



Happy Engineers Day!



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संपादकीय

नमस्कार,
'पूर्णमिदं' चा २०२० या वर्षातील ५ वा अंक आपल्यापर्यंत पोहोचवत आहोत. सप्टेंबर ते डिसेंबर या कालावधीत होणारे 'Engineer's Day', 'ओझोन दिवस', 'पर्यटन दिवस' आणि 'राष्ट्रीय प्राणी कल्याण दिवस' आपण निरनिराळ्या पद्धतीने साजरा करत असतो. 'पूर्णम' च्या निरनिराळ्या उपक्रमातून या सर्व विशेष दिनांच्या निमित्ताने कार्यक्रम झालेच. या अंकातही आपण 'पर्यटन दिवसानिमित्त' श्री. अनिरुद्ध चावजी यांचा 'Tourism Beyond Tigers' हा विशेष लेख देत आहोत. 'पूर्णम' करत असलेल्या 'इ - कचरा' संकलन उपक्रमांमधील मूळ समस्या काय आहेत याची उकल डॉ. संजय जोशी यांनी आपल्या लेखात केली आहे. ह्या दोन्ही अत्यंत अनुभवी व्यक्तींचे लेख माहितीपूर्ण आणि वाचनीय आहेत. नेहमीप्रमाणेच वाचकांच्या प्रतिक्रिया या वेळेस ही येतीलच याची खात्री वाटते.

1. पूर्णम च्या १२ ऑगस्ट पासून सुरू असलेल्या

'webinar' मालिकेला प्रेक्षकांचा उदंड प्रतिसाद लाभतोय. त्यामुळेच अजून वेगवेगळे आणि अभ्यासपूर्ण विषय मांडायला आम्हाला संधी मिळते आहे. आपल्या मनात जर काही या उपक्रमाविषयी सूचना असतील तर जरूर कळवाव्यात.

मागील अंकाप्रमाणेच याही अंकांमध्ये शालेय उपक्रम सदराखाली प्रश्नमंजुषा दिली आहे. बच्चे कंपनीच्या सहभागाची अपेक्षा आणि त्यांच्या अजून काही सूचना असल्यास त्याचेही स्वागतच आहे.

पुढील कालावधीत 'पूर्णम' ची 'कपडे तुमचे - कौशल्य आमचे' या उपक्रमांतर्गत आपण अधिक लोकांपर्यंत पोहोचणार आहोत. आपल्या सोसायटीत यासंबंधी स्टॉल लावायचा असल्यास आम्हांस नक्की कळवा.

मागील दोन महिन्यात ४ निरनिराळ्या कौशल्य प्रशिक्षण कार्यक्रमांमध्ये २५ हून अधिक महिला सहभागी झाल्या होत्या. त्यातून ६ महिला पूर्णमबरोबर रोजगारासाठी जोडल्या गेल्या आहेत. याचे विस्तृत विवेचन या अंकात दिले आहे. पुढील

कालावधीत असाच दिव्यांगांसाठी प्रशिक्षण वर्ग घेणार आहोत, ज्यामध्ये संगणक प्रशिक्षण घेण्यात येणार आहे.

या आणि अशा निरनिराळ्या उपक्रमांमध्ये आपण आपला सहभाग अवश्य नोंदवावा. त्याचबरोबर अशा कार्यक्रमांना लागणाऱ्या निधीचे सुद्धा आपल्याकडून स्वागत आहे. यासंबंधी अधिक माहिती आपल्या संकेतस्थळावर उपलब्ध आहेच. धन्यवाद..

- संपादकीय मंडळ,

पूर्णम इकोव्हिजन फाऊंडेशन

Bimonthly Report

E-waste and Plastic Waste Management

Under this project, we collect electronic and electrical waste and plastic waste and hand-over it to Maharashtra Pollution Control Board (MPCB) authorized recyclers. The waste which can be reused is refurbished and donated to needy organizations. Poornam conducts E-waste and plastic waste collection drives every Saturday-Sunday and weekly runs permanent collection centers around the Pune city with support of Cummins India Foundation.

Poornam conducts regular collection drives at society & commercial level. These drives are supported by Cummins India Foundation.

In month of September, Poornam team conducted total 16 collection drives at society & commercial level across 6 zones of Pune city where around 225 donors donated E-waste and plastic waste. Total E-waste and plastic waste collection during these drives are 1.4 ton and 487 kg respectively. In month of October, 2 collection megadrives were organized in Warje-Karvenagar & Sinhagad Road area. Total E-waste and plastic waste collection during these drives are 3.6 ton and 987 kg respectively. Total 8 permanent weekly collection centers were running in two months. Out of 8 one is newly opened at Saraswat Bank on Suncity Road. At the center 437 kg of E-waste & 472 kg of plastic got deposited. For two days 31st October & 1st November special drives were organized at Nagarkar Prashala, Dnyanada Pratishthan in Karvenagar. In all 665 kg of E-waste was collected during this drive.

Poornam has donated 5 bicycles to Jankalyan Samiti & 1 fridge to SevaDeep Foundation.

Fabric Up-cycling

Indian culture has always been developed in the favor of sustainability of environment, inclusive of 3Rs- Reduce, Reuse, and Recycle. Fabric Up-cycling is also one of the Poornam's projects which takes this concept to the wider level. Under "Your Fabric, Our Skill" activity, we are collecting old jeans & manufacturing attractive products out of those & give those back.

In the months of September & October, 39 old jeans were collected in total. 4 collection

drives were organized at society level for collecting jeans. To generate livelihood for women in association with Persistent Foundation Poornam conducted 3 training sessions on Warli painting, Fabric Jewellery making & Toy making out of old fabric. About 13+ women attended these trainings.

We carried out special drives for cloth collection at Nagarkar Prashala, Dnyanada Pratishthan in Karvenagar. Two tons of old clothes were collected during this drive held for two days, that is on 31st October & 1st November.

Awareness initiatives

Along with activities for city's waste management Poornam spread awareness regarding waste management and environment. Making citizens aware is important for accelerating public participation in managing waste. Poornam conducts awareness activities at various levels like school, college, society and slum level. Online session regarding E-waste awareness was carried out in Z.P.School at Vadgaon Budruk. Fifty school students attended this session.

Poornam successfully conducted several webinars on Facebook on Entrepreneurship opportunities in various environment related fields. Eminent speakers guided about Entrepreneurship opportunities in waste management, Climate change, Environment friendly residential societies, Biodiversity, Plastic to fuel plant, E-waste & Bamboo plantation. Webinars were conducted at 4.30 pm on every Wednesday.

Sanitary Napkins Manufacturing Project

For the rural sector, Poornam, in association with Cummins India Foundation, has established a sanitary napkin manufacturing plant. At present, livelihood generation has been provided to 10 women forming one Self Help Group (SHG) and is taking efforts to spread a word about clean and healthy menstrual hygiene habits. Now onwards the unit is handed over to that SHG.

Green consultancy

Under this project we provide consultation regarding rainwater harvesting, wet waste and dry waste management at society, commercial and rural/town level. In Pune city, we run composting unit & rainwater harvesting unit at Laxmi Park Society, Navi Peth. Some units have been stopped due to present situation of COVID-19.

Financial Donation option as Poornahuti

One good deed is better than thousand words... It is rightly said that 'Manage everything which is unavoidable and Avoid everything which is unmanageable... An 80G certified NGO Poornam Ecovision Foundation thinks on the same lines and has been working on solid waste management for past 8 years. We must know how to manage our "plastic and electronic waste" which is unavoidable to use. Poornam urges you to donate "Poornahuti" of just Rupee 1 daily, a small contribution towards a big change in the environment. This first step assures you a safe environment. You can contribute your amount by transferring it to below mentioned Bank Account and forward your contribution screen shot on the whats app number given below.

Bank details:

Account name-Poornam Ecovision Foundation.

Bank Name- State Bank of India.

Branch- Karve nagar, Pune

Account no. - 34537729509

IFSC - SBIN0013530

What's app number- 7720054175



poornam ecovision foundation

Photo Gallery



Tree Plantation on occasion of Ozone Day Celebration
at Poornam Office



Inauguration of Women Training activity



Women training sessions on Patch work & Fabric Jewelry



Fridge donation to SevaDeep Foundation



Cycle donation to Jankalyan Samiti

E-waste as problem: Facts



“Globally, a cell phone is sold to around one of every four people on an annual basis. Every year millions of electronic devices such as mobile phones, TVs, computers, laptops, and tablets reach the end of their useful life. Unfortunately, the majority of these electronic products end up in landfills and just a tiny percentage comes back as/in new electronic devices.”



In the 21st Century, the information and communication revolution has brought enormous changes in the way we organize our lives, our economies, industries and institutions. At the same time, these have led to manifold problems including the problems associated with generation of massive amount of hazardous waste and other wastes generated from electric products. It constitutes a serious challenge to the modern societies and requires coordinated efforts to address it for achieving sustainable development. Rapid growth of technology, upgradation of technical innovations, and a high rate of obsolescence in the electronics industry have led to one of the fastest growing waste streams in the world which consist of end of life electrical and electronic equipment products generally known as the E-waste. Electronic Waste, also described as the Waste Electronic and Electrical Equipment (WEEE), may be defined as discarded computers and peripherals, office electronic equipment, entertainment gadgets, mobile phones, television sets and refrigerators, air conditioners and variety of electrical appliances. This definition includes used electronics which are destined for reuse, resale, salvage, recycling, or disposal. Essentially, Electronic waste, or e-waste, is a term for electronic products that have become unwanted, non-working, and have essentially reached the end of their useful life. Others define the re-usable (working and repairable electronics) and secondary scrap (copper, steel, plastic, etc.) to be “commodities”, and reserve the term “waste” for residue or material which is dumped by the buyer rather than recycled, including residue from reuse and recycling operations.

The sources of generation of this kind of waste are universal. Practically every individual in the society is responsible for generation of E-waste directly or indirectly in one

form or other either at the domestic level or at the workplace. More recently, policy changes have led to a tremendous influx of leading multinational companies into India to set up manufacturing facilities, R&D centers and software development facilities. The domestic market is getting revitalized due to rapid economic growth and changing consumption patterns. This growth has significant economic and social impacts. The increase of electronic products, consumption rates and higher obsolescence rate leads to higher generation of electronic waste (E-waste). The increasing obsolescence rates of electronic products added to the huge import of junk electronics from abroad create complex scenario for solid waste management in India.

We are creating E-waste at a rapid rate. With such a very short useful life, these electronics transition into E-waste at a rapid pace. In fact, it was estimated that there were 422 million unused and unwanted cell phones accumulating in people's homes by the end of 2018.

Globally, a cell phone is sold to around one of every four people on an annual basis. Every year millions of electronic devices such as mobile phones, TVs, computers, laptops, and tablets reach the end of their useful life. Unfortunately, the majority of these electronic products end up in landfills and just a tiny percentage comes back as/in new electronic devices. According to a UN study, in 2017 alone, 41.8 million tons of electronic waste (E-waste) was discarded worldwide, with only 10 to 40 percent of disposal done properly. Electronics are full of valuable materials including copper, tin, iron, aluminum, fossil fuels, titanium,

gold, and silver. Many of the materials used in making these electronic devices can be recovered, reused and recycled, including plastics, metals, and glass.

Various parts / materials / composition of E-waste may be divided broadly into six categories such as

- Iron and steel, used for casings and frames
- Non-ferrous metals, especially copper used in cables, and aluminium
- Glass used for screens, windows
- Plastic used as casing, in cables and for circuit boards
- Electronic components
- Others (rubber, wood, ceramic etc.).

These components contain deadly chemicals and heavy metals like lead, cadmium, chromium, mercury, polyvinyl chlorides (PVC), brominated flame retardants, beryllium, antimony and phthalates. Long-term exposure to these substances damages the nervous systems, kidney, bones, reproductive and endocrine systems. Some of them are carcinogenic and neurotoxic. Because of such health hazard, safe disposal of E-wastes is a critical problem and poses a threat to both health and vital components of the ecosystem. There are number of channels through which E-waste goes to the environment. E-waste that is land filled produces contaminated leachates, which eventually pollute the groundwater.

On this background, Ministry of Environment and Forest published E-Waste (Management and Handling) Rules in 2011 which came into effect from May 1st, 2012. The Rules apply to every producer(s), distributor(s), collection center(s), re-furbishers

E-waste as problem: Facts

re-cycler(s), consumer(s) or bulk consumer(s) involved in the manufacture, sale, purchase and processing of electrical and electronic equipment or components as specified in the relevant Schedule. However, these rules have been amended once in 2016 and the latest amendment is into effect since 22nd March, 2018 with the objective of channelizing the E-waste generated in the country towards authorized dismantlers and recyclers in order to formalize the E-waste recycling sector. India ranks fifth in the world in generating E-waste, according to the UN's Global E-Waste Monitor, 2014. In 2017, over 200 manufacturers of electronic goods, including some e-giants, were served notices by the Central Pollution Control Board (CPCB) for not complying with E-waste procurement norms. The new E-Waste (Management) Amendment Rules, 2018 has the provision of *introduction of Producer Responsibility Organisation (PRO) registration*. Another important provision is the *addition of EPR targets for producers*. Producers/importers, who have recently started their operations—whose number of years of operations is lesser than the average life of the product they are selling—have also been given a collection target which is lesser than the targets for other producers.

Dr. Sanjay Joshi
Vice President,
Paryvaran Dakshata Mandal,
Thane.

Last Quiz Answers

Answers of questions published in last issue

1. CPCB च्या यादीनुसार भारतातील सर्वात स्वच्छ हवा असणारे शहर कोणते?

क. चंडीगढ

2. Silent Valley National Park कोणत्या राज्यात आहे?

अ. केरळ

3. पृथ्वीच्या नैसर्गिक वातावरणात किती टक्के कार्बन डायऑक्साईड असतो?

अ. ०.०४%

4. माती प्रदूषण रोखाण्यासाठी खालीलपैकी कोणता उपाय बरोबर आहे?

क. खतांचा योग्य व न्याय्य वापर

5. जल प्रदूषण कायदा किती साली अस्तित्वात आला?

क. १९७४

6. सर्वात पहिल्यांदा कचरा विल्हेवाटीची रचना कोणत्या शहरात निर्माण झाली?

अ. अथेन्स

7. कोडींगनुसार प्लास्टिकचे किती प्रकार असतात?

ब. ७

8. सर्वात लांबचा पल्ला पार करणारी स्थलांतरित पक्ष्याची प्रजाती कोणती?

अ. आर्क्टिक टर्न

9. खालीलपैकी कोणत्या कृतीमुळे पर्यावरणास धोका पोचत नाही?

अ. कचऱ्याचा पुनर्वापर व पुनर्चक्रीकरण

10. "Environment" हा शब्द कोणत्या भाषेतून उगम पावला आहे?

अ. फ्रेंच

National Wildlife Day 2020



Environment Quiz

1. When Tiger Project was launched in India?

- A) 1973 B) 1974 C) 1983 D) 1984

2. What does 'MIKE' stands for?

- A) Monitoring of Illegal Killing in Europe
B) Monitoring of Illegal Killing of Elephants
C) Monitoring of Illegal Killing of Eagles
D) Monitoring of Illegal Killing of Endangered Species

3. Name the only country where both Tigers & Lions are found.

- A) South Africa B) Kenya C) India D) Bangladesh

4. What is the scientific name of Bengal Tiger?

- A) Panthera tigris corbetti B) Panthera tigris amoyensis
C) Panthera tigris altaica D) Panthera tigris tigris

5. Which country produces the most E-waste per year?

- A) USA B) France C) China D) India

6. How many percent of E-waste is recycled in India?

- A) 90% B) 80% C) 95% D) 97%

7. Which toxic element is not found in E-waste?

- A) Lead B) Mercury C) Arsenic D) Cadmium

8. Which country generates lowest E-waste?

- A) Cambodia B) Germany C) Switzerland D) Bhutan

9. Which Indian city generates highest quantity of E-waste?

- A) Bangalore B) Chennai C) Mumbai D) Ahmedabad

10. Which of the following is first Government Authorized E-waste recycler in India?

- A) High Tech Recycling B) Viro Green C) E-Parisaraa Pvt Ltd D) ECS Environment

(Answers will be given in next issue.)



Earlier, the guide's role was restricted to searching for the striped big cat. If despite his best efforts a tiger was not sighted – the “*kuch nahi dikhaya*” comment was regularly heard at the exit gates of many prominent tiger reserves!!! The managers of non-tiger forests have often complained of lack of interest among the tourists in their forests.

Those were the days when one of the Khans was the Shahenshah of Bollywood. I would make it a point to watch all his movies... in fact only his movies. I loved the way he acted, delivered his patented hiccup dialogues and also dance around with all his heroines. A friend would always recommend watching the other Khan of the screen and so also the Khannas, Kapoors and others who did not share the big *filmi* surnames. Finally after a lot of persuasion, I went and watched a movie that did not have any of the big names... I was so impressed by the roles played by all the unknown actors that I immediately made up my mind to start exploring the rest of Bollywood, Hollywood, Tollywood, as well as vernacular cinema. I kept getting pleasantly surprised at every step. Thank God I said, that I listened to my friend and my love and understanding of films really became complete.

Almost similar is the story of many of our Wildlife Photographers. I stand corrected – Tiger photographers!!! They have without doubt captured some of the best emotions, actions and portraits of the tiger. The tiger is

Tourism beyond tigers

one of the most glamorous animals of the Indian forests and very elegant in all its movements too. Importantly, it is highly photogenic too. There is also no doubt that the Tiger like the Big Khan of the Cinemas is a charismatic entity. Both of them have been extravagantly showcased in all the visual media too. Without batting an eyelid, it can easily be stated that cinema and jungle businesses have immensely benefitted from their respective glamour. However, I would state that the benefit ends there. Like all other film stars who also have a niche in the entire cinema environment – other animals too have an important role to play in the jungle.

Unfortunately in their single minded devotion to the tiger, the tiger-wallahs have missed out on the remaining beautiful people of the forest. They could easily have missed a glory lily flowering, a tiger centipede devouring a frog, very different looking Danaid eggfly butterflies mating, racket tailed drongo mimicking a spotted deer call as it annoyed a leopard or even watching a troupe of langoors at play.

Thus forest managers at Tadoba

have been promoting the concept of exploring the forest in totality. Many of my friends too agreed to change their view of the forest. Some even kept their cameras down and instead took along a binocular. They returned from safaris and confided that they experienced a much different forest from the earlier safaris. Later they also shared that they started to visit forests not known for tigers and suddenly they were enchanted by the totality of the wilderness. They also made it a point to tell me how much their local guide could share about the anthropogenic value of the flora, the peculiar behaviour of animals and even the variation of nesting habits of birds based on the rainfall patterns. Earlier, the guide's role was restricted to searching for the striped big cat. If despite his best efforts a tiger was not sighted – the “*kuch nahi dikhaya*” comment was regularly heard at the exit gates of many prominent tiger reserves!!!

The managers of non-tiger forests have often complained of lack of interest among the tourists in their forests.

“ Birdwatchers thronging to Bhigwan lake are providing a better alternative to the local fishermen. Lesser know Phansad sanctuary today is probably just as famous among nature photographers as any prominent tiger reserves.”

In fact if an effort was not made to showcase these forests differently, the same story of poor footfall would continue in the future too.

Some forest managers fortunately have had a wider vision and promoted unique activities and remote locations very well. The British era rest-houses of Melghat are today attracting tourists with some of the finest tastes. The adventure activity at Hazra waterfalls guarantees an adrenaline rush. Boating on the open waters of Irai lake at Moharli is attracting more and more people every day. Butterfly park at Agarzari with its unique interpretation centre has one of the highest footfalls in the region. Birdwatchers thronging to Bhigwan lake are providing a better alternative to the local fishermen. Lesser know Phansad sanctuary today is probably just as famous among nature photographers as any prominent tiger reserves. Incidentally none of these above locations and

Tourism beyond tigers

many other such locations promise the sighting of a tiger.

The message is very simple. The local authority needs to identify a USP for the location and then promote it well. The success of such locations with good signage, trained guides and decent tourism infrastructure – is almost guaranteed. Similarly, the managers of tiger forests also need to plan their tourism beyond just tigers, as getting its confirmed ‘darshan’ would mean that the tiger would be visible to all its prey animals too. We wouldn’t want the tiger to go hungry – Would we?

-Anirudh Chaoji

Biologist, Tadoba Andheri Reserve

Ecologist & Director, Ran Mangli & Ecologics.in



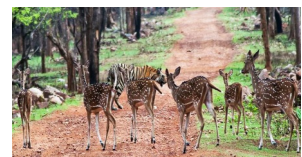
Danaid Butterfly



Racket Tailed Drongo



Tiger in Tadoba-Andheri Tiger Reserve



Spotted Deers

Feedback

“Poornam Ecovision Foundation is doing amazing work on nature conservation. Through their Awareness Initiative, they are reaching to masses to live a sustainable and environmentally friendly lifestyle. They invited us to create awareness upon the neglected topic of honey bee conservation and sustainable business ideas around it and through this, we reached to people to save bees. We are happy to get associated with them. Together we can save the bees!”

**- Mr. Amit Godse
Founder & CEO
Bee Basket Enterprises Pvt Ltd**

“My experience with the webinar I did for Poornam.... first and foremost I compliment the team.... Thorough professionalism was very evident in the organization, planning, punctuality and publicity of the event. My subject specialization being Climate change, I was approached for the talk. But Dr. Manerikar was very sure he wanted me to focus on waste management as an employment or business opportunity. And in order to do justice to his request, I pushed my limits! And in the process of preparing my talk I think I grew as a professional and a teacher. Thanks to Poornam, the talk is still available on the web for people to watch and learn from and so I think its a great initiative of public awareness and society building. I would only suggest that there is still quite a lot of scope for the outreach and publicity of such events. I hope more networking continues and brings about people's participation in waste management.

I wish Poornam Ecovision a very happy new year & a prosperous future in it endeavors!”

**-Dr. Rajani Panchang
UGC-Assistant Professor
Savitribai Phule Pune University**

Our Associates



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PRATISHTHAN**

Since 1981
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An organisation dedicated to the socio-economic development of rural/disadvantaged sections.

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॥वसुधैव कुटुम्बकम्॥



Poornam Ecovision Foundation

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