

Ministry of Earth Sciences

Swachhata Hi Seva स्वच्छता ही सेवा



Report on International Coastal Clean-up Day, 15 September 2018

National Centre for Coastal Research (NCCR) NIOT Campus, Pallikaranai, Chennai - 600 100



Co-ordinators

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Sr. Programme officer, SACEP

Commandant Pramod Pokhriyal, Indian Coast Guard
- Elliot Beach, Chennai, Tamilnadu

Dr. Jagannath Rathod, Professor, Karantak University
- Aligadda Beach, Karwar, Karnataka

Dr. S. Bijoy Nandan, Professor, Cochin University of Science & Technology - Fort Beach, Kochi, Kerala

Dr. P.Soundarapandian, Professor, Annamalai University
- **Silver Beach**, Cuddalore, Tamilnadu

Dr. Jayant Kumar Mishra, Professor, Pondicherry UniversityRangachang Beach, South Andaman

Dr. P. Rama Rao, Director, Bay of Bengal Centre, Andhra UniversityRK Beach, Vishakapatnam, Andhra Pradesh

Dr. Pratap Kumar Mohanty, Professor, Berhampur University - **Gopalpur-on-sea**, Gopalpur, Odisha

OBSERVANCE OF SWACHHATA HI SEVA 2018

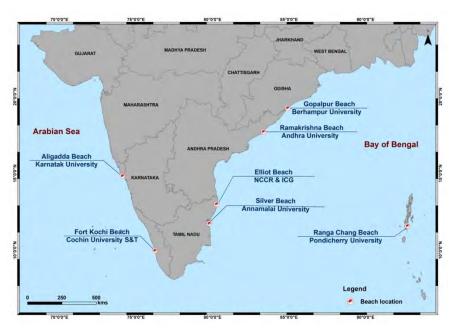
Introduction

India has a long coastline of 7,517 km, contributing to ecological richness, biodiversity and economy. Every year thousand tons of garbage composed of plastics, glass, metals, sanitary, clothes etc. reach the oceans and plastics contribute a major portion (~ 60%) of the total garbage that finds its pathway to the ocean every year. Recently, a number of studies have reported an increase in the number of killings of marine animals (birds, turtles, mammals etc) due to plastic ingestion and strangling by abandoned (ghost) fishing nets.

Ocean Conservancy, an organization that works for protection of the oceans initiated **International Coastal Cleanup (ICC)** day in the year 1986 to create awareness among the public to preserve our coastline pollution free. The ICC day is celebrated globally on the third Saturday of September every year with a common goal to collect and document the trash apart from creating awareness among the public to ensure the cleanliness of the beach.

The **Swachh Bharat Abhiyan** of Government of India aspires for a cleaner India; coastal cleaning plays a crucial role in creating awareness and cleanliness around the beaches along the Indian coasts. NCCR, MoES being one of the responsible agencies for "Coastal Clean Sea Campaign" of UN and nodal agency for "Marine Litter Program" of SACEP conducted the beach cleaning activity by motivating the public through awareness programs to rush to nearby beaches and become a part of the cleaning drive. It involves picking up of debris, litter and other objects from the beach to minimize the amount of garbage accumulated on the beaches.

On the occasion of ICC Day 2018, falling 15th September on 2018, NCCR, Chennai and Indian Coast Guard (ICG), Eastern Command, Chennai organised а beach cleaning activity at Elliot Beach, Chennai. Apart from this. NCCR coordinated with maritime universities state



Locations selected for observance of coastal cleanup day-2018

observance of the day through a cleanliness drive by associating school, college and university students, teachers, researchers, volunteers, fishermen and general public at 6 beaches *viz.*, the Aligada beach at Karwar by Karnatak University, the Fort Kochi beach at Kochi by Cochin University of Science & Technology, the Silver beach at Cuddalore by Annamalai University, the Ram Krishna beach at Visakhapatnam by Andhra University, the Gopalpur beach at Odisha by Berhampur University and the Rangachang beach, South Andaman, Port Blair by Pondicherry University.

Venue:

Elliot Beach, Besant Nagar, Chennai

Co-ordinator:

Comdt. Pramod Pokhriyal Indian Coast Guard (ICG) &

National Centre for Coastal Research (NCCR)

The beach cleaning programme at Elliot's Beach began at 7:00 AM. Apart from the staff of NCCR, and Indian Coast Guard (ICG), students from different schools and colleges, volunteers TREE from foundation, HSBC, VIT University and other organisations such as INDOMER, Aashiana Green club, local fishermen participated with great enthusiasm. The total number of participants was 1280, out of which 813 were students, govt. officials, scientists, fishermen, general public and the rest 467 from coast guard units.

Students from different schools i.e., Sri Sivaswani Kalalaya Sr Secondary, Sir Shiva Shakti School, Kendriya Vidyalayas, KK Nagar, APL Global School, VIT University and CTTE College for women took active part in the program.









Participation by Coast Guard personnel and school students

Necessary gears such as caps, gloves and gunny bags were provided to the volunteers to ensure individual hygiene and safety. A briefing was made to volunteers how to collect and make an estimate of the trash. After the trash collection, different groups of participants conduct a rally displaying the placard message and slogans.

During one and half hour of cleaning 1.5 km² beach area, litter such as wrapper, shoes, remains of food stuffs, papers, food packages, glass bottles, sharp metallic objects were collected. Maximum numbers of alcohol beverage glass bottles were found.

Participating Institutions



NCCR staff



College students displaying placards



Scientists from INDOMER displaying placards

The coast guard personnel formed a human chain in the shape of "ICC" on the beach to showcase the importance of the day; aerial view of the event was shot from a coast guard hovering Helicopter.



Indian Coast Guard (ICG) members lined up in the form of ICC

Majority of the litter were in various forms of plastics i.e., bottles, glasses, thermocol (polystyrene), fishing net and rope fragments. An inventory form was filled up by each group for making an estimate of the amount of litter collected during the process. Almost 70 bags of litter weighing about 2 tons were collected from the beach, segregated and kept at one place. At the end, these bags were handed over to the Greater Chennai Corporation for appropriate disposal.





Collection of beach litter in gunny bags

The Inspector General S Paramesh, TM, Commander Coast Guard Region (East) and some of the senior coast guard officers interacted with the participants and presented a memento to mark the event.





Interaction of Coast Guard officials and presentation of memento to NCCR

Mr. Alok Kumar Ojha, Senior Superintendent, Postal Department, Chennai was invited as the Chief Guest by NCCR, interacted with the scientists and officials of Indian Coast Guard and appreciated the activities and promised to extend necessary support and participations in the future.



SACEP Representative Certificate of participation and mementos were distributed to various school and college students, NGO's acknowledging their support to this cause. Refreshments were provided to all the participants. Through this beach cleaning programme, we aim to set an example to the people of the city and encourage them to be an active and conscious part of the cause towards a cleaner city. Also, such events highlight the fact that every citizen of the country is responsible for keeping the environment clean and pollution-free.

Beach cleaning activities













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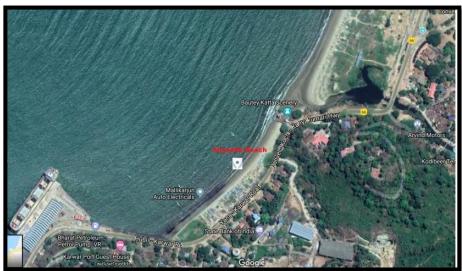
Venue:

Aligadda Beach, Karwar, Karnataka

Coordinator:

Prof. Jagannath Rathod Karnataka University, Karnataka & National Centre for Coastal Research (NCCR)

Karwar coast, the headquarters of Uttara Kannada district described as 'Karnataka's Kashmir' by the Nobel laureate Dr. Rabindranath Tagore for its scenic beauty makes a perfect tourist destination. The fine sandy beach with its own blend of seafood cuisine attracts tourists from all over the world. The traditional fishing, port and ship movement, adventurous sports activities invite tourists and results in the accumulation of solid and liquid waste in the beaches. The waste management practice along the 4km from Tagore beach is being carried out by the district municipality administration using cleaning machine. However, Aligadda beach adjacent to Tagore beach was taken up for cleaning on the occasion of International Coastal Clean up Day 2018. The latitude of Aligadda beach, Karwar, is 14° 48' 20" N and the longitude is 74° 7' 25" E, extends over a length of approximately 1.5 kilometers. The beach is located in the closest vicinity of Karwar city with major drainage outlet and on the other side port and fishing harbour. Hence, the anthropogenic effect on this particular beach is intense.



Location map showing Karwar tourist beach & port

Volunteers made it happen:

On the eve of ICC day, a cleanliness drive was organised at Aligadda beach on 15th September 2018 by the Department of studies in Marine Biology, Karnatak University Post-Graduate Centre, Karwar in association with National Centre for Coastal Research (NCCR), Chennai under the Ministry of Earth Sciences (MoES), Indian Coast Guard & Coastal Security Police Station Karwar, Aditya Birla Grasim Industries and Karnataka State Pollution Control Board.



Participation of college students for cleaning activities

Debris collected included plastic bags, plastic and glass beverage bottles, plastic caps and lids, clothing and shoes, food wrappers, buoys and floats, fishing nets, plastic sheets, ropes, tobacco packaging, and burnt crackers etc. which were segregated by the volunteers.

More than 250 volunteers including students from various schools participated in the drive. At 7.00 in the morning, all the volunteers assembled on the beach and participated in the cleanup drive.

Trash Collection:

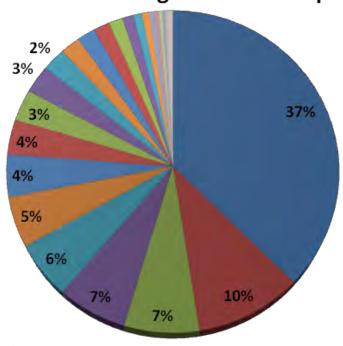
The audacious task of all the volunteers yielded collection of 4 tons of wastes.



Collection of Beach Litter

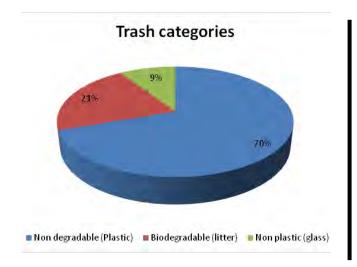
The percentage wise separation of the waste materials included 37% of plastic bags, 10% of clothing and shoes, 7% of burnt crackers, 7% of food packaging wrappers and 5% of beverage bottles.

Trash collected during beach cleanup - Karwar



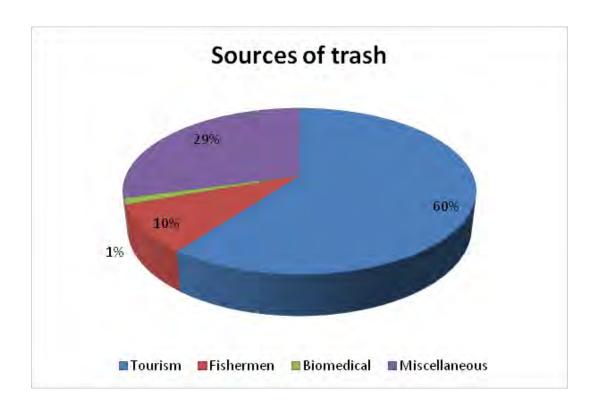
- Bags (Paper/Plastic)
- Burnt crackers
- Twigs, flowers
- Buoys/Floats
- Ropes
- Fishing nets
- Caps, Lids
- Straws/Stirrers

- Clothing, Shoes
- Food Wrappers/Containers
- Beverage Bottles (Plastic)
- Coconut shell
- Cups, Plates, Forks, Knives, Spoons
- Beverage Bottles (Glass)
- Tobacco packaging/wrappers
- Crab/lobster/fish



Trash materials collected were analyzed categorically; contribution of plastic materials accounted for 70% followed by 21% litter from biodegradable and 9% glass materials.

Sources of the plastics were identified and it was found that 70% of the plastics originated from tourism/ beach visitors followed by a 21% contribution by fishermen and 9 % miscellaneous.



The human activities at the beach side such as celebrating festivals, immersion of idols, sports and recreation accounted for the major portion of the waste collected and water activities contributed for a small portion of the waste collected. After segregation, all the waste garbage was handed over to Karwar city municipality cooperation for further processing and disposal.

This cleanliness drive was concluded by the awareness spreading words by our key speaker Dr. J. L. Rathod, Chairman, Department of Studies in Marine Biology by focusing the need of individual participation in combating with waste management. The participants pledged for zero waste producers with the slogan "Change begins within us".



Interaction with local media



'Karavali Munjavu' (16th September 2018)

4 ton of waste collected at Aligadda beach

KARWAR: A cleanliness drive was held at Aligadda beach on Saturday as part of International Coastal Cleanliness

During the drive, four ton of waste including waste plastic bottles, plastic cups, pieces of fishing nets used by fishermen, was collected by the volunteers.

Over 250 participate

More than 250 people including students from various schools participated in the

The drive was organised by Karnatak University PG Centre Marine Biology Department, National Centre for Coastal Research, Indian Coast Guard, Coastal Security Police, Aditya Birla Grasim Industries and Karna-



Volunteers who cleaned the Aligadda beach on Saturday. DH PHOTO

PG Centre Head GL Rathod earth. explained the adverse effects

Indian Coastal Guard Comof plastic on the environment, manding Officer A S Nan-especially on marine life and da, Pollution Control Board the occasion. taka State Pollution Control the need to check plastic waste Environment Officer Vijaya DH News Service

fromtaking a toll on the planet earth. Hegde, CMC Commissioner S Yogeeshwar, Sourabh Gabel, Shivakumar Haragi and others were present on

Hubballi-Dharwari

Deccan Herald 16, 9,2018

Deccan Herald (16th September 2018)

03

Venue:

Fort Kochi Beach, Kerala

Coordinators:

Dr. S. Bijoy Nandan

Cochin University of Science & Technology (CUSAT) & National Centre for Coastal Research (NCCR)

On the day of International coastal cleanup day, the Dept. of Marine biology, Microbiology and Biochemistry CUSAT in association with National centre for coastal Research (NCCR), MoES, Govt of India, along with St. Alberts College, Kochi, CIFNET, Kochi organized the coastal cleanup at the Fort Kochi beach. Students and teachers about 120 numbers assembled at the Vasco de Gama square at 7 AM. Dr. Bijoy Nandan, Professor & Head of the Dept. welcomed the gathering and highlighted the importance of the day and how marine litter and micro plastics are posing a grave threat to our marine ecosystem and the need for such cleaning and awareness activities.



Addressing the participants by Prof. S. Bijoy Nandan

Smt. Shiny Mathew, Standing Committee Chairperson, Smt. Zeenat and Shri. Antony Francis Councillors of Fort Kochi Municipal corporation commended on the initiative taken by the students and faculty of CUSAT and the need for such awareness programs for coastal cleanup program. Dr. Ravishankar (Director, CIFT) suggested that waste management must start from our home and emphasized such change should happen around us. Prof. Dr. N Chandramohan Kumar (Syndicate member, CUSAT) then gave a brief talk on the duty of every citizen to minimize the use of plastics. Dr. Mohammed Hatha and Dr. Rosamma Philip Professors of the Dept. also felicitated the gathering.



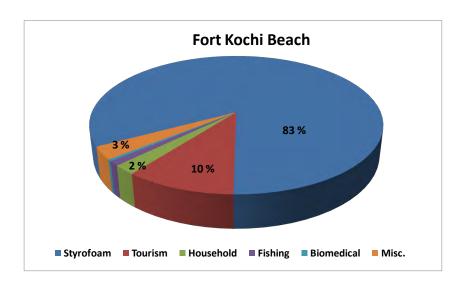
Address by dignitaries to the participants

The students and faculties engaged in the coastal cleaning program for about 1 and half hour. Approximately 50 gunny bags of waste were removed from the beach.

The waste collected mostly contained plastic items ranging from bags to straws and glass bottles. The various items were tabled to collect data and the numbers are dizzying. The toppers of the chart were plastic bags that came up to a number of 379 pieces, plastic cutlery (which includes straws, forks, and plates) that was a staggering number of 797 pieces. Plastic bottles were observed to be 508, 216 shoes, 152 syringes, 622 plastic fishing materials, 192 glass bottles were all part of the waste cleared.



Collection of marine litters from the Fort Kochi beach



Percentage of marine debris collected from beach

The segregated items were handed to Kochi Corporation for appropriate waste management. Followed by the cleaning activity an awareness rally was organized with placards and banners portraying the need for effective waste management especially marine litter and plastics.



Handover of collected litter to local municipality

CUSAT has also decided to take forward this initiative with all the other departments to make a bigger impact and do this every year.



Awareness rally by CUSAT students

2018 സെപ്റ്റംബർ 15 • ശനിയാഴ്ച മാതൃഭൂമി

കുസാറ്റ് ശുചീകരണം നടത്തുന്നു

കൊച്ചി > അന്തർദേശീയ തീര ദേശ ശുചീകരണ യജ്ഞത്തി ൻെറ ഭാഗമായി കുസാറ്റ് മറൈൻ ബയോളജി വകുപ്പും കേന്ദ്ര ഭൗ മശാസ്ത്ര വകുപ്പിൻെറ കീഴിലുള്ള അന്തർദേശീയ തീരദേശ ഗവേ ഷണ കേന്ദ്രവും ചേർന്ന് ശുചീ കരണ സംഘടിപ്പിക്കുന്നു. ശനി യാഴ്ച രാവിലെ ഏഴരയ്ക്ക് ഫോർ ട്ടുകൊച്ചി കടപ്പുറത്താണ് ശു ചീകരണം. കെ.ജെ. മാക്ലി എം .എൽ.എ., പ്രൊഫ. ഡോ. എൻ. ചന്ദ്രമോഹനകുമാർ, ഡോ. രവി ശങ്കർ, ഷൈനി മാത്യു, ആൻറ ണി ഫ്രാൻസിസ് തുടങ്ങിയവർ പങ്കെടുക്കും.

THE HINDU KOCHI
SATURDAY, SEPTEMBER 15, 2018

IN BRIEF

Coastal clean-up day at Fort Kochi

KOCHI

The Department of Marine
Biology at the Cochin
University of Science and
Technology in association
with National Centre for
Coastal Research will
organise a coastal clean-up
day at Fort Kochi on
Saturday. An official release
said that students and
teachers will participate in
the initiative.

Media coverage



Venue:

Silver Beach, Cuddalore, Tamilnadu

Coordinators:

Dr. P.Soundarapandian
Annamalai University (NSS) &
National Centre for Coastal Research (NCCR)

The National Service Scheme (NSS) group of Annamalai University in association with National Centre for Coastal Research, Chennai (Ministry of Earth Sciences), organized International Coastal Cleanup day Programme at Silver Beach, Cuddalore on 15.09.2018 on the occasion of International Coastal Cleanup Day 2018. About 500 volunteers undertook a rally at Cuddalore to highlight coastal cleaning and the need for a healthy environment.



Dr. M.Srinivasan, Director, CAS Marine Biology delivered the Presidential address. Dr. P. Soundarapandian, Programme Co-ordinator of NSS, welcomed the gathering. The District Governor of Rotary Club Mr. S Piraiyon, Environmentalist Mr. T. Arul Selvam, Cuddalore District AIDS Prevention and Control Unit Manager Mr.K.Kathiravan, Mrs. Renuga, Deputy Director, Fisheries department, Mr.Elangovan, Scientist, Swaminathan Foundation participated in the rally. Dr. M. KalaiSelvam, Dr. S. Ayyapparaja, Dr. T. Muthukumararaja, Mr. K. Thamizhmaran, Dr. S. Ramesh, Dr. Sudhakar, NSS Programme Officers made the necessary arrangements.



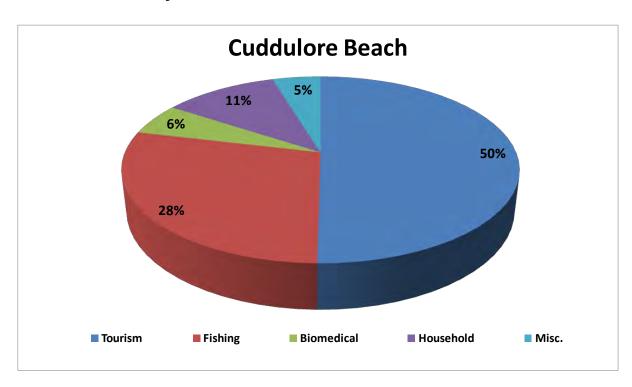
Awareness rally by university students

Nearly five hundred students along with Coastal Police, General Public, fishermen and Fisheries department personnel took part in the environmental awareness rally and coastal cleanup activity.



Nearly 50 % of the debris is from tourist, 28% from fishery and 11% from household origin.

Collection of trash from the beach by university students



கடலூர். செப்-15

கடலூரில் உலக கடற்கரை தூய்மை தினத்தை முன்னிட்டு விழிப்புணர்வு பேரணி



சிதம்பரம் அண்ணாமலை பல்கலை கழக நாட்டு நலப்பணித் திட்டம் மற்று கடலூர் ரோட்டரி கோஸ்ட்டல் சிட்டி இணைந்து நடத்திய உலக கடற்கரை தூய்மை தினத்தை முன்னிட்டு



கடலூரில் உலக கடற்கரை தூய்மை தினத்தை முன்னிட்டு விழிப்புணர்வு பேரணி மற்றும் தூய்மை பணி



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கடலூரில்

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கடலூர், செப்.16

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டலூர் தேவனாம்பட்டினம் கடற்கரையில் முடிவடைந்த வுடன் கடலூர் தேவனாம் பட்டினம் கடற்கரையில் தூய்டுமைப்படுத்தும் பணியில் சிதம்பரம் அண்ணாமலை பல்கலைக்கழக கடல் உயிரியல் உயராய்வு மையம் மாணவர்கள், ஆங்கிலத்துறை மாணவர்கள், மன உளவியல் மாணவர்கள், விவசாயத்துறை மாணவர்கள், பொறியியல் துறை மாணவர்கள், ஆங்கில துறை மாணவர்கள் என மொத்தம் 270 சிதம்பரம் அண்ணாமலைப் பல்கலைக் கழக நாட்டு நலப்பணித் திட்ட மாணவர்கள் தூய்மைப் பணியை மேற்கொண்டனர்.

இவர்களுடன் கடலூர்

வாற்றினார். சுகாதாரத்துதறை மாவட்ட கண்காணிப்பாளர் கதிரவன், நாட்டு நலப்பணித் திட்ட ஒருங்கிணைப்பாளர் டாக்டர் சௌந்தர பாண் டியன் வாழ்த்துரை வழங் கினார். நாட்டு நலப்பணித் திட்ட அலுவலர் மற்றும் கடலூர் கோஸ்ட்டல சிட்டி ரோட்டரி சங்க தலைவர் டாக்டர் கலைச்செல்வன் நிகழ்ச்சிகளை ஒருங்கிணைப்பு செய்தார்.

பரம் அண்ணாமலைப் பல் கலைக் கழக நாட்டு நலப் பணித் திட்ட அலுவலர்கள் ஐயப்ப ராஜா முத்து குமார ராஜா இரமேஷ் தமிழ்மாறன் சுதாகர் மற்றும் கடலூர் சிட்டி ரோட்டரி சங்க நிர்வாகிகள் ஜே.ஏ.படேல் தங்க ரமேஷ் கிருபாகரன் ஆறுமுகம். விஸ்வநாதன் மருத்துவ இராமமூர்த்தி மணிவாசகம் டி.சுப்ரமணியன் ஆகியோர் கலந்து கொண் டனர். இந்த பேரணியை போக்குவரத்து துறை உதவி ஆய்வாளர்கள் சதீஷ்குமார், இரங்கநாதன், காவலர் நாகராஜன் ஆகியோர் பாதுகாப்பு பணிகளை சிறப்பாக செய்தி ருந்தனர். இந்த விழிப்புணர்வு பேரணி மற்றும் வெள்ளி கடற்கரை தூய்மைப்பணியை சிதம்பரம் அண்ணாமலை பல்கலைக் கழக நாட்டு நலப் பணித் திட்ட அலுவலர் மற்றும் கட லூர் கடலூர் ரோட்டரிசிட்டி சங்க தலைவர் டாக்டர் கலை செல்வம் ஒருங் கிணைத்து சிறப்பாக செய்திருந்தார்.



டீன்டாக்டர் எம் சீனிவாசன் தலைமை தாங்கினார். கடலூர் ரோட்டரி சங்க மாவட்ட ஆளுநர் ரோட்டரி டன் சிறப்பு விருந்தினராக கலந்துகொண்டு பேரணியை கொடியசைத்து துவக்கி வைத்தார். இந்த பேரணி க துறை முக ரோட்ட றி கோஸ்ட்டல் சிட்டி நிர்வாகி களும் உறுப்பினர்களும் பெருந்தி ரளாக கலந்து கொண்டனர். இந்த நிகழ்ச்சி யில் சுற்றுச்சூழல் பாதுகாப்பு குறித்து டி. அருள்செல்வம் சிறப்பு சொற்பொழி

05

Venue:

RANGACHANG, SOUTH ANDAMAN, A & N Islands

Co-ordinators:

Prof. Jayanta Kumar Mishra Dept. of Ocean Studies and Marine Biology Pondicherry University & National Centre for Coastal Research (NCCR)

International Coastal Cleanup Day was observed on 15th Sept. 2018 at Port Blair. A total of 95 participants that included post graduate students, research scholars, faculties and public took part in the awareness campaign. All the members were provided with a cap with ICC cleanup program logo. A rally was organized in the university campus and at Rangachang Coast, Port Blair, South Andaman with the ICC-2018 banner and various environmental awareness messages through placards were displayed to create awareness among the people and sensitize coastal population and tourists about the deleterious effect of marine litter and non-degradable disposable items in the coastal environment. Prof. P. M. Mohan of the Department of Ocean Studies and Marine Biology delivered an introductory remark to the participants and flagged off the rally.



Flag off of awareness Rally



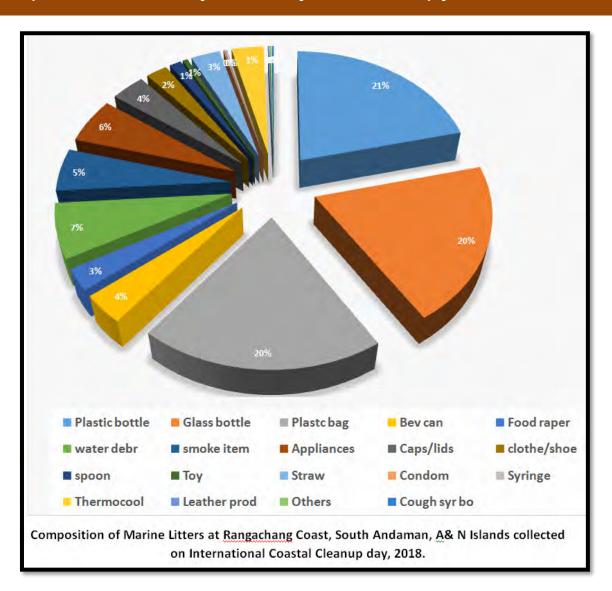
The Coastal Cleanup program was taken up at Rangachang and Burmanalah coast covering a stretch of 1.5 kms, which is located south of Port Blair city. This is a sandy shore line with rich biodiversity mainly corals, sea grasses, Sea weeds, Sea cucumbers, *Tridacna* sp., Mollusks, Sea urchins, *Conus* sp., oysters, echinoderms, cnidarians etc.. This coast line is also under tremendous environmental pressure due to several anthropogenic activities including tourism.

At the cleanup site, Pradhan of Beodnabad Gram Panchayat joined the program and assisted. The Pradhan also interacted with all the volunteers and discussed the coastal cleaning plan by their Panchayat.

On behalf of the ICC-2018, two numbers of 100 liter capacity dust bins were donated to the Pradhan with the request to keep these dustbins in the public places along the sea beach for the use by common man.

During the clean-up activity, several non-degradable items were collected, which were dominated by plastic and glass beverage bottles, house hold items, fishing related debris, syringes, needles, cough syrup bottles, condoms, tyres, thermocol sheets, debris from religious activities etc. There were no foreign origin materials or litter along the coast.

The dominant litter were 1,350 packaged water bottles of different brands, 1,256 liquor bottles, 1,287 plastic bags, 229 beverage cans, 173 food rappers and several numbers of other items. All these items were segregated and kept in one place to be removed by the Panchayat office to dump yards.





The program was conducted with highly enthusiastic volunteers of the Department of Ocean Studies and Marine Biology, school students from the Govt. Senior Secondary School, Rangachang and members of the Beodnabad Gram Panchayat.

06

International Coastal Cleanup Day inaugurated by Prof. G. Nageswara Rao, Hon'ble Vice Chancellor of Andhra University on 15th September, 2018 from Kalimatha Temple in Visakhapatnam, Andhra Pradesh. Students and faculty members joined in this rally on coastal clean-up campaign.



Flag off by Vice-Chancellor, Andhra University

Venue:

R K Beach, Visakhapatnam

Co-ordinators:

Dr. P. Rama Rao, Director Bay of Bengal Centre, Andhra University & National Centre for Coastal Research (NCCR)

A rally on coastal clean campaign was launched Hon'ble Viceby Chancellor G. Prof. Nageswara Rao, Andhra University, at 09:00 AM on 15th September, 2018 from Kalimatha Temple R.K. near Beach, Visakhapatnam. Heads of the departments, faculty, retired professors and research scholars attended this coastal clean campaign. Around 200 students from the science college participated in this event. A beach site at Peda Waltair bus depot near Lawson's Bay Park in Visakhapatnam was attended by all the above students for removal of all the debris including plastics. All the student participants were given the certificates and snacks.

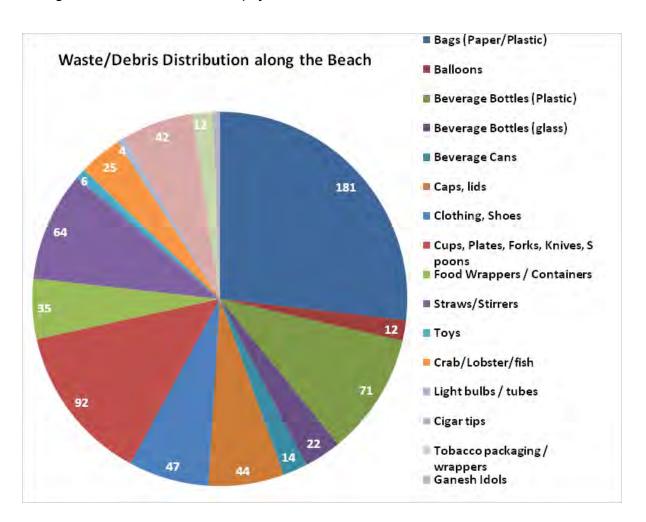






Awareness Rally by University Students & Staff of AU

The rally on this International coastal cleanup day was conducted for about 2 km along the beach road from Kalimatha temple, R.K. beach to Palm beach hotel. All the banners depicting "beat plastics ... save our marine environment" etc are displayed and the rally moved with these slogans by all the participants. This attracted a lot of attention of the general public and passersby. After finishing the 2 km rally, participants moved to the specified place, Lawson's Bay colony beach and started cleaning the waste/debris thrown along the beach. The pie diagram is showing the distribution of different debris collected in a stretch of 500 meters of the beach. It can be seen that majority of the waste is plastic (bottles, bags etc.) that are thrown by the people who visit the beach and getting transported the wave and currents. Idols of God, made of Plaster of Paris were seen, since the event is organized after Ganesh idol puja / immersion- a Hindu festival.



The student participants were given Participation Certificate as a token of appreciation for their community service.



On the same day, in the afternoon, a lecture was also delivered by Prof. P. Rajendra Prasad, former Director, CSBOB on the effects of plastic on marine life to all the student participants, research scholars and science faculty. The entire programme was well appreciated by all the student participants.

On the occasion of International Coastal Cleanup Day 2018, Department of Marine Sciences, Berhampur University observed the event at Gopalpur Beach, Gopalpur-on-sea, Odisha. Active participation were from various other institutes *viz.* NSS wing of Berhampur University; India Meteorological Department (IMD), Gopalpur; Zoological Survey of India(ZSI), Gopalpur; Gopalpur Ports Ltd; Gopalpur College, Gopalpur; Khetramohan Science College, Narendrapur; NAC, Gopalpur and Saraswati Sishu Mandir, Gopalpur.

Hon'ble Vice Chancellor of Berhampur University, Prof. Rajendra Prasad Das inaugurated and flagged off the programme.

Venue:

Gopalpur Beach, Gopalpur-on-sea, Odisha Coordinator:

Prof. Pratap Kumar Mohanty Berhampur University, Odisha & National Centre for Coastal Research (NCCR)



Flag off by Prof. R.P. Das, Vice Chancellor, Berhampur University

Sri Ranjan Kumar Biswal, Registrar, Berhampur University, Dr. Sadananda Nayak & Dr. S.P. Nayak, Dr. R. N. Jena, NSS coordinators and Sri Umacharan Sethi, Executive Officer, NAC, Gopalpur and other dignitaries were present on the event.

About 200 members including local school children, college, university students, research scholars, faculty members, scientists and print and electronic media participated in the event.



Coastal Cleanup rally to create awareness among the beach users

An awareness rally was organized in the Gopalpur town and the public actively participated in the rally holding placards with slogans on beating plastics and keeping the ocean and beach trash free.

A meeting was organized on the Gopalpur beach where Prof Mohanty spoke elaborately on the aims and objectives of the programme. Vice Chancellor Prof Das, Registrar Sri Biswal, Prof. K. C. Sahu, Dr. A. Mohapatra, ZSI, Mr. Amlan Dutta, GPL, Dr. S.P. Nayak and Dr. Sesadev Patro addressed the gathering about the beach and ocean pollution and its prevention.



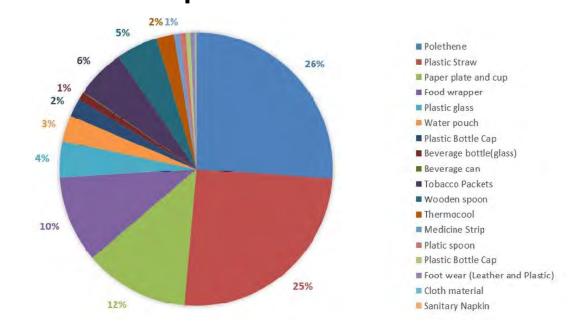
Collection of Marine litter by participants at tourist beach of Gopalpur

Emphasis was given on awareness of the tourists who contribute almost 92 % of the total debris found on the beach. Fishing activities contribute 8 % of the debris and hence fishermen were also part of campaign. The debris collected were segregated at a place and disposed appropriately. Head of Department, Department of Marine Sciences, Berhampur University distributed Certificate of participations to the fellow members.

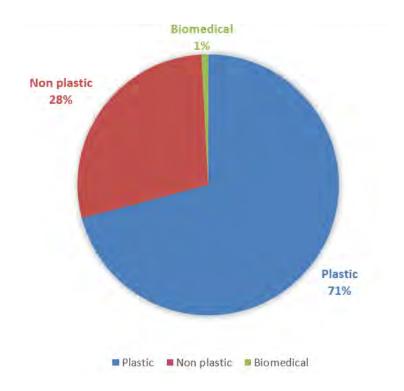


Segregation of marine litter and Certificate distribution to the participants

The beach cleanup programme was conducted on the tourist beach proper covering a total area of 23, 256 sq m and debris collected were about 36 kg of 20 different items. However, the top ten items, according to their number are; plastic bags, plastic straw, food wrappers, tobacco packets, paper plates and cups, wooden spoon, plastic glass, water pouch, plastic bottle caps and thermocols.



Percentage distribution of debris collected at Gopalpur beach



71 % of items collected are of plastics origin mainly from tourist activities

The status of beach litter is quite alarming and may become graver if we are not aware and conscious about it to check the pollutant at the source and also the ways and means of preventing the pollution. Coastal cleanup campaign, spearheaded by NCCR, Chennai and involving most of the coastal states of India is a small step in this direction and the general public is requested to join this campaign.



Prof. P. K. Mohanty interacting with electronic media

THE TELEGRAPH, 16 SEPT 2018

THE TELEGRAPH SUNDAY 16 SEPTEMBER 2018

rash-free beach drive in Gopalpur

SUNILPATNAIK

SUNIL PATNAIK

Berhampur: More than 150 students of various educational institutes on Saturday took part in a raily by giving slegans and holding placards depicting various quotes on beating plastics and keeping the ocean and beach trash free at coean in the coean and beach trash free at Coean and beach trash free at Coean and the coean and beach trash free on the Agameter of the coean and beach trash free on the Agameter of the coean and beach trash free on the Agameter of the coean and beach trash free on the Agameter of the coean and beach trash free on the Agameter of the coean and beach trash free on the Agameter of the coean and beach trash free on the agameter of the coean and beach trash free on the beaches in Odisha, we know that pollution menare is continuous. The track part of the fishing activity."

"Though there are other "Though there are other "Though there are other "Though there are other trash transfer of the coean and the coean and the fishing activity."



TIMES OF INDIA, 16 TH SEPT 2018

Tourists leave beach unclean

district. The fact came to the fore after the beach cleaning exercise taken up by students and staff of Berhampur University and other institutions on Saturday.

The top 10 items in the waste were plastic bags, plastic straw, food wrappers, tobacco packets, paper plates and cups, wooden spoon, plastic glass, water pouches, plastic achand collected around 36 kg

Berhampur: Tourists contribute 92% of the debris found on Gopalpur beach in Ganjam district. The fact came to the tors," said professor, depart-ment of marine sciences, BU, Pratap Mohanty. Fishing activities contribute to the rest 8% of the beach debris, he added. His department underto-ok the drive along with National Centre for Coastal Rese-arch, Chennai, on Internatio-

nal Coastal Cleanup Day.
The volunteers cleaned
23,256 square metres of the be-

of debris. They were drawn from NSS wing of the Univer-sity, IMD Gopalpur, Zoological Survey of India (ZSI), Gopal-pur, Gopalpur Ports Limited, Gopalpur College, Khetramo-han Science College, Narendrapur, Gopalpur NAC and Sa-raswati Sishu Mandir, Gopalpur. Vice-chancellor of Berhampur University Rajendra Prasad Das flagged off the awareness rally on the beach. Registrar Ranjan Biswal was

EENADU, 16SEPT 2018

పర్యావరణంతోనే మానవాఇ మనుగడ



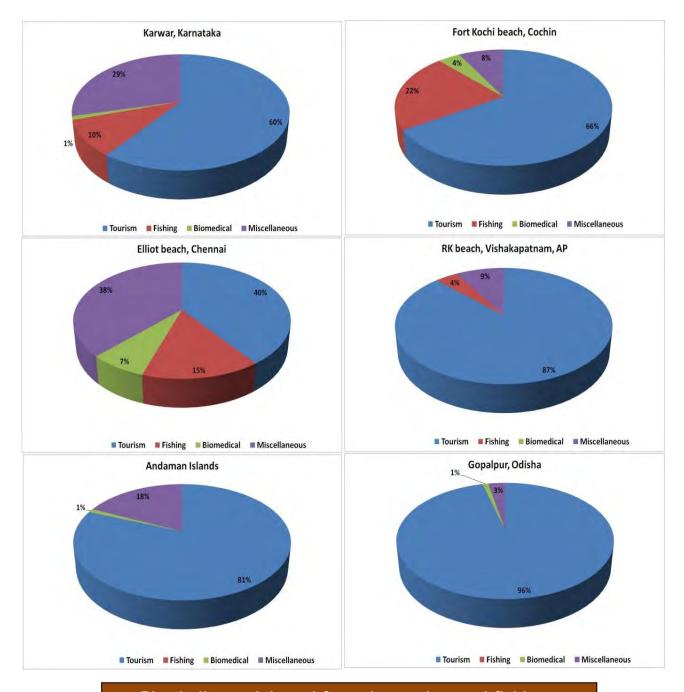






In conclusion...

The data on percentage composition of debris in different beaches during the cleanup program suggest that the presence of nondegradable materials of plastic is relatively high.



Plastic litter originated from the tourism and fishing sector dominate all beaches. Biomedical products are observed in urban beaches.

In most cases, the solid wastes reach to the coast through nearby waterways, rivers, creeks etc from the land and overflow the beaches, making the beaches unhygienic and hazardous. In addition to that, the usage of the beach by local dwellers and visitors and other social factors make the problem worse. Manual cleaning of beaches, engaging people is cumbersome, expensive and sometimes next to impossible. With the increased use of plastic, the concept of 3Rs- reduce, recycle and reuse needs to be adopted through a stringent action plan. Although, a number of coastal cleanup awareness programs are being undertaken recently by few organizations, NGOs etc., however, lack of solid waste management facilities is the major hindrance in most of the places. Similarly, recycling efforts of solid waste in most of the places /cities are either inadequate or lacking. Thus, segregation and processing of solid waste at household level is highly essential, which can be achieved through public participatory approach, awareness activities, educating at school and college levels and through print and audio-visual media. Installation of debris booms, fin deflectors at upstream and bridges along river ways will definitely help in reduction of solids wastes entering into the coastal waters.

> It is high time to frame a national marine litter policy that can control and manage litter at the land boundary and prevent their entry into marine environment to maintain its pristine nature.