

SBSI 2020 FINAL PROJECT REPORT



Submitted by

SR.NO	NAMES	ROLL NO
<u>1</u>	Sankalp .S. Ajgaonkar [L]	20P0430001
<u>2</u>	Sitaram .S. Nhanji	20P0430031
<u>3</u>	Utkarsh kholkar	20P0430019

Under guidance of
Dr.Rajeshkumar Hyam
Assistant Professor
Department of Physics
Goa University

2020-21

DECLARATION

I / We have carried out the SBSI 2020 Internship under the guidance of –



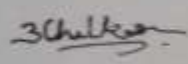
Dr. Rajeshkumar hyam

Assistant Professor,

Department of Physics

Goa university

The contents of this report are original and are reporting the 108 hours of work carried out by us during this internship.

SRNO	NAMES	ROLL NO	SIGNATURE
1.	SANHALP .S. AJGAONKAR	20P0430001	
2.	SITARAM NHANJI	20P0430031	
3.	UTKARSH KHOLKAR	20P0430019	

CERTIFICATE

This is to certify that the following SBSI 2020 Intern/Interns -

SR.NO	NAMES	ROLL NO
<u>1</u>	Sankalp .S. Ajgaonkar [L]	20P0430001
<u>2</u>	Sitaram .S. Nhanji	20P0430031
<u>3</u>	Utkarsh kholkar	20P0430019

have satisfactorily completed 108 hours of activities related to Swachhata.

During this internship period, it was noticed that the interns acquired and enhanced the following skills –

1. Leadership
2. Innovative skill
3. Communication skill
4. Time management
5. Resource management
6. Creativity

This report is being submitted to SBSI 2020 University Nodal Officer, in partial fulfilment for the completion of the SBSI Course during the academic year 2020-2021.

Dr, Rajeshkumar Hyam

()

Dr. Priya D'costa

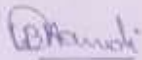
()

Dr.Sudhir Cherukulappura

()

CERTIFICATE

This is to certify that this internship report 'Swachh Bharat Summer Internship' is a record of work done by **Sankalp Ajgaonkar, Sitaram Nhanji and Utkarsh Kholkar**, students of Physics Department of Goa University and that they have successfully completed 100 hours of work in Palyem village under the Swachh Bharat Summer Internship (SBSI) program during the period, 15 March 2021 to 25 April 2021.



Sarpanch,

SARPANCH
Village Panchayat Palyem
Tal : Pernem-Goa.

Palyem Panchayat.



ACKNOWLEDGEMENT

At the outset, we would like to thank our program director Dr. Sudhir Cherukulappura for his administrative support and encouragement.

We can never forget God, our parents, families who have supported us, both, through this internship and all throughout our life.

We appreciate our Nodal Officer Dr. Jyoti D. Pawar and SBSI Mentor Dr. Rajesh Kumar Shankar Hyam for their encouragement and guidance during the course of our internship. We are also obliged to the faculty and non-teaching staff of the Department of Physics, Goa University for their indulgence and co-operation in the execution of our internship.

CONTENTS

SR.NO	ACTIVITY	PAGE NO.
1	<u>INTRODUCTION</u>	7
2	<u>SANITIZATION & HYGEINE RELATED ACTIVITIES</u>	8-11
	Spreading awareness through poster	7
	Distribution of pamphlets in locality	8
	Conducting survey	10
3	<u>WASTE MANAGEMENT RELATED ACTIVITIES</u>	11-24
	Cleanliness start from self	11
	Awareness camp on zero littering and avoiding use of plastics	12
	Innovative technology based solution for waste recycling (aquaponics)	13
	Recycling farm waste (vermicomposting)	16
	Greenary (ecofriendly agricultural practice) (neem oil)	18
4	<u>CONCLUSION</u>	21

Introduction:-

Following the Prime Minister's clarion call on 2nd October 2014 for each individual to devote at least 100 hours to Swachhata through the year, the Ministry of Human Resource Development in association with the Ministry of Drinking Water and Sanitation has launched the 'Swachh Bharat Summer Internship – 100 Hours of Swachhata'.

The program aims to:

- Develop the skill and orientation of youth for sanitation related work.
- Bring youth across the country an opportunity to make a significant contribution to **the swachhata revolution**.
- Integrate youth in the community service in rural areas in the run up to the 150th birth anniversary of Mahatma Gandhi.

The students of the Department of Physics, Goa University along with proper guidance from our SBSI mentor, Dr. Rajeshkumar Shankar Hyam and Nodal Officer Dr. Jyoti Pawar, have completed the 100 hours of service towards making India a clean country, thereby putting into action the motto, “Cleanliness is next to Godliness” The students have whole heartedly completed the internship complete dedication and zeal. There have been many hurdles along the way, but we can proudly say that we gave it our all in making the beautiful village of Palyem even more beautiful by using various innovative and traditional techniques for proper management of waste. We have carried out various Waste management activities, awareness programs on sanitization & hygiene, house to house surveys and much more, all of which have been continuously monitored by our panel and has been presented in the report below.

Planning and mapping

- The application forms for the internship were submitted to the sarpanch of the Palyem Panchayat with authorisation from the SBSI mentor and the nodal officer.
- A meeting was held along with the Panch member and the SBSI team to discuss the proposed plan and goal for internship
- Required information regarding waste collection management and places were decided where we can perform our proposed activities.
- **Hours taken:-03**

SANITIZATION & HYGIENE RELATED ACTIVITIES

Spreading Awareness through Posters

Place: Kiran pani, Palyem near circle

Date:21/03/2021

- We installed posters/banners having information and messages regarding swacch bharat abhiyan.
- The posters were installed at such places where maximum people could see and acknowledge it.
- We also took help from locals to install the posters.



HOURS TAKEN:-03

Distributing Pamphlets in Locality

Place:Kiran pani, near by houses

Date:-21/3/2021

- We managed to distribute pamphlets in almost every house in the locality.
- The pamphlets were just like mini version of poster/banners. It had some detailed information about swacch bharat abhiyan.
- It also contained do's and dont's to ensure cleanliness in household and society.
- We also explained and provided more information to the locals rather than just sticking to the pamphlet.



HOURS TAKEN:-04

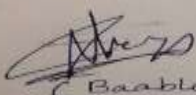
Conducting Surveys

Place: Bhomwado, palyem

Date: 24/3/2021

- Apart from distributing pamphlets in every possible household we also conducted surveys in order to get information regarding people's habits contributing to cleanliness.
- The survey consisted of 15 questions (daily life) which helped us to know how an individual helps in contributing to cleanliness of his/her house and its surroundings.
- The survey also helped us to know the people better and what problems they face.
- We also concluded that most of the people were doing great by following rules governed by the panchayat regarding separation dry and wet waste.
- We also found that every week or twice a month government allotted car would come to collect household waste.

Sr. No	Questions	Responses
01	Name of the head of the family.	Baablo Nharji
02	Total number of family members.	4
03	Where do you get drinking water for your house?	Tap water
04	Do you separate waste as dry waste and wet waste?	Yes
05	How frequently you clean your house and its surroundings?	House - weekly Surroundings - Monthly
06	Does your waste find its way into rivers, ponds by some means?	No, there's no waterbody nearby
07	What do you do with the waste you have collected?	Dump it, give it to garbage collector
08	Do your family members bath daily?	Yes
09	Do they practice washing hands before eating?	Yes
10	What kind of toilets your family members use?	Private Built in house
11	What are the other activities that you practice to ensure cleanliness in and around you?	Cleaning of house Proper ventilation
12	Is there any facility regarding disposing of waste material in your locality?	Yes, separate area is allocated to dump
13	Does panchayat work towards ensuring clean and green village?	Yes
14	Do you follow all the SOPs (wearing mask, social distancing) in current conditions?	Yes
15	Do you believe that Swacch Bharat Abhiyaan is for betterment of the country?	Yes


(Baablo Nharji)

GOA UNIVERSITY
F.Y M.Sc Physics

Page 1

HOURS TAKEN:-14

WASTE MANAGEMENT

Garbage collection

Place: Naikwada, Palyem

Date: 3/04/2021 -4/04/2021

- Being part of SBSI, and as interns it is our responsibility that we first follow cleanliness and later tell about it in the society.
- We are proud to say that we follow all the rules and take all the necessary steps to keep our house and surroundings clean.
- We separate dry and wet waste and later give it to the workers who come to collect the household waste.
- When enquired we found that the waste collected in such manner is later sent to treatment plant for deposition.
- We follow the three R's wherever possible to maximum extent.



Hours taken:-08

Awareness camp on zero littering and avoiding use of plastics

- DATE:-17/04/2021
- LOCATION:-near bhumikavetal temple, 3 local grocery general store and 2 hotels
- Everyday we used to make 10 paper bags each by using newspapers and glue, it took us around 20 days to make 500 paper bags. we distributed this in 3 local general stores and hotels where we observed the use of plastic bags was maximum.



- We also stuck some posters with the theme, “BAN THE USE OF PLASTICS” on different places including bus stops, walls etc. Around 50 pieces were stuck on walls using adhesive gum.



- Also we distributed pamphlet of “Swacha Bharat Abhiyan” which had useful information regarding different ways to keep cleanliness in our village, around 50 such pamphlets were distributed in shops, hotels, temples and in some houses.
- Our main objective was to create awareness among the locals to ban the use of plastic and substitute to use of eco-friendly material.
- **Hours taken:-12**

Innovative technology based solutions for waste recycling)

(AQUAPONICS)

- **PLACE:-** Palyem
- **Date:-** 15/03/2021-25/04/2021
- This method combines aquaculture cultivating fish and other aquatic animals in tanks with hydroponics, where plants are cultivated in water
- The water from the fish tanks pumped onto the beds where plants grow. While the fish excretions provide nutrients for the plants, the clean water is recirculated back to the fish tank.
- It was a challenging task since it consumed more time than we expected, it took us around one month just to design and to find raw materials accordingly
- Fortunately we found a person who sponsored this project and also had a keen interest in this project and allowed us to construct this at his home. We also thank the Sarpanch madam for helping us to find a person who sponsored for this project.

BEFORE





- After collecting raw materials it was easy to connect them but the main problems were several leak at different places and also adjusting the angles of pipes so that water flows through the gravity, this was a great challenge faced by us, after days of hardwork we were finally able to complete the work.





AFTER:-



- Currently seeds are being sown and will soon start with aquaculture, presently it is working fine, we are waiting to see grown plants, we have started with basil seeds.

Hours taken:-32

Recycling from waste (Vermicomposting)

- **Date :** 18/04/2021
- **Location :** Near Hill Crest- Village from Bhandarwada palyem.
- Vermicompost technology has promising potential to meet the organic manure requirement in both irrigated and rainfed areas.
- It has tremendous prospect in converting agro-waste into valuable agricultural input.
- It is very cheap and low maintenance method and can be used by every farmers to help their agriculture.

❖ BEFORE



- We used some of the raw materials such as cow dung, farm waste, soil, earthworms, coconut fronds, Vermicomposting bed.

- After adding all the bio-waste, release the earthworms species over the mixture and cover the compost mixture.
- After the 24th day around 4000 to 5000 new worms are introduced and the entire raw material is turned into the vermicompost.

❖ **AFTER**



- The manure is now ready and we can use it for all the crops. Thus it can be used instead of chemical fertilizers.
- Our main objective was to create awareness among the locals to use manure by eco-friendly method instead of chemical fertilizers.

Hours taken:-24



GREENERY(Eco-friendly agricultural practices)

(Neem oil)

- **Date :** 18/05/2021
- **Location:** Bhandarwada palyem , pernem Goa

- Neem oil is extensively used in agriculture as eco-friendly insecticide and fungicide.
- Since use of chemical pesticides and insecticides have risen it's time to adopt eco-friendly insecticide and neem oil is the best solution.
- Firstly we had to collect a good quality of neem leaves which can produce a high quality oil.



- Then boil the neem leaves in a container having water .
- After boiling we get a neem oil which can be directly used.

BEFORE



- Then we had used Neem oil an garden plants and cashew plants to check the result.
- We waited for 5-6 days to check the result.

❖ AFTER



- Used of Neem oil can help to a large extend . It has really controled **fungi** and **insects** .
Hours taken:-16

CONCLUSION

Swachh Bharat Summer Internship was a great learning experience for us. The internship was performed in Palyem village wherein we conducted awareness campaigns and waste management activities. We learnt to work as a team and we understood the true meaning of team work. Everybody had an aim of cleanliness and spreading awareness of various traditional and innovative ideas of waste management, amongst the people. All the members of the team gave equal contribution in achieving the goal. We learnt about the Palyem garbage management system and the efforts that Panchayat is putting in to keep the village of Palyem garbage free. After a lot of hard work we finally completed our internship of 100 hours. We learnt to plan and execute our ideas. This internship in true sense is taking the Swachh Bharat Abhiyan to new heights. This type of internship is a great way to bring the people together and work towards a better India. Swachh Bharat Summer Internship should be conducted every year to build a clean and healthy India. For us, our Swachh Bharat Summer Internship Team, this internship is not the end but a beginning of something new wherein we will do our best in maintaining cleanliness and innovating new ideas in our surrounding.