training- plastic removal techniques:

Demonstration Topics:

- 1) Manual plastic beating and collection
- 2) Use of hand nets, rakes, collection bags

Safety training:

- 1) Hand gloves
- 2) Gumboots
- 3) Avoiding contamination
- 4) Safe segregation after collection

Activity:

Participants divide into groups for hands-on practice

12:30-1:00 PM /SESSION 3: Strategies and Safe disposal

Topics :

- 1) Sorting plastic into recyclable/non-recyclable
- 2) Intermediate storage
- 3) Linkage with recycling centres

1:00 PM- 2PM / LUNCH BREAK

2PM -3PM: SESSION 4: Prevention Strategies:

Topics:

- 1) Community based monitoring
- 2) Setting up No-plastic zones
- 3) Waste audits in local markets
- 4) House hold segregation
- 5) Alternative to single –use plastic
- 6) Role of school/volunteers

3:00 – 4:00PM /SESSION 5: Demonstration of low-cost innovative tools:

- 1) Reusable cloth collection bags
- 2) Floating barrier models
- 3) Low-cost data recording sheets for monitoring
- 4) Robe- based drag nets for community use

Hands on: Participants build one simple tool

4:00 -4:30 PM /Group work and action plan development:

Each group prepares one month local action plan

4:30 PM -5 PM / Validictory Session:

- 1) Post assessment test
- 2) Certificate distribution
- 3) Feedback form collection
- 4) Group photo

Materials Required:

- 1) Gloves, Masks
- 2) Collection Bags (cloth/jute)
- 3) Nets, bamboo tools
- 4) First-aid kit
- 5) Marker Pens, Charts
- 6) Projector and screen
- 7) Drinking water
- 8) Registration sheets, feedback forms

Facilitators Required:

- 1) Environmental expert
- 2) Waste management specialist
- 3) Health and safety trainer
- 4) Field supervisors (2-3)
- 5) Documentation team

Expected Outcomes:

- 1) Increased awareness of plastic hazards
- 2) Skill development in plastic removal and segregation
- 3) Community networks formed for regular clean-ups
- 4) Reduced plastic dumping in targeted water bodies
- 5) Sustainable local monitoring system launched

Duration: One full Day (DAY – II)

Restoration of Local water bodies (Water Management, Drought proofing and rain water harvesting)

Duration: One day (9:30 AM -4:30 PM)

Target Participants: Students, Community members, local population, teachers

Workshop objective:

- 1) Understand the causes of water body degradation and drought vulnerability
- 2) Learn practical methods for lake /pond restoration
- 3) Demonstrate low-cost rainwater harvesting techniques
- 4) Promote community based monitoring , prevention of plastic pollution
- 5) Create an action plan for local implementation

Detailed Schedule: (Time wise)

9.30 AM TO 10 AM / Registration and Welcome Tea

- 1) Registration, distribution of workshop kits
- 2) Welcome by organizers

10:00 AM TO 11 AM / SESSION 1: Understanding water body degradation

- 1) Plastic waste, sewage inflow, encroachment, eutrophication
- 2) Successful lake/pond rejuvenation

11 AM -12 PM /SESSION 2: Restoration Technique:

- 1) Distillation methods
- 2) Removal of invasive weeds and floating waste
- 3) Constructed wetlands for natural filtration
- 4) Buffer zone creation and plantation

12:00-1:00 PM /SESSION 3:

- 1) Ground water recharge structures
- 2) Check dams, percolation pits
- 3) Soil-moisture conservation methods
- 4) Village-level drought resilience planning

1:00-2:00PM /Lunch Break

2:00 PM- 3:00PM /SESSION 4: Rainwater Harvesting Demonstration:

- 1) Rooftop RWH model demonstration

- 2) Simple household RWH units
- 3) Community RWH structures
- 4) Cost-benefit analysis

3:00-4:00PM /Hands on Activity:

- 1) Mapping the nearest water body
- 2) Identifying pollution sources
- 3) Demonstration of a small recharge pit/filtration unit

4:00-4:30 PM /Closing and certificate distribution

- 1) Feedback form submission
- 2) Certificate distribution

Materials Required:

- 1) Projector and screen
- 2) Flip charts and markers
- 3) Sample RWH filter (gravel-charcoal-sand)
- 4) Models, posters
- 5) Gloves, masks for demonstration
- 6) Workshop kit (pen, notebook, brochure)

Expected Outcomes:

- 1) Participants gain practical knowledge to restore ponds/lakes
- 2) Awareness of drought –proofing for local villages
- 3) Ability to construct small RWH structures at home/school/college
- 4) Creation of a local action team for follow-up restoration
- 5) Reduction of plastic waste and pollution at local water bodies

Conclusion:

Beating plastic from water bodies requires a combination of science, technology and community action. This workshop proposal outlines a structured plan to study, test and recommended plastic removal and prevention methods that can be implemented local and national levels.

This workshop will empower participants with scientific knowledge and practical skills to conserve water implement water harvesting systems and contribute to a sustainable future. By spreading awareness and adopting simple techniques, communities can play a major role in creating a water-secure environment.



Signature with Authorized Personal with Seal

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Ref. No.

Date 20

ANNEXURE I

PROPOSED TOTAL BUDGET WITH BREAK- UP:

DAY I :

(One-Day Workshop Plan: Beating plastic from water bodies: Removal, prevention and Sustainable management)

Beating plastic from water bodies –proposed budget:

1) Human Resources :

Item	Estimated Cost
Environmental Expert/Trainer	10,000
Volunteers (10-20 people, refreshment allowance)	5000
Total	15,000

2) Materials and Equipment:

Item	Estimated Cost
Cleaning tolls	30,000
Waste collection bags (biodegradable)	5000
First aid kit	2000
Water testing Kit	5000
Total	42,000

3) Transport and Logistics

Item	Estimated Cost
Vehicle for waste collection/transport	4000
Vehicle for equipment transport	1000
Total	5000

4. Awareness and outreach

Item	Estimated Cost
Posters, banners, flex, printing	4000
Handouts/Pamphlets	1000
Total	5000

5. Refreshments

Item	Estimated Cost
Snacks and drinking water	2000
Lunch	3000
Total	5000

6. Documentation and Miscellaneous

Item	Estimated Cost
Photography/vídeo reporting	2000
Contingency	1000
Total	3000

TOTAL COST: 75,000/ (For Day I)

PROPOSED TOTAL BUDGET WITH BREAK- UP:

DAY II:

Restoration of Local water bodies (Water Management, Drought proofing and rain water harvesting)

1) Human Resources :

Item	Estimated Cost
Environmental Expert/Trainer	10,000
Volunteers (10-20 people, refreshment allowance)	5000
Total	15,000

2) Materials and Equipment:

Item	Estimated Cost
Folders/Files	2000
Notebooks	2500
Pens	2000
Printed hand outs	5000
Total	11,500

3) Resource Person Honorarium

Item	Estimated Cost
Expert session on water body restoration	5000
Expert session on Rain water harvesting	5000
Expert session for drought proofing strategies	5000
Travel for experts	5000
Total	20,000

4) Food and Refreshments

Item	Estimated Cost
Tea and snacks	3000
lunch	10,000
Drinking Water	1000
Total	14,000

5) Administration and Miscellaneous :

Item	Estimated Cost
Documentation and report writing	4500
Photography/videography	5000
Auditors' Fee	5000
Total	14500

TOTAL COST: 75,000/ (For Day II)



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ANNEXURE-II

BANK DETAILS OF THE ORGANISATION:

Name of the organization	Dhruba Chand Halder College
Bank Account Number and name of the account holder /organization	11403896097, Dhruba Chand Halder College
Type of Account	Current Account
Name of the Bank	State Bank of India
Name of the Branch with branch address	Dakshin Barasat, 24 parganas south, West Bengal, 743372
IFSC of the Branch	SBIN 0002046
Mobile Number of the Programme Coordinator	9474854398
PAN/TAN of the Account holder/organization	AAALD1133F

Signature of Authorized Personnel with Seal

PRINCIPAL

Dhruba Chand Halder College
P.O.-D. Barasat, P.S.-Jaynagar
Dist.-South 24 Parganas

NAME : DR. RUPANWITA SARKAR

DESIGNATION: ASSISTANT PROFESSOR, DEPARTMENT OF ZOOLOGY, DHRUBA CHAND HALDER

COLLEGE

POSTAL ADDRESS: 4/2 PARAMHANSA DEV ROAD, CHETLA, KOLKAT 700027

MOBILE NUMBER: 9474854398

Email ID: rupanwita.biswas@gmail.com