



S.V. GOVT. COLLEGE GHUMARWIN

Distt. - Bilaspur, Himachal Pradesh, Pin-174021,

Phone and Fax 01978-255551. www.gcghumarwin.org.in, gcghumarwin-hp@nic.in

BEST PRACTICES

(PRACTICE NO.1)

1. Title of the Practice: BANNING OF SINGLE USE PLASTIC

Single-use plastics, often also referred to as disposable plastics, are commonly used for plastic packaging and include items intended to be used only once before they are thrown away or recycled. These include, among other items, toffee wrappers, all types of junk food packages, food packaging, bottles, straws, containers, cups and cutlery etc.

2. Objective of the Practice:

Plastic is not biodegradable and usually goes into a landfill where it is buried or it gets into the water and finds its way into the water bodies (Govind Sagar Lake). Although plastic will not biodegrade (decompose into natural substance like soil) it will degrade (break down) into tiny particles after many years. In the process of breaking down, it releases toxic chemicals which make their way into our food and water supply. These toxic chemicals are now being found in our bloodstream and the latest research has found them to disrupt the Endocrine system which can cause cancer, infertility, birth defects, impaired immunity and many other ailments.

Our main focus is to sensitize students and staff on ways to avoid or reduce single use plastic in any form.

3. The Context:

Single use plastic is harmful to environment as it is non-biodegradable as it takes years to disintegrate. Our country produces hundreds of millions of tons of plastic every year, most of which cannot be recycled. It's obvious that we need to use less plastic, move towards environmentally sustainable products and services and come up with technology that recycles plastic more efficiently.

In our college canteen bottles of soft drinks, mineral water, and junk food packed in plastic wrappers was being used by the students. In the session 2018-19 the college administration took a prompt action to abandon the use of single use plastic. In our

canteen even before this initiative was announced by the state Government we decided to go plastic free. There are no plastic plates, spoons and straws in our canteen. We are using steel glasses, plates and spoon.

4. The Practice:

A Quote by Gandhiji on Environment and Ecology: “The earth, the air, the land and the water are not an inheritance from our fore fathers but on loan from our children. So we have to handover to them at least as it was handed over to us.” Although during his time environment problems were not recognised as such, however with his amazing foresight and insight he predicted that things are moving in the wrong direction.

Government has decided to take plastic ban as a national level campaign to address the environmental hazards being caused by the indiscriminate use of plastic. Educational institutions must lead this nation-wide endeavour. There is a need for our institutions to actively contribute to the effort of banning the use of single use plastics. Students are the face of the Nation and they can be moulded and made aware and sensitized to imbibe good values for sustainable development. Our generation needs to understand the importance of passing safe environment to the future generation.

Our institution has taken step as per the MHRD guidelines. The guidelines encourage our college to adopt policies and practices towards cleaner and plastic free campuses.

- Our institutions has carried out awareness drives and sensitising workshops on the harmful impacts of single use plastics.
- College administration ensures no use of single use plastic and defaulters are fined.
- There is no use of single use plastics any form in canteens and hostels, etc.
- Students are not permitted to bring non-biodegradable plastic items to the institution. They are asked to bring steel lunchboxes and water bottles.
- Every student is motivated to make his/her household and habited region plastic free.
- Our college has installed water purifier to provide safe drinking water to avoid the purchase and use of single use packed plastic water bottles.
- Our institution also ensures the use of jute/cloth bags as Government of Himachal Pradesh has already banned the use of poly bags/plastic/thermocool cutleries.
- Our college conducted events and poster competitions etc. on designing ecological and environment friendly goods to minimise the use of single use plastic.
- Students and faculty must work towards this in mission mode.

5. Evidence of Success: Our Institution has followed the Government notification in letter and spirit. The maximum use of single use plastic is in eating joints. It is used for packaging of eatables, cold-drinks and so on. Since our institution has banned single use plastic therefore, by default the plastic comes with packed food is banned.

- We are either using steel utensils or paper made utensils for eating and drinking.
- Students and faculty members are bringing steel lunch boxes and water bottles.
- We have replaced plastic made apparatus with glass/silica made apparatus.

6. Problems Encountered and Resources Required:

Although complete ban of single use plastic and plastic apparatus is difficult and challenging until we find any alternative to replace it with other environment friendly material but we have to do it anyway. In some scenarios we have not found the substitute of single use plastic, we need a land mark research to find a suitable substitute to the problem, hence complete ban of plastic is not possible.

Moreover it is difficult to convince students about not using plastic since it is readily available and handy, easy to carry. Moreover it is cheap and convenient, and as long as there is demand for it, people are going to manufacture it.

A national ban will have to be enforced by local bodies, but gram panchayats may not have the resources to do routine checks on plastic use.

(PRACTICE NO. 2)

1. Title of the Practice: GREEN ENERGY INITIATIVE

2. Objectives of the Practice

- I. To encourage the steps towards Environmental Protection.
- II. To promote the usage of renewable energy resources in the society.
- III. To motivate the Government institutions for adopting the pollution free energy resources.
- IV. To promote the Government schemes and policies regarding environmental protection.
- V. To provide the uninterrupted power supply for 24 hours x 365 days for the institution.

- VI. To demonstrate the power project to the college students for making them aware about environmental protection and for promoting the government efforts.

3. The Context

The solar power plant is providing uninterrupted power supply for the institution. During the time bound process of admission, examination for filling and examination process the energy received from the plant helps for the completion of above processes within the given time framework. This plant also caters the power requirements during different co-curricular activities like inter college events, cultural activities, different day celebrations and Annual Prize distribution functions of the college.

The Central Government has stopped the budget allocation for off-grid solar power plant. The restart of this scheme can be very fruitful for the sustainable development.

There is a need of the hour that the use of green energy should be made mandatory for every government department specially the colleges. Since the colleges provide education for a good number of students from the near peripheral area, the message regarding the usefulness of such plants can spread in the society through our students (our educated and aware messengers).

Since the institution needs a good amount for the initiation and establishment of this project but usually the institutions are lacking such amount with them for this purpose, the institutions should be provided with the sufficient budget and subsidy either by State or Central Government for the establishment of such Solar Power Plants.

The concerned departments should give approvals to these projects in an accelerated manner so that the process can be completed with the minimum efforts and time. The process can be exercised more efficiently by adopting 'Single Window Clearance' system.

4. The Practice

Our institution is the first institution of the state where 15kwp off-grid solar power plant is working successfully. The institute not only established its own power plant but the RUSA Coordinator of the college publicized this process and project during different meeting and through social media. As a result of which many colleges of the State went for the same project in their respective institutions. The

major offices of the college are connected with the solar power plant and regular works of the college offices do not suffer due to power cuts. During off office hours the power is utilized for lights during night hours.

The Green energy, which includes green electricity, is clean energy. This means that it is produced with little-to-no environmental impact and does not disperse green house gases into the air, that contribute to global warming, hydro and solar energy.

In Himachal Pradesh, generally we use green energy i.e. hydro and solar energy. Hydro-power projects do not pollute the water and air because it does not disperse green house gases. However, hydro-power projects affect the environment, by affecting the natural habitat near the dam. Keeping these points in mind, solar energy is the best alternative source of energy. It will not affect the environment in any way.

The institution faced following constraints/limitations during the establishment of this project:

- I. Initially the institution was lacking the sufficient budget for the project.
- II. The process was time consuming as it required different formalities at institution level, at executing agency (HIMURJA) and at State and Central government Level.
- III. The technical experts for the minor repair of the plant were not locally available and vendor of the plant usually took time even for minor repair.
- IV. The solar power plant has the battery backup for eight hours only, but during the winter there remains fog/mist for most of the day hours and the solar panels do not receive the sufficient sun rays. It affects the working of the plant adversely.
- V. In the year 2016, the institution sent a project proposal for 25 kwp solar power plant in the Girls' hostel but could not get any correspondence/confirmation from the higher authorities.
- VI. The government started a new scheme for On-grid solar power plant that has no power backup which is not as useful as an off-grid solar power plant.

5. Evidence of Success

Our institute had taken the initiative to use the best green energy source i.e. solar energy, to meet the power requirement of the institute in the end of 2015. It started functioning fully in August 2016. It is an off-grid with capacity 15 kWp. Few important points regarding this solar power plant are listed below:

Date of installation of Solar Power Plant: 08/08/2016

Cost: Rs. 18,70,800

Actual Cost paid by the institute: Rs. 2,92,500 (RUSA GRANT)

Subsidy: Rs. 15,78,300

Capacity: 15 kWp

Capacity of Inverter: 20 kVA

Battery Rating: 240V, 250 AH

Energy Consumption data for one month (For battery based system at the time of installation): 2025 units

Reading on 02/09/2019: 1,56,255 units (1125 Days)

Per day units generated: $156255/1125$: 138 units

Cost per unit in Himachal Pradesh: Rs. 4.65

Total saving in 1125 (08/08/2016 to 07/09/2019 (Approx 1125 days)) days:
 $156255 \times 4.65 = \text{Rs. } 726585$

Annual consumption and generation (as it is off- grid): $138 \times 365 = 50370$ units.

From these points it has been concluded that in the last three years we have generated about 1,56,000 units, that costs about 7,26,000 Rs, which is about 40% of total cost of the solar power plant (without subsidy). Also, the actual amount paid by the institute for this project (i.e. Rs. 2,92,500) have been recovered in almost one year.

This practice for the establishment of Solar Power Plant encouraged other HEI's for the establishment of such plants in their respective institutions e.g. GC Bilaspur, GC Dhaliara, GC Shahpur, GC Nahan etc.

6. Problems Encountered and Resources Required

The college installed the 15 kwp on-grid Solar power Plant, in the year 2016. On establishing this project the institution faced the following problems;

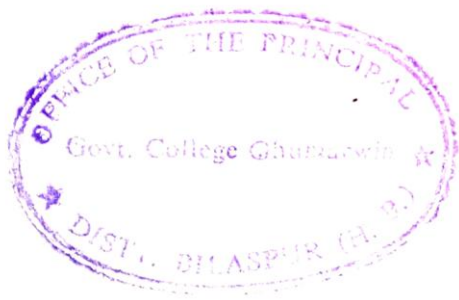
- i. Initially there was a little information with the institution regarding such plant hence it was very difficult to persuade the committee and make them ready for the installation of this plant.
- ii. Since the college has no technical expert for such plants and we were dependent for the technical expertise from the external source (HIMURJA). It caused unnecessary delay in the entire process of the installation.
- iii. During the process, the institution was not aware about the beneficiary amount to be spent on the project; otherwise we could establish the plant of greater capacity in our institution.
- iv. The institution had not sufficient amount for the execution of this plant but in later stage we were able to manage the sufficient amount out of RUSA Fund.
- v. During the installation of the plant we came to know that it would require a separate room where the inverters like equipments to be kept. The institution had to manage and provide the space for the same.
- vi. In addition to the regular teaching and non-teaching work, the college level incharge for this plant had to spare a lot of time for the completion of the whole process.


7. Notes (Optional)

The use of green and renewable sources of the energy is the need of the hour. Since these sources initially require more funds, so the government should make it mandatory for the government institutions to use the green energy. These institutions will act as the messengers to the society for promoting and adopting such government policies. Such efforts at mass scale will be helpful for the sustainable development. Our institution generated and utilized 1,56,255 units of electricity through this plant hence helped environmental protection directly/indirectly.

The installation of the off-grid solar power plant in the institutions will also increase the efficiency and output of the government institution as these institutions will use the uninterrupted power supply throughout the year. This practice will also be an alternative source of energy for the nation where energy deficiency is the major

problem. More research work in the field of Solar Power Energy will make it a cheaper and accessible to all in near future.




Principal
SVGC Ghumarwin
Distt. Bilaspur (H.P.)



REPORT ON BEST PRACTICES

PRACTICE I

1. BANNING OF SINGLE USE PLASTIC

नोटिस

दिनांक: 14/12/2018

महाविद्यालय में पढ़ने वाले सभी विद्यार्थियों को सूचित किया जाता है कि पर्यावरण संरक्षण को ध्यान में रखते हुए महाविद्यालय परिसर में प्लास्टिक के कवर में बन्द खाद्य सामग्री (चिप्स, कुरकुरे, टॉफियाँ, चिंगम आदि) का प्रयोग मान्य नहीं है। अतः जो विद्यार्थी महाविद्यालय परिसर के अंदर इस सामग्री का प्रयोग करते हुए पाया जाता है उसके विरुद्ध अनुशासनात्मक कार्यवाई की जाएगी और साथ ही 50 रुपए या अधिक जुर्माना भी किया जा सकता है।


प्राचार्य

स्वामी विवेकानन्द कॉलेज घुमारवीं

नोटिस

दिनांक: 06/07/2018

महाविद्यालय में पढ़ने वाले सभी विद्यार्थियों को सूचित किया जाता है कि पर्यावरण संरक्षण को ध्यान में रखते हुए महाविद्यालय परिसर में प्लास्टिक के कवर में बन्द खाद्य सामग्री, पानी, बोतल व अन्य सामग्री का प्रयोग मान्य नहीं है। अतः सभी विद्यार्थी को सूचित किया जाता है कि महाविद्यालय परिसर के अन्दर व बाहर प्लास्टिक की बोतल व अन्य खाद्य सामग्री ना लेकर आयें।


प्राचार्य

स्वामी विवेकानन्द कॉलेज घुमारवीं

नोटिस

दिनांक: 09/2/2019

दिनांक : 14/12/2018 के नोटिस के अनुसार महाविद्यालय में पढ़ने वाले सभी विद्यार्थियों को सूचित किया गया था कि पर्यावरण संरक्षण को ध्यान में रखते हुए महाविद्यालय परिसर में प्लास्टिक के कवर में बन्द खाद्य सामग्री (चिप्स, कुरकुरे, टॉफियाँ, चिंगम आदि) का प्रयोग मान्य नहीं है परन्तु फिर भी विद्यार्थी महाविद्यालय में इन सामग्री का उपयोग कर रहे हैं अतः जो विद्यार्थी महाविद्यालय परिसर के अंदर इस सामग्री का प्रयोग करते हुए पाया जाता है उसके विरुद्ध अनुशासनात्मक कार्यवाई की जाएगी और साथ ही 100 रुपए य अधिक जुर्माना भी किया जा सकता है ।



स्वामी विवेकानन्द कॉलेज घुमारवीं

3277
311-3299

Form VAT-XVIII
(See rule 52(3) of the Himachal Pradesh Value Added Tax Rules, 2005)
TAX INVOICE BILL

01978-256542
98161-10406

PURCHASER COPY

RAJINDRA TRADING COMPANY

H.P. Rate Contract Sports & Complete Educational Material.

als in :- Stationery, Sports Material, Science equipments, Musical Instruments, & General order Suppliers.

BUS STAND GHUMARWIN, DISTT. BILASPUR (H.P.)

No.	497
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Date	2	4	1	1	2	0	1	6
TIN								
Valid from:								

PURCHASER's Particulars

to: The Principal, S.O.V. Govt College Ghumarwin, Distt Bilaspur

Sanctioned & Passed for Purchase	Checked and Verified
Signature	Signature
Stamp	Stamp

Qty	Description of Goods	Price per		Value of goods	
		Unit	4%	Amount	
08	Dustbin Plastic mounted Nilkamal 60 litre	2295/-		18360 =	
16	Dustbin Plastic mounted Nilkamal 100 litre	3295/-		52720 =	
02	Dustbin Plastic mounted Nilkamal 120 litre	4895/-		9790 =	

नोट: 1. फर्म द्वारा 8 कुड़ेदान 60लीटर के, 16 कुड़ेदान 100लीटर के तथा 2 कुड़ेदान 120लीटर के मालाई आई है तब हम मालाई को दिए गए परन्तु उनमें से केवल 16 कुड़ेदानों (100लीटर) के ही ही माहिदालय में फिक्स करवाया गया क्योंकि 8 कुड़ेदान 60लीटर तथा 2 कुड़ेदान 120लीटर जिन्हें माहिदालय में फिक्स करवाने की जरूरत नहीं थी वे बिना फिक्स करवाये ही लिया गया। जिन कुड़ेदानों के फिक्स नहीं करवाया गया उनका फिक्स करवाने का लगभग जो 1 पाप (रुपये) एक हजार चार सौ बीस (₹ 1400) का है वे भी कुले राखी हैं। कल फरक दो दिल की इसी राशि बनती है उसके हिसाब से कुले की मादारी की बोली है। निम्न की चरका नीचे दर्शाई गई है।

दिल की राशि :- 80,870 =

कुड़ेदान फिक्स नहीं करवाने की राशि :- 1414 =

79,456 = (79,456 =)

वै. ए. 54 (3972.80) = 3972.80

1 to 20 (Price of goods without Vat) 83,429 =

Added Tax 5% 80870 =

1 Price (Price of goods+VAT) 4044 =

1 Price (Price of goods+VAT) 84914 =

1 Price (Price of goods+VAT) 84914 =

1 to 20 (Price of goods without Vat)	83,429 =
Added Tax	5%
1 Price (Price of goods+VAT)	80870 =
1 Price (Price of goods+VAT)	4044 =
1 Price (Price of goods+VAT)	84914 =
1 Price (Price of goods+VAT)	84914 =

Input Tax credit is available to a taxable person against this copy only.

DIKSHA Offset Printers, Old Bus Stand Ghumarwin, Mobile: 94180-94180
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For : Rajindra Trading Company

OFFICE OF THE PRINCIPAL

Swami Vivekanand Govt. College Ghumarwin,
Distt. Bilaspur (H.P.)

Voucher No. BP-2016-17-15 to Voucher No.

Cheque No. 901138 Dated 15/02/2017

Amounting to Rs. 849.14/- (Rs. Eighty four thousand only)

has been drafted in the name of Sh./M/s. nine hundred fourteen only for making

the payments of the undersigned vouchers which may kindly be signed or directed for payments:-.....RUSA.....

Sr.No.	Description	Cheque No.	Amount
1	Rajendra Trading Company Bus Stand Adhwarwin	901138	84914 84914 = 00
			C.A. [Signature]

19 EQUIPMENT (उपकरण)

Eighty four thousand nine hundred fourteen		Rs. 84914=00
only		Grand Total

Prepared by:

Checked and verified for Rs.

Bursar

S.V.G.C. Ghumarwin
Distt. Bilaspur (H.P.)

CamScanner

Principal

S.V.G.C. Ghumarwin
Distt. Bilaspur (H.P.)

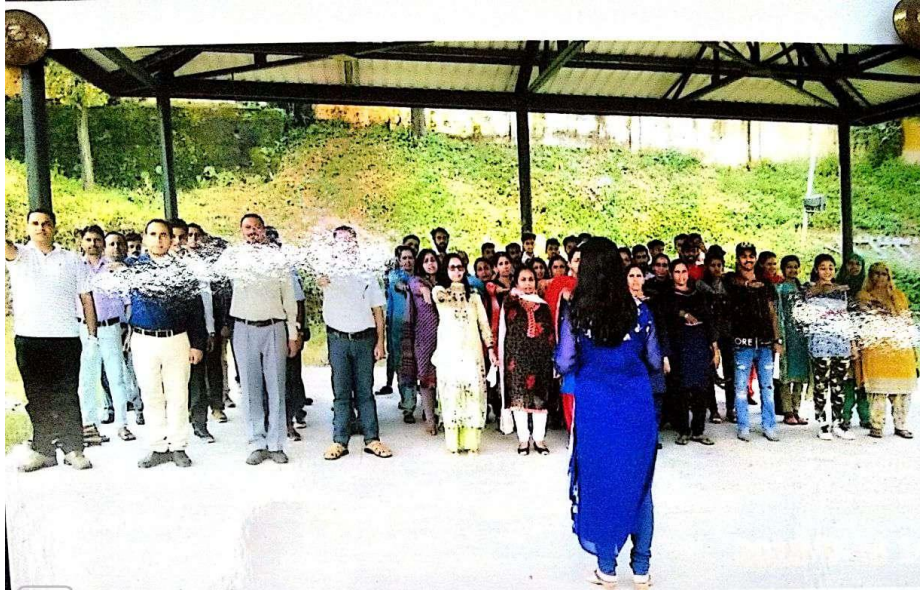


Figure 1 Staff and students taking pledge to ban single use plastic



Figure 2 Staff and students on cleanliness drive



Figure 3 Poster Making Competition on Environment Conservation



Figure 4 Separate dustbins placed for collection of wet and dry garbage



Figure 5 Lush green, neat and clean campus

OFFICE OF THE PRINCIPAL

Swami Vivekanand Govt. College Ghumarwin,
Distt. Bilaspur (H.P.)

Voucher No. 3 to Voucher No.
Cheque No. 901105 Dated 30/10/15
Amounting to Rs. 93810 (Rs. Ninety three thousand only)
has been drafted in the name of Sh./M/s. ~~Eight hundred ten only~~
for making the payments of the undersigned vouchers which may kindly be signed
or directed for payments:- RUSA Fund / GRANT

Vr.No.	Description	Cheque No.	Amount
1	Advance Payment for Purchase of Solar Street Light Director Kionurja Ghimada	901105 901105	93810 = 00

1 RENOVATION (नवीकरण)

Ninety three thousand eight hundred ten only		
Rs.	Grand Total	Rs. 93810 = 00

Prepared by:

Checked and Verified for Rs. 93810/-

Bursar

S.V.G.C. Ghumarwin
Distt. Bilaspur (H.P.)

Treasurer PTA

S.V.G.C. Ghumarwin
Distt. Bilaspur (H.P.)

Principal

S.V.G.C. Ghumarwin
Distt. Bilaspur (H.P.)

Stamp: 28/09/2015

(H.P. Govt. Energy Dev. Agency Bilaspur)
Roura Sector-2, Distt. Bilaspur (H.P.)-174001.
Ph. No. 01978 222590

No. HIMURJA/BLS/ SPV SLS / Full Cost 2013-14

Dated: 24.09.2015

To

The The Principal,
SV Govt. College Chamarwin
Distt. Bilaspur (H.P.)-174001

Subject: - Regarding Purchase of Solar Street Light-Performa Invoice thereof.

Reference: - Your letter No. END. SVGC (RUSA)-467-468 dated 10.09.2015.

Sir,

On the above captioned subject and reference, the unit cost of SPV Street Lighting Systems of CFL type and LED type and for SPV Home Lights Model-II CFL type is as under:-

Sr. No.	Description of work/duties	Per unit/system cost in ₹
1	FOR Cost at Himurja District Head Quarter Bilaspur for the Supply of (CFL Type) SPV SLS.	18,649.00 ₹ Fifteen Thousand six hundred
2	FOR Cost at Himurja District Head Quarter Bilaspur for the Supply of (LED Type) SPV SLS.	18,635.00 ₹ Fifteen Thousand six hundred
3	For SPV Home Lights Model-II CFL type	9,350.00 ₹ Nine Thousand three hundred

It is, informed that per unit system cost as mentioned above is as per the letter No. HIMURJA (F-7) 2/ SPV Prog. 2014-15-1306-1711 dated 21.02.2015 of Directorate HIMURJA, Kasumpti Shimla-171009, with FOR cost at HIMURJA Distt. Head Quarter at Bilaspur. The further expenditure on account of power transportation of the systems from HIMURJA office at Bilaspur to the site of installation alongwith loading unloading charges has to be borne by the beneficiaries organization.

It is, therefore requested, if you are interested to install the SPV street lights, then to deposit either @ ₹ 18,649.00 ₹ Eighteen Thousand six hundred forty nine only for CFL type or ₹ 18,635.00 ₹ Eighteen Thousand six hundred thirty five only for LED type, per SPV street light or ₹ 9,350.00 ₹ Nine Thousand three hundred fifty six only SPV Home Lights Model-II CFL type through Demand Draft in favour of Director Himurja payable at Shimla through the office of undersigned.

Sanctioned by... out of... RUSA/... 93810

Checked and Verified
S.V.G.C. Chamarwin



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Principal



Figure 6 Solar Panel



Figure 7 Solar Power House



Figure 8 Use of Solar light to run fan in seating umbrella

Dr. Vasundhara Rajan Bhardwaj
Principal
Swami Vivekanand Government College Ghumarwin
District - Bilaspur
Ghumarwin Distt. Bilaspur (Jharkhand)
PIN-174021