

2018-19 | Vol.12

St Joseph's College of Arts and Science for Women

(Affiliated to Periyar University, Salem)
Mookandapalli, Hosur.



Nature - The Gentlest Mother!



Our Superior General, Presentation Convent



Very Rev. Mother Celine Nirmala, B.Sc., B.Ed., M.TH. (ROME)



Editoria Principal's Messag Annual Repo Galler Article

Dear Readers.

The Editorial team of this glorious organisation proudly presents the magazine 2018-2019. Another successful academic year has passed by the abundant mercy and grace of the Almighty. We give a lot of importance to the wholesome development of the growing generation. This magazine proves to be the bridge between the flowing thoughts of our talented creators and their artistic magnification. The theme of this issue is Nature is the World's Best Teacher. "Nature's beauty is a gift that cultivates appreciation and gratitude" - Louie Schwartzberg. Nature is beautiful, permanent and beyond human comprehension. The human society is selfish as nature is destroyed for material benefits. The technology and modern advancements being the reason for nature's decay, it's high time we realised the patient, selfless virtues of Nature.

Hence, the aim of this magazine is to point out the current issues of the destruction of nature and the ways to develop the bond with Mother Nature in all our endeavours. This is the honest effort of showcasing the opinions of budding personalities. Preserving nature is our responsibility and finding its divine spirit attunes our energy to it.

We have taken utmost care to present to you a brief account of the important events of the year 2018-2019. It would not have been possible for us to bring out this Annual but for the constant encouragement and support rendered to us by our Secretary and Principal Rev. Dr. Sr. I. Arockia Rani, Vice Principal Rev. Sr. Sagaya Mary James, Heads of the Departments, Assistant Professors and supporting staff. It is our pleasure to take this opportunity to thank all the Authors who have contributed the articles and technicians who have meticulously chosen colours and designed the magazine. We express our sincere gratitude to all those who have helped us in one way or the other. Let us inspire each other with hope, confidence, and faith in the road ahead! Happy Reading!

CONVENOR

Rev. Dr. Sr. I. Arockia Rani, M.Sc., M.Phil., Ph.D., PGDCA

EDITORIAL COMMITTEE

Mrs. C. Hemalatha, M.A., M.Phil., M.Ed., [Tamil]

Mrs. C. Magila, MBA., M.Com., [BBA]

Mrs. L. Jenniffer, M.A., M.Phil., [English]

Ms. K. Saranya M.A., M.Phil., [English]

Ms. R. Somiyajayaranjini M.A., M.Phil., PGDCTT., [English]

PHOTOGRAPHY

Mrs. G. Banupriya, M.Com., M.Phil., [Commerce] Mrs. N. Vadivu, M.Com., M.Phil., [Commerce]

From the Principal's Desk

"I will instruct you and show you the way you should walk, give you counsel with my eye upon you". (Psalm 32:8)

Dear Staff & Students,

I am very much glad to witness the phenomenal leap of accomplishments this year, adding glory to the fruitful history of this acclaimed institution. In this harmonious



ambience, the management assures that the confidence of every student is built through the wholesome personality development enriched with incorruptible virtues. The students are also provided with progressive thoughts of academic education as well as impressive extra-curricular activities.

I am grateful that this academic year was profusely blessed with the grace and love of the Almighty. The two important events of the year were the Two Days National Conference on Prominent Challenges in Information Technology organized by the Department of Computer Science and the One-Day National Conference on Recent Trends in Differential Equations organized by the Department of Mathematics. It is quite inspiring to behold the extraordinary ability of our students unfolded through the challenging opportunities every day. I am really happy to share that the management and the staff were the guiding anchors of the various activities that were undertaken by the students. The students are moulded to reach the pinnacle of perfection and this academic stay definitely prepares them to be responsible citizens when they step out as graduates. I sincerely hope that our outgoing batches of this year will indeed reach greater heights in life. The college magazine can be exemplified as the portrayal of the literary and artistic skills of our students. My hearty congratulations to the editorial team for their determined efforts in bringing out this magazine!

Patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish"- John Quincy Adams. I intently believe that one would acquire the wisdom of life during the stay in our institution - the core of knowledge. I place my hearty prayers to the Lord Almighty for another flourishing milestone. May God bless you all!

UNIVERSITY RANK HOLDERS



B.Com., 83.02% 5th Rank



AYESHA .A.J B.Com., (CA) 84.01% 7th Rank



RESHMA .M B.Sc., Physics 92.2% 10th Rank



M.A., (ENGLISH)



М.Сом.,



M.Sc., COMPUTER SCIENCE



M.Sc., MATHS



B.Com., CA (A)



B.Com., CA (B)



В.Сом.,



BCA.,



BBA.,



B.A., ENGLISH



B.Sc. MATHEMATICS



B.Sc. Physics



B.Sc. COMPUTER SCIENCE



B.Sc. BIO-TECH



B.Sc. CHEMISTRY



HOSTELERS

ANNUAL REPORT 2018 - 19

"Commit to the Lord whatever you do, and He will establish your plans" - Proverbs 16:3.

I am very much delighted to present the 12th annual report of our college. It has been another exciting year with so many highlights during the academic year 2018-19. It is often said "Perfection is not attainable, but if we chase perfection, we can catch excellence" Yes, every school and college strives for excellence. With due respect, I gladly welcome our admirable Chief guest Mr. F. Israel Inbaraj, GM-HR at TCS Ltd, Regional President-NHRD South India and certified coach by ICF, Rev. Fathers, Sisters and well-wishers, Our Vice Principal Rev. Sr. Sagaya Mary James, Professors, Parents and my dear Josephites. Building on a legacy of achievement, this has proven to be another exceptional year for our college; tribute goes to the team work by the management, staff and students.

ACADEMIC EXCELLENCE

"The beautiful thing about learning is that, no one can take it away from you"- B.B King.

UNDER GRADUATE COURSES:

Class	Students Appeared	Pass%	Distinction	First Class
B. C. A	64	87.5	10	54
B. Sc (CS)	45	95.5	20	25
B.Com	66	89.3	-	45
B.Com (CA)	128	85.1		99
B.B.A (CA)	30	90	01	26
B. Sc (Bio-Technology)	36	100	10	26
B. Sc (Mathematics)	68	92.7	25	37
B.A. (English)	55	87.2		41
B.Sc. (Physics)	39	92.3	10	26

POST GRADUATE COURSES:

Class	Students Appeared	Pass%	Distinction	First Class
M. Sc (Computer Science)	10	100	3	7
M. Sc (Mathematics)	18	77.8	7	4
M.A (English)	17	100	Marie No.	17
M.Com	11	100		11

M. Phil

Ologo	Students Appeared	Pass%	Distinction	First Class
Class	1	100		1
Computer Science	4	100		4
Commerce	3	73	9	1
English	8	100	1	7

RANK HOLDERS:

S.No.	Name	Class	Percentage	Rank
1	Swati .R	B.Com	83.02	5
2	Ayesha .A.J	B.Com [CA]	84.01	7
3	Reshma .M	B.Sc [Phy]	92.2	10

STAFF ACTIVITIES

"Talent wins games, but team work and intelligence win championships."-Michael Jordan.

- Mrs. Priya, Assistant Professor from the Department of Commerce, presented a paper on the topic "Impact of Subliminal Messages on Consumer Behaviour: A Fresh Look into the Future" in the 2nd International Conference held at St. Joseph's College of Arts and Science, Cuddalore on 17th February 2018, which was published in Emperor International Journal of Finance and Management, Salem.
- Mrs. Magila and Mrs. Uma, Assistant Professors from the Department of Management presented papers in the National Conference held at Ganesh School of Business Management, Salem on 23rd February 2018.
- Rev. Sr. Arockia Valan Rani, Assistant Professor of Computer Science department published a paper on the topic "A Review of Video Steganography using LSB Methodology" in the International Journal for Research in Applied Science and Engineering Technology, Haryana in the month of March 2018.
- Mrs. Dhina Suresh, Head of Computer Science department published a paper on the topic "Review on Cost Effective Data Replication Techniques in a Cloud-Based Environment" in the International Journal of Engineering Science Invention in the month of April 2018.



- Orientation Class was conducted for the staff members on 11th June 2018 by Rev. Fr. Ignatius, Administrator in the Fountain Institute for training Counsellors and psychotherapists, Sundampatti, Krishnagiri.
- Mrs. Rashmi, Head of the Department of Physics presented poster presentation on "Effect of Sonication on the Thermal Conductivity of Nano fluids" in International Conference held at Osaka, Japan from 28th to 30th September 2018.
- Dr. Ezhilarasi, Mrs. Kanimozhi, Mrs. Hemalatha, Mrs. Kavitha, Dr. Sanguvathi, Assistant Professors of Tamil Department, published papers in the International Journal of Tamil Studies, Chennai in the month of November 2018.
- Mrs. Ashwini and Mrs. Mageswari, Assistant Professors from Computer Science Department, conducted a certificate course on "R Programming" for final year students from 12th to 14th December 2018.
- Mrs. Reena Raj, Mrs. Viyani Jenita Mary, Mrs. Kavitha, Mrs. Sengamalam and Mrs. Banupriya, Assistant Professors from the Department of Commerce presented papers on different topics in the Journal of Emerging Technologies and Innovative Research, Ahmedabad on November 2018 and January 2019.
- Mrs.Magila and Mrs. Suganthi, Assistant Professors of Management Department presented papers in the National and International seminars at IIBS Research College, Bangalore on 9th January 2019.
- Mrs.Kamatchi and Mrs.Suganya, Assistant Professors from the Department of Nutrition and Dietetics presented papers in the International Conference on 22nd January 2019 in Mother Theresa University, Madurai.
- Sri Ramaswamy Naidu Memorial College, Virudhunagar conducted an International Conference, in which Mrs. Jenniffer, Mrs. Pansy Evangeline Victor, Mrs. Arokia Sheela, Ms. Nithya Rathna, Ms. Deepa, Ms. Monisha and Ms. Nithya, Assistant Professors from the Department of English published papers on the topic "Translation" on 22" February 2018.
- Dr. Lavanya, Head of English Department, presented a paper at the National Conference on "Comparative Literature" at Loyola College, Namakkal, on 24" August 2018.



- Mrs. Dhina Suresh, Mrs. AntoRamya, Mrs. Bobby, Mrs. Zindhu, Mrs. Amalredge, Mrs. Aswini, Mrs. Jayanthi, Mrs. AnushaPrem, Mrs. Mageswari, Mrs. Suguna, Mrs. Geethanjali, Rev. Sr. ArockiaValan Rani, Mrs. Logeswari and Mrs.Roobavathy, Assistant Professors of Computer Science department, published papers in the International Journal of Trend in Research and Development, Amreli, Gujarat on 18th September 2018.
- Mrs. Jaleesha, Mrs. Mahalakshmi, Mrs. Pavana Swetha, Mrs. Karunya, Ms. Kulandhai Therese, Mrs. Meenakshi, Mrs. Deepa, Mrs. Shobanapriya, Mrs. Sagana, Mrs. Kavitha and Mrs. JebaselviKavitha, Assistant Professors from the Department of Mathematics presented and published papers in various National and International Conferences in the Month of December 2018 and January 2019.
- Mrs. Anto Ramya, Mrs. Bobby and Mrs. Amal Redge presented papers in the National Conference on "Recent Trends in Differential Equations" on 23rd January 2019 held at our college, which were published in the International Scientific Research Organization for Science, Engineering and Technology Journal, Indore.

STUDENTS ACTIVITES

"The future belongs to those who believe in the beauty of their dreams."
- Eleanor Roosevelt.

- 7 students from the Department of Commerce presented papers on "Challenges in GST" at Sri Venkateshwara College, Dharmapuri on 24th January 2018. Ms. Tanzia and Ms. Swetha of III-B. Com (CA) won 1st prize, Ms. Mozhi Amudhu of II-B. Com (CA) won 2nd prize.
- On 2rd February 2018, 14 students from the Department of Computer Science presented papers in Sacred Heart College, Thirupathur. Ms. Priyadharshini and Ms. Rabuni of II B.Sc (CS), Ms.Srividya, Ms.Pavithra, Ms. Kavya and Ms. Varshini of II B.C.A won cash awards.
- 12 students from the Department of Management participated in Inter college competition held at Sacred Heart College, Thirupathur. Ms. Linda Rose Babu of I B.B.A(CA) won 2ndprize for paper presentation on 21st February 2018.



- College Union election was held on 4" July 2018 and union members President Ms. Srividhya of III-B.C.A, Vice President Ms. Shruthi of II-B.Sc. (Maths), Secretary Ms. Linda Rose Babu of II-B.B.A (CA), Cultural Secretary Ms. Afreen of III-B.A (English), and Sports Secretary Ms. Priyadharshini of III-B.Sc.(CS) were elected.
- Paper presentation competition was conducted by the Department of Computer Science on 16th July 2018, in our college. 23 pairs participated and 3 pairs were selected: Ms. Manisha and Ms. Tejaswini won 1th prize, Ms. Srividhya and Ms. Pavithra won 2th prize, Ms. Anusha Raman and Ms. Jeevitha won 3th prize.
- Ms. Divya from the Department of Computer Science won 1*prize in Slogan competition, conducted by Jewel One, Hosur on 30th July 2018.
- Students from the Department of Bio-technology and Computer Science attended the orientation Program on counselling class handled by Rev. Sr. Vinitha, Rev. Fr. Antony, Claretian priest and Rev. Fr. Backiaraj, SDB, Salesian priest in the month of August 2018.
- 20 Students from the Department of Commerce won 3rd prize in Skit held at Don Bosco College, Dharmapuri on 16th August, 2018.
- ♦ Inter-college competitions were conducted by Adhiyamaan College of Arts and Science, Uthangarai in 24th August 2018, 13 students from the Department of Computer Science participated. Ms. Pavithra and Ms. Shilpa won 1st prize and Ms. Pavithra and Ms. Nithya won 3rd prize in paper presentation. Ms. Mahalakshmi and Ms. Malasree of III-BCA won 1st prize in Quiz.
- Ms. Yamini Priya and Ms. Fathima Sayeed of II-B.Sc (Chemistry) got 1st Prize in Poster Presentation and Ms. Bhuvaneswari got 2nd Prize in Paper Presentation at Inter collegiate competitions held at Pachamuthu College of Arts and Science for Women, Dharmapuri on 19st September 2018.
- Ms. Archana of II-M.A (English) has cleared UGC NET exam held from 18th to 22nd December 2018, with 45.3%.
- 4 students from Commerce Department participated in the inter college competitions held at Jyothi Nivas College, Bangalore on 6th February 2019 and won 2th prize in Business Plan.



Our Prime Minister Mr.NarendraModi's clarion call for youth-led Development, the Ministry of youth affairs and Sports organised a "National Youth Parliament Festival 2019". Ms. Deena Jacquelin of II-B.A(English) cleared in Screening, District level and State level and was selected for National Level Competition to be held at Delhi on 27° February 2019.

SPORTS ACTIVITIES

"Champions keep playing until they get it right" - Billie Jean King

- Senior Women's State Level Kho-Kho competition was held from 23rd to 25th February 2018 organized by Kho-Kho association at Shri Rosy Vidyalaya, CBSE School, Periyakulam, Theni, Ms. Indhumathi from II-B.Com (CA) and Ms. Devika from I. B.Com (CA) won 3rd Place.
- S kilometre Marathon race was conducted by AVS Global School, Denkanikottai on 25th February 2018, Ms. Subbulakshmi of III-B.Com (CA) won 2nd place and Ms. Archana of I-B.Sc. (Physics) won 3nd place.
- 29thSouth Zone Senior National Kho-Kho competition was held from 28th to 30th September 2018, held at Z.P Ground, Mahabub Nagar, Telangana, Ms. Indhumathi of III B.Com (CA) won 3th place.
- Chess competition was held on 5th and 6th October 2018 at A.V.S College of Arts and Science, Salem, Ms.Hajira of II-B.C.A won 1st place.
- Ms. Indhumathi and Ms. Devika of Commerce Department secured 10th position in Kho-Kho South Zone Inter-University Level held at Mangalore University, Udupi, from 15th to 18th October 2018.
- Selvam Arts and Science College, Namakkal conducted Inter college Fencing competitions on 21st and 22nd December 2018,Ms.Nandhini of III-B.Sc. (Maths) won 3nd position in Sabre and Epee, Ms. Sumithra of II-B.Sc (Chemistry) won 3nd position in Foil and 2nd position in Epee and Ms. Venmani of II-B.Sc.(Maths) won 4th position in Foil
- ♦ 12th National Kung-Fu championship was held from 6thto 8th January 2019 all Gachibowli, Hyderabad, Telangana, Ms. Charanya of I-B.Sc. (Bio-Tech) won 1st place in Tai-Chi.



DEPARTMENT ACTIVITIES

"Coming together is a Beginning, Keeping together is a Progress, Working together is SUCCESS"-Brian Tracy

- Association Meets, Guest Lectures, Industrial Visit, Workshops, Bridge Course, Value Added Course and Inter Departmental Competitions of all the Departments were conducted in the Current Academic Year.
- 10 students from the department of English performed a skit on "Othuvathuoliyel" at Government Girls Higher Secondary School on 5th October 2018.
- Department of Computer Science organized a National Conference on "Prominent Challenges in Information Technology" on 18th September 2018, the Chief Guest was Mrs. Rose Abraham, Scientist F,LRDE,DRDO, Bangalore, Key Note speaker was Mr. L.Gnana Michael Prakasam, Scientist H,LRDE,DRDO, Bangalore. 75 students from the Department with their staff members went to Government school for Special children on 7th December 2018, to celebrate "The Joy of Giving" on account of Christmas.
- On 23rd January 2019, a National conference on "Recent trends in Differential equations" was organized by the Department of Mathematics and the Chief guests were Dr.K.Balachandran, Professor, Department of Mathematics, Bharathiar University, Dr.S.Marshal Anthoni, Associate Professor, Department of Mathematics, Anna University, Regional campus and Dr. Smitha S Nagouda, Associate Professor, Department of Mathematics, Christ University, Bangalore.

CAREER FORUM AND PLACEMENT CELL

"If Opportunity doesn't knock, build a door"-Milton Berle.

- "Mega Job Fair" was held in our college on 7th February 2018, 200 students participated and 164 got placed. 56 students in Bright Star, 11 students in DNMC International, 40 students in Zenith groups, 13 students in Magus, 32 students in Zen Corp Techno Solutions, 40 students in IDBI Federal Bank.
- * "Shemford International School" conducted interview on 8th February 2018, 6 students participated and 4 got placed.



- From 23rd November to 1st December 2018, placement training programme was conducted to all the final year students by Mr. Vibin Chandar, Lecturer in ICT, Blue Crest University College, Ghana, at our college.
- On 15" and 16" February 2019, Aptitude, Group discussion and Personal Interview was conducted by Sarathi groups, Dyuthi Consultancy, Hosur at our college campus, 242 students participated from which 154 students were selected for the job fair to be organized by that consultancy.
- 54 Josephites attended interview at Telligent Company, Electronic City, Bangalore on 18th and 19th February 2019.

NSS, RRC, YRC, WOMEN CELL AND CONSUMER CLUB

"The Best way to find yourself is to lose yourself in the service of others"- Mahatma Gandhi.

- From 12th to 17th February 2018, NSS special camp was conducted at Begepalli by NSS unit and 100 students participated.
- On 5" March 2018, students from YRC unit participated in elocution competition on the topic "Various training programme to be given to the YRC volunteers to face the natural calamities" conducted by Periyar University, held at Government Arts and Science college, Krishnagiri and it was organized by Mr.Arul.D.S, District Collectorate and Mr. Venkataraman.C, District Co-ordinator.
- On 8th March 2018, "Women's Day" was celebrated by our women cell.
- * "Swachh Bharath" Programme was jointly conducted by NSS, RRC and YRC units on 2[™] July 2018 to create awareness on Dengue fever, Mr. Murugesh Reddy, Panchayat Head & Mr. Antony Raj, Health inspector, Begepalli were the chief guests.
- NSS, RRC and YRC units together conducted "Swachh Bharath" at Ezhil Nagar and Rajeshwari Layout on 3rd and 4th July 2018.
- Consumer club was inaugurated on 25th July 2018 Dr. M.N Latha, Retired Associate Professor, Nirmala College, Coimbatore was the Chief Guest.



- A Motivational Programme was organized in our college on 14th August 2018 by BRCS and Mahatma Mission who gave "Navarathna Award" to encourage women achievers and also to create a special awareness to young women. Our college also honoured the awardees.
- On 20th August 2018, Mr. Prakash, Inspector and Mr. Ramu Sub-Inspector of Police visited our college and gave awareness on "Demerits of Alcohol and Road Safety Measures".
- Our college Consumer Club conducted competition on the topic "The world without Drug and Alcohol", on 20th August 2018, Ms. Thooba Anjum of II-B.Sc (Physics), Ms. Roswin Raju of II-B.Sc (Physics), and Ms. Shalini of I-B.Sc (Physics) got 1th, 2th and 3th prize respectively.
- "Awareness about AIDS and Importance of blood donation" was conducted by NSS on 30th August 2018, Mrs. Sumathi .N, ICTE, GH, Hosur was the chief guest.
- Campus cleaning was done by NSS unit with the help of 100 students on 24th September 2018.
- The Staff and the students of our college donated Rupees One Lakh for the Kerala flood relief fund on 30th August 2018.

ALUMNI ASSOCIATION

"Let us always meet each other with a smile, for the smile is the beginning of love."-Mother Teresa.

- Trade and food fest was conducted by our college alumni at our campus on 27th July 2018.
- Alumni Association meet was held on 4th August 2018.



CONCLUSION

"A hard beginning maketh a good ending."-John Heywood.

It is rightly said, "The secret of all great undertakings is hard work and self-reliance" I avail this opportunity today to express a heart-felt gratitude to our very Rev. Mother Celine Nirmala, Superior General, Presentation Convent, Coimbatore for her trust in hard work and self -reliance, which has boosted our efforts to make our college one of the best. would indeed be failing my duty if I don't express our gratitude to our Provincial Sr. Odilia Francesco Province for her constant support and encouragement rendered for the growth of our institution. I extend my heartfelt thanks to our Vice Principal Rev. Sr. Sagaya Mary James for her continuous efforts throughout this academic year, all our Heads of the Department, Teaching, Non-Teaching, Supportive Staff, Rev. Sr. Arockia Valan Rani and Rev. Sr. Sagaya Priya who has supported us the entire year. I wish to remind you that however small your role here was, not one of you is insignificant, not one of you is forgotten, You have contributed to this college in a very special way. Finally I thank the Lord Almighty for nourishing and guiding our institution throughout these days. Even though our past is golden and our achievements are decorated with precious stones of many colours, I still believe that the best is yet to be. Let tomorrow dawn with better hopes and better dreams, Thank You All!

> Sr.I.Arockia Rani Principal



Staff Orientation







Union Dnaugural & Freshers Day



























Physics





Maths





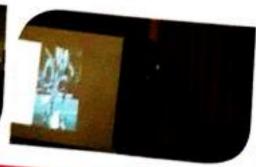
English





Computer Science







Bio-Tech







Chemistry





BBA







Commerce







Nutrition & Dietetics







Independence Day





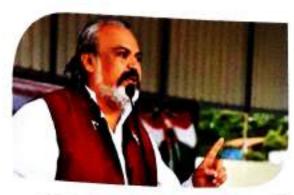














Teachers Day













Trade Fair - Commerce







Cultural Fest - Paprizeal















Cultural Fest - Paprizeal











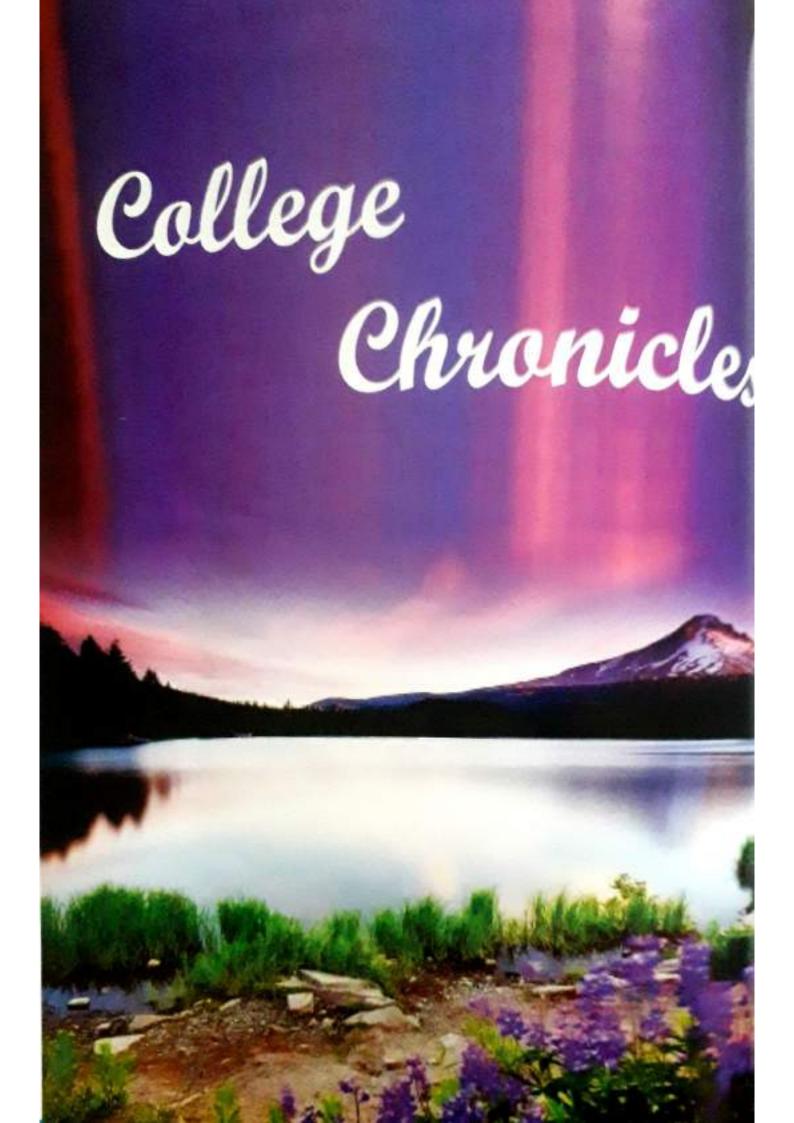












NATURE IN LITERATURE

Nature plays a vital role in the lives of people and the Universe as a whole. It is also seen as a perfectly ordered system of concentric circles where the Earth and Nature itself, was at its centre. Nature is also Heaven's reflection on Earth and anyone trying to disturb the natural order is considered evil. Nature is better described by the Heraclitus' philosophy Panta rei meaning that everything flows, or everything is constantly changing from the smallest grain of sand to the stars in the sky. Exactly saying, nature is perfect and its perfection is given by the relationship of all its elements.

Early critics praised Shakespeare as the poet of nature, as if the natural world, rather than scholarship was its inspiration. For Shakespeare, nature is experienced and learned. Arden is shaped by literary pastoral, just as Lear's death shows how nature sharpens rather than soothes human agonies. Poetry has always fascinated and provokes readers to think and understand the world in a deeper way. Many nature lovers have used poetry to connect with what they every time they step out into the open.

One of the most known and appreciated nature poets is Robert Frost. His works connect everyday life to nature. The lines from "The Road Not Taken" are celebrated lines of English literature - "Two roads diverged in a wood". Tennyson, the Poet Laureate of Great Britain uses references of nature to describe more philosophical themes. His interest in reformed society is brought out through his poetry Ulysses.

Wordsworth is one of the most famous poets of the Romantic Era. He is connected to nature in a deeper yet simple manner. The lines from Tables Turned show how people destroy nature by means of scientific implementations.

"Sweet is the lore which nature brings

Our meddling intellect

Misshapes the beauteous forms of things:-

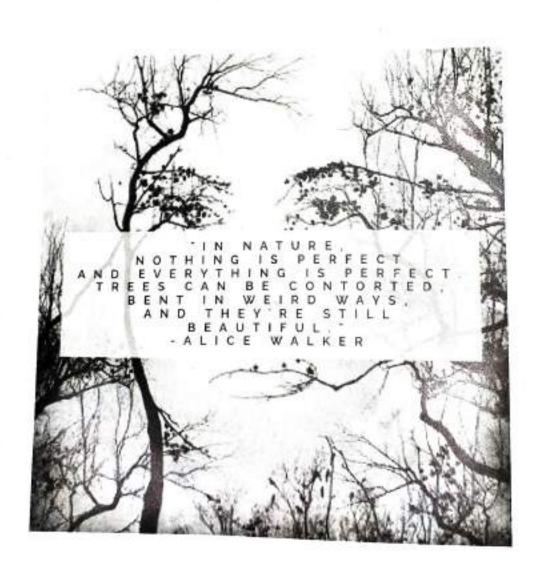
We murder to dissect".

Unlike many other nature poets, Shelley uses nature to describe society and man's inner thoughts. His poems are filled with deep metaphysical meaning which describes mystic and the sacred manner in his works. Ode to the West Wind is the best example. Keats provokes us to imagine his descriptions of nature. Though his poems are focused on the environment, they bring about a melancholic and sober tone to his work, which reflects the struggle in his life. Ode on a Grecian Urn is one of his most famous poems.

Nature is a broad division as the earth's physical phenomena, is omnipresent in literature as in life. Other than this, initial stipulation nature pervades all literature, further universals is difficult to defend. Many early texts utilize nature to describe origin. John Milton's Paradise Lost even details heaven and hell as determinants of human consciousness, thereby deeming the eternal and ethereal as influential spaces as well.

William Shakespeare's comparisons of women to summer days yielded to the direct treatment of seasonal splengour or by William Blake's Songs of Innocence and of Experience. Nature certainly plays a part in writings of the "Old World". The period from the end of the Civil War to the early twentieth century gave literature which has refined the relationship of people and the environment. We can see naturalism interpreted in a philosophical aspect in Darwinian biology. The role of nature in literature plays a great part in the lives of people and the Universe.

Dr.K.Lavanya, M.A., M.Phil., Ph.D., Head, Dept of English





GREEN COMPUTING

Green computing is the environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it is also defined as the study of that reduces their environmental impact.

Many IT manufacturers and vendors are continuously investing in designing energyefficient computing devices, reducing the use of dangerous materials and encouraging the recyclability of digital devices. Green computing practices came into prominence in 1992, when the Environmental Protection Agency (EPA) launched the Energy Star program.

Green computing is also known as green information technology (green IT). Green computing aims to attain economic viability and improve the way computing devices are used. Green IT practices include the development of environmentally sustainable production practices, energy-efficient computers, and improved disposal and recycling procedures.

To promote green computing concepts at all possible levels, the following four approaches are employed:

- Green use: Minimizing the electricity consumption of computers and their peripheral devices and using them in an eco-friendly manner
- Green disposal: Repurposing existing equipment or appropriately disposing of, or recycling, unwanted electronic equipment
- Green design: Designing energy-efficient computers, servers, printers, projectors, and other digital devices
- Green manufacturing: Minimizing waste during the manufacturing of computers and other subsystems to reduce the environmental impact of these activities

Government regulatory authorities also actively work to promote green computing concepts by introducing several voluntary programs and regulations for their enforcement. Average computer users can employ the following tactics to make their computing usage more green:

- Use the hibernate or sleep mode when away from a computer for extended periods
- Buy energy-efficient notebook computers, instead of desktop computers
- Activate the power management features for controlling energy consumption
- Make proper arrangements for safe electronic waste disposal
- Turn off computers at the end of each day
- Refill printer cartridges, rather than buying new ones
- Instead of purchasing a new computer, try refurbishing an existing device



Virtualization - Green Computing approach

Computer virtualization refers to the abstraction of computer resources, such as the process of running two or more logical computer systems on one set of physical hardware. The concept originated with the IBM mainframe operating systems of the 1960s but was commercialized for x86-compatible computers only in the 1990s. With virtualization, a system administrator could combine several physical systems into virtual machines on one single, powerful system, thereby unplugging the original hardware and reducing power and cooling consumption.

Several commercial companies and open-source projects now offer software packages to enable a transition to virtual computing. Intel Corporation and AMD have also built proprietary virtualization enhancements to the x86 instruction set into each of their CPU product lines, in order to facilitate virtualized computing. Effective utilization of available capacity is critical to cut costs and increase efficiency. The Indian industry is already feeling the heat of an energy crisis. Large data centres consume a considerable amount of energy.

Virtualization comes in handy in such a scenario. It simply means making one computer do the work of many, by using a single physical resource such as server, operating system, application or storage device. Virtualization software and hardware envisage the maximum utilization of the unused capacity so that multiple users can simultaneously share it.

It is an effective tool for cost-effective, greener computing. By dividing each server into multiple virtual machines that run different applications, companies can increase their server utilization rates and reduce costs. It can reduce a firm's electricity bill considerably. A number of virtual machines can co-exist in separate partitions on a single server's hard-drive, each as a software emulation of another server running its own operating system and software applications.

The Merits of Green Computing

- Green computing lowers the energy considerably minimized with the use of nontoxic materials in the equipment.
- The green equipment will be less expensive in the near future due to the efficient consumption of resources.
- Here's how designers plan to make the future computer more eco-friendly across its entire life span from manufacture to recycling.
- Energy-intensive manufacturing of computer parts can be minimized by making the manufacturing process more energy efficient.



- Energy-intensive manufacturing of computer parts can be minimized by making the manufacturing process more energy efficient.
- By replacing petroleum-filled plastic with bio plastics-plant-based polymers-require less oil and energy to produce than traditional plastics with a challenge to keep these bio plastic computers cool so that electronics won't melt them.
- Landfills can be controlled by making the best use of the device by upgrading and repairing in time with a need to make such processes (i.e., upgradation and repairing) easier and cheaper.
- Avoiding the discarding will not only control e-waste out of dumps but also save energy and materials needed for a whole new computer.
- Power-sucking displays can be replaced with green light displays made of OLEDs, or organic light-emitting diodes.
- Use of toxic materials like lead can be replaced by silver and copper.
- Making recycling of computers (which is expensive and time-consuming at present)
 more effective by recycling computer parts separately with an option of reuse or resale.

Dr. Dhina Suresh. M.Sc., M.Phil., Ph.D., Head, Dept of Computer Science



NATURAL RESOURCE MANAGEMENT

INTRODUCTION: Natural resource management deals with managing the way in which people and natural landscapes interact. It brings together land use planning, water management, biodiversity, conservation, and the future sustainability of industries.

HISTORY: The resource conservation movement in the 20th century recognized that conservation strategies had not been effective in halting the decline of natural resources.

A more holistic, national and even global form evolved, from the Brundtland Commission and the advocacy of sustainable development.

Community-Based NRM:

The three key assumptions:

- Locals are better placed to conserve natural resources,



- People will conserve a resource only if benefits exceed the costs of conservation, and
- People will conserve a resource that is linked directly to their quality of life.

INTEGRATED NATURAL RESOURCE MANAGEMENT (INRM):

The conceptual basis of INRM has evolved in recent years through the convergence of research in diverse areas such as sustainable land use, participatory planning, integrated watershed management, and adaptive management. INRM is being used extensively and has been successful in regional and community based natural management.

BIO-DIVERSITY: The issue of biodiversity conservation is regarded as an important element in natural resource management.

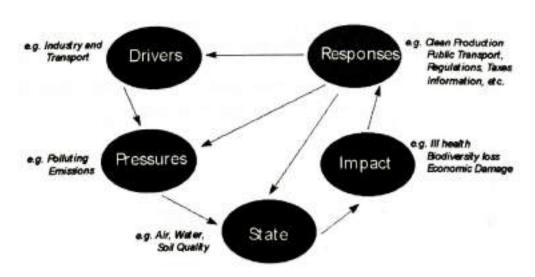
These threats have received increasing attention from environmentalists and the public, the precautionary management of biodiversity becomes an important part of natural resources management.

CONCLUSION:

Impact of State Response

- D-Policies, Poverty
- P- Demand from Sector
- S-Productivity / Waste
- I-Crop Yield decline
- R-Policy / Acts

By this way management of natural resources can be done to enhance the conservation of resources for our future generations...



Mrs. K. Meenakshi, MBA Department of Management



PHYSICS AND ITS POWERFUL IMPACT ON THE ENVIRONMENT

Look deep into nature, and then you will understand everything better.
-Albert Einstein

No other science can get away from physics because all matter is made up of molecules. As physics is the study of how matter acts and reacts to various forcing aspects of the world and the universe, physics has massive implications for the environmental sciences. The environment we live in is called the natural world. With nuclear bombs, spacecraft, toxic chemicals, and other human activities, the natural world is no more 'natural' in any sense. Whatever is happening to the planet has got a direct effect on us, so for the existence of human beings, the study of an environment is so important. The physical world is facing lots of issues today due to the various activities of human beings. These environmental issues are directly related to various laws of physics. The environmentalists are trying to find out how sensor developments, management, and storage of radioactive materials, energy conservation and energy saving developments are affecting the environment. Physics principles and their relation to the environment is a huge concept. There are various ways in which physics helps us to study the environment.

Remote Sensing Equipment: With remote sensing equipment measurements can be taken from a long distance, usually from satellites or aircraft in space. Photography from the space can even be counted as remote sensing. By bouncing the laser light off Earth's atmosphere, a lot of data can easily be gathered. This helps us to find the depth if sea beds or height of lands or even speed and directions of rivers and streams.

Remote Sensing Satellite: With the help of infrared satellites we can directly
measure the heat produced by the Earth. We can also measure the size and thickness of
the ice sheets on the Earth's surface every year.

. Spectroscopy: This is an amazing device which helps us to know about the gases that are present in different layers of the atmosphere. We can also get to know the approximate age of a dead tree.

Fluid Dynamics: This physics principle helps us to explain and predict what happens
in the seas and atmosphere. Using this physics principle of pressure, density and
temperature we can easily explain why the seas and rivers move the way they do. Weather
can also be appropriately predicted by this principle.

The problems we face in the future will be due to the use of non-renewable sources of energy; Whether renewable forms of energy can make our life better or not, we should know what are their physical constraints are in the environment. Hence, it is very important to understand how physics is related to environmental problems and deals with them.

M.Rashmi, M.Sc, M.Phil, B.Ed, Asst. Prof & Head, Dept.of.Physics

FISHERIES

A fishery is an early engaged method of raising or harvesting fish which is determined by some authority to be a fishery. According to the Food and Agriculture Organization, "a fishery is typically defined in terms of the people involved, species or type of fish, the area of water or seabed, a method of fishing, class of boats, the purpose of the activities or a combination of the foregoing features". The definition often includes the combination of fish and fishers in the region, the latter fishing for similar species with similar gear types. A fishery may involve the capture of wild fish or raising fish through fish similar gear types. A fishery may involve the capture of wild fish or raising fish through fish similar gear types. Directly or indirectly, the livelihood of over 500 million people in farming or aquaculture. Directly or indirectly, the livelihood of over 500 million people in developing countries depends on fisheries or aquaculture. Overfishing including the taking of fish beyond sustainable levels is reducing fish stocks and employment in many taking of fish beyond sustainable levels is reducing fish stocks and employment in many taking of fish beyond sustainable levels is reducing fish stocks and employment in many taking of fish beyond sustainable levels in International Sustainability Unit, the New Yorkworld regions. A report by Prince Charles' International Sustainability Unit, the New Yorkworld regions at the property of the people in July 2014 estimated global fishery were adding \$270 billion a year to global.

FISHERIES MANAGEMENT:

Fishery management is an activity of protecting fishery resources, so sustainable exploitation is possible. Modern fishery management is often referred to as a government system of appropriate management rules based on defined objectives and a mix of management means to implement the rules which are put in place by a system of monitoring control of surveillance. A popular approach is the ecosystem approach to fishery management. According to the Food and Agriculture Organization [FAO] of the United Nations, there are, "no clear and generally accepted definitions of fisheries management". However, the working definition used by the FAO is, "the integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and formulation and implementation with enforcement as necessary regulations or rules which govern fishery activities in order to ensure the continued productivity of the resources and the accomplishment of other fishery objectives".

OCEAN FISHERIES:

Oceans occupy 71% of the earth's surface. They are divided into five major oceans, which in decreasing order of size are: The Pacific Ocean, The Atlantic Ocean, The Indian Ocean, The Southern Ocean, and The Arctic Ocean. The Pacific's greatest asset is its fish. The shoreline waters of the continents and the more temperate islands yield Herring, Salmon, Sardines, Snapper, Swordfish, Tuna and Shellfish. The Atlantic Ocean is the second largest ocean. It has some of the world's richest fishing resources especially in the waters covering the shelves. The major species of fishes are Cod, Haddock, Hake, Herring, and Mackerel. The most productive areas include The Grand Banks of Newfoundland, The Bahama Banks, the water around Iceland, the Irish Sea etc. Eel, Lobster, and Whales have also been taken in great quantities.

The Indian Ocean is the third largest ocean. The warmth of the Indian Ocean keeps phytoplankton production low, except along the northern fringes. The Southern Ocean is the fourth largest ocean. The most common species are Squid, Whales, Seals, Krill, and Variety of Fishes. The Arctic Ocean is the smallest of all. The area has a fragile ecosystem which is slow to change and slow to recover from disruptions or damages.

FISHERIES SCIENCE:

Fisheries science is the academic discipline of managing and understanding fisheries. It is a multidisciplinary science, which draws on the disciplines of limnology, oceanography, freshwater biology, marine biology, conservation, ecology, population dynamics, economics, and management. In some cases, new disciplines have emerged as in the case of bio-economics and fisheries law. Fisheries science is typically taught in a university setting and can be the focus of an undergraduate, Master's or Ph.D. program. Some universities offer fully integrated programmes in fishery science.

Ms. Nithya.G, M.A., M.Phil, Asst.Prof, Dept of English



5 UNBELIEVABLE OCEAN MYSTERIES THOSE REMAIN UNSOLVED

"Mermaids may not exist, but the ocean is still full of mysteries."

Those large beautiful bodies of water are home to an infinite number of strange creatures and bewildering phenomena. The average ocean depth is 14,000 feet deep-that leaves a lot of room for the mysterious, the mythical and everything in between. The ocean is 95% unexplored, unknown, unseen by the human eyes. Fred Gorell, the head of public affairs at the National Oceanic and Atmospheric Administration's Ocean Exploration and Research divisions, tells Mashable in an interview that:

"Every time we go off on an expedition, we see something new, or something believed to be new."

Gorell has done a project called OPERATION DEEP SCOPE in 2004, a team of explorers placed a non-obstructive camera on the bottom of the deep ocean of the Gulf of Mexico. In an instant, a new discovery was made. This one camera in one place in less than a minute of operation imaged a video of six-feet Squid that had never been seen before, not known to exist with us on the planet. He marks:



"How many other mysteries are still remaining in the planet?"

It's seemingly endless in number, especially when you factor in the incredibly tough work of sea exploration. The ocean's expansiveness requires a huge number of people to vigilantly keep watch on underwater cameras. It would take an NOAA explorer an "extraordinarily huge part of their future life" to study the images coming in from ongoing expeditions.

Here are the five ocean mysteries science still haven't solved.

The Four Submarine disappearances of 1968

The year 1968 was considered to be a bad year for submersibles. In 1968, the four separate submarines from different countries were completely disappeared. These were the USS Scorpion (U.S), the INS Darak (Israel), the Minerve (France) and the K-129 (Soviet Union). Theories around the unrelated disappearances vary, from accidental torpedo self. firing to attacks kept under wraps by the government (particularly between the Scorpion and K-129). All the four missing subs still have no explanation and might never arrive too.

2. A Cannibal Shark in Australia:

The only thing scarier than a shark in the world is Cannibal Shark. After scientists recovered a tag that had been tracing a nine-foot-long great white, they discovered something surprising. The shark had suddenly dove 1,903 feet, the temperature on the tag going from 46 degrees Fahrenheit to 78 degrees Fahrenheit the only way the temperature could change that swiftly is if the shark had been eaten by something larger. It's not entirely uncommon for a shark to eat another shark, though the instances surrounding this great white are still murky.

The 'Atlantis of Japan'- Yonaguni Monument

The lost city of Atlantis is one favourite among mystery buffs. But Japan has a similar mystery of its own. In 1986, a local driver near Yonaguni Jima, an island, south of Japan, discovered a large section of underwater formations. The structures according to marine geologist Masaaki Kimura, look like Castle ruins, five temples, a stadium, and a triumphal arch. And some believe they are the ruins of an ancient city.

The Milky Sea Phenomena

Sailors of Yore used to tell tales of suddenly encountering "Pale, Milky, glowing waters." As it turns it wasn't just a fisherman's tale. In 1955, a British merchant vessel documented that the sea looked "MILKY WHITE."



Modern scientists, like Steve Haddock at the Monterey Bay Aquarium Research Institute, have discovered that the luminous bacteria or bioluminescent dinoflagellates are the main sources of the glow, though it was still theoretical at the time of a 2005 study. A follow-up study from Haddock and three other scientists concluded that the bacteria glow to attract fish, so it can be ingested and live inside of it. The bacteria gather in the trillions, but scientists still don't know what caused "such a massive bacteria population explosion."

"There are still far more questions than answers surrounding milky seas, "the study says, we have gained a new sense for how very little indeed we really know about the place we call home."

The Bermuda Triangle

After numerous disappearances, the Bermuda Triangle has cut quite a name for itself in the world of mystery and conspiracy theories. The Bermuda Triangle is also known as Devil's Triangle or Hurricane Alley. The major tragedies began in 1918, when the U.S. Navy ship USS Cyclops disappeared in the stretch of Atlantic Ocean, bounded by Miami, Bermuda, and Puerto Rico. No S.O.S. distress call was sent before the ship and its crew of 300 vanished into the great unknown, according to the History.

In 1945, five Navy Bombers got lost flying over the region, compasses failing to work. They eventually lost fuel and had to land in the sea. When a rescue plane was sent to find them, it disappeared along with the men in the bombers. Theories about the disappearance range from the Supernatural, from aliens to rips in the space-time continuum. The last scientific theory is that gas hydrates created sinkholes near the region.

"Mystery creates wonder and wonder is the basis of man's desire to understand."

Ms. Somiyajayaranjini.R. M.A., M.Phil, PGDCTT., Asst. Prof (Dept. of English)

"The Poetry of Earth is never dead".



APPLICATIONS OF GREEN CHEMISTRY IN EVERYDAY LIFE

"The environment is where we all meet; where we all have a mutual interest; it is the one thing all of us share."

-Lady Bird Johnson

INTRODUCTION

Green Chemistry is the new and rapid emerging branch of chemistry. The beginning of green chemistry is considered as a response to the need to reduce the damage of the environment by man-made materials and the processes used to produce them.

Paul Anast as known as the Father of Green Chemistry has given the term Green Chemistry in 1991. The main emphasis of green chemistry scientists is the design of safer chemicals and chemical processes to replace the use of hazardous substances.

The Environmental Protection Agency (EPA) defines green chemistry, as the design of chemical products and processes that reduce or eradicate the use or generation of hazardous substances. This involves reduced waste products, nontoxic components, and improved efficiency.

Basic Principals of Green Chemistry:



Prevention: It is better to prevent the production of waste than to treat or clean up waste after it has been created.

Less Hazardous chemical synthesis: Wherever practicable, synthetic methods should be designed to use and generate a substance that possesses little or no toxicity to human health and environment.

Designing Safer Chemicals: Chemical products should be designed to affect their desired function while minimizing their toxicity and environmental destiny throughout the design of the process.



Solvents and auxiliaries: Chose the safest solvents available for any given step and avoid whenever possible.

Use of renewable feedstock: Use chemicals which are made from renewable resources rather than chemicals originating from depleting resources.

Design for degradation: Design chemicals that degrade and break down into harmless products which do not persist in the environment at the end of their function.

Safer chemistry for accident protection: Choose and develop chemical procedures and substances that are safer and minimize the potential for chemical accidents, explosions, and fires. Here are some of the fields involved in everyday life where green chemistry has been applied to some extent.

APPLICATIONS:

A. Green Dry Cleaning of Clothes

Perchloroethylene (perc) is the solvent most commonly used in dry cleaning clothes. Perc (Cl2C = CCl2) is suspected to be carcinogenic and it contaminates groundwater on its disposal. A new technology known as micelle technology is developed by Joseph De Simons, Timothy Remark and James Mcclain in which liquid carbon dioxide can be used as a safer solvent along with a surfactant to dry clean clothes.

B. Eco-Friendly Paint

Sherwin William established water-based acrylic alkyd paints from recycled soda bottle plastic (PET), acrylic and soya bean oil. These paints give performance benefits of alkyds and low VOC (Volatile organic compound) content of acrylics. In alone 2010 enough quantity of these paints was manufactured to eliminate 362,874Kg of VOC's.

C. Biodegradable Plastics

BASF developed a biodegradable polyester film called as Eco flex. This film is used along with cassava starch and calcium carbonate to make fully biodegradable bags called Ecovio. The bags are certified by he Biodegradable Products Institute as completely biodegradable into the water, CO2, and biomass in industrial composting systems. These bags are also found to be tear - resistant, puncture - resistant, waterproof, and printable and elastic so can be used in the place of conventional plastic bags.



D. Solar Cell

The Solar cell is the most important example of green technology. It directly converts light energy into electrical energy by the process of photovoltaic. Solar photovoltaic technology has been found to be one of the few renewable, low-carbon producers with both the scalability and the t echnological development to congregate the ever-growing global demand for electricity.

E. Building With Green Technology

Green buildings make use of a variety of environmentally friendly techniques in order to reduce their impact on the environment. Use of domesticated materials, reflexive solar design, natural ventilation, and green roofing technology may allow builders to construct a building with a significantly smaller carbon footprint than normal construction. These techniques are beneficial for the environment as well as they can produce cost - effective buildings which are healthier for the occupants too.

Conclusion

The greatest challenge is to incorporate green chemistry in day to day life. Many successful efforts have been made but still, a lot has to be done. This can be achieved by training and educating the new generation of chemists. Green chemistry has to be introduced in the syllabus of the students at all levels so that each individual is made aware to choose the greener path in everyday life.

> Mrs. V. Vidya, M.Sc., B.Ed., and Mrs. K. Sarada, M.Sc., Dept. of Chemistry





WISDOM OF EATING MORE VEGETABLES

Vegetables are considered in dietary guidance because of their high concentrations of dietary fibre, vitamins, minerals, especially electrolytes and more recently phytochemicals, especially antioxidants. People who eat more vegetables as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Vegetables provide nutrients vital for health and maintenance of your body. Most vegetables are naturally low in fat and calories. None have cholesterol. Vegetables are important sources of many nutrients, including potassium, dietary fibre, folate (folic acid), vitamin A, and vitamin C. Diets rich in potassium may help to maintain healthy blood pressure.

Vegetable sources of potassium include sweet potatoes, white potatoes, white beans, tomato products, beet greens, spinach, lentils, and kidney beans. Dietary fibre helps to reduce blood cholesterol levels and may lower risk of heart disease. Fibre is important for proper bowel function. It helps to reduce constipation and diverticulitis. Fibre-containing foods such as vegetable help provide a feeling of fullness with fewer calories. Folic acid helps the body form red blood cells. Vitamin A keeps eyes and skin healthy and helps to protect against infections. Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C aids in iron absorption.

Fresh vegetables are like rock stars when it comes to bone health. They offer highly bio-available forms of calcium, magnesium, silica and a host of other minerals that work synergistically to build strong healthy bones. One of the fat-soluble vitamins playing a critical role in bone health is vitamin K2. Research has shown that eating the seeds of the fennel plant has a beneficial effect on bone mineral density, as well as bone mineral content. It is wise to eat a variety of dark green leafy vegetables, plus other vividly coloured veggies (purple, red, yellow, and orange).

THREE WAYS TO BOOST THE NUTRIENT POWER OF OUR VEGETABLES:-

Eating a variety of fresh vegetables is always desirable, but there are ways to boost their nutritional value even further.

i) Fermenting:-

Fermenting is one of the best ways to turn ordinary vegetables into superfoods. The culturing process produces beneficial microbes that are extremely important for our health.

ii) Juicing:-

Juicing provides an easy way to consume more vegetables and a greater variety of them as well as providing all of those important nutrients in an easily assimilated form. Raw juice can be likened to a "living broth" as it is teeming with micronutrients and good bacteria.



iii) Sprouting:-

Sprouting is a perfect complement to juicing. Sprouts provide some of the highest quality protein. Some of the most common sprouts include mung bean, wheatgrass, peas, broccoli, and lentils.

It supports cell regeneration. It has powerful sources of antioxidants, minerals, vitamins, and enzymes that protect against free radical damage.

Ms. Dhivya. R.M.A., Asst.Prof (Dept. of English)



GREEN CHEMISTRY

INTRODUCTION

Green chemistry is a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture, and application of chemical products.

Green chemistry is also called sustainable chemistry. Paul.T.Anastas is the father of Green Chemistry who is the director of Yale University's centre for green chemistry and green engineering. He is appointed by Barack Obama as the agency's assistant administrator for research and development and the United States Environmental protection agency. It is also reducing the risks of chemicals and chemical reactions. Finally, it is about evolution a chemical process.

TO ACHIEVE IN GREEN CHEMISTRY:

First, it begins with chemistry education. Chemistry students need to encourage the principle of green chemistry and designing the process of choosing the reagents. Chemistry projects should be designed and interpreted.

Teachers also plan the projects in green methods. Reactions should involve by using green solvents preferred. The experiment should be avoided in the tedious experimental procedures like longer reaction time, the reaction at higher temperature etc.

FOCUSING IN GREEN CHEMISTRY:

The green chemistry looks at pollution prevention on the molecular scale. The green chemistry supports the environmentally friendly chemistry processed which reduces the elimination of the generation of hazardous substances. The concept of efficiency is employed to eliminate the wastes which are toxic and hazardous reagents.



PRINCIPLES OF GREEN CHEMISTRY

There are 12 principles which are based on the design of materials and processes.

GOALS IN GREEN CHEMISTRY

The goal of green chemistry is to create better, safer chemicals while choosing the safest, most efficient ways to synthesize them and to reduce wastes. The main goal is to reduce toxicity and any other hazardous effects in our ambient and industrial areas

BENEFITS OF GREEN CHEMISTRY

Economical and less waste, Energy efficient, lower cost of production and regulation, fewer accidents, safer products, healthier workplace and communities protect human health and the environment.

ADVANTAGES IN GREEN CHEMISTRY

In Human health: cleaner air and water, increased safety for chemical industry, less potent accident, less personal equipment required, safe products available for purchase, safer food.

In environment: Green chemical degrade to innocuous products recovered for further use, plants and animals suffer from toxic chemicals, less chemical ecosystems, less use of hazardous waste can fill lands.

In economy and business: Higher yields for chemical consuming smaller, becomes fewer synthetic steps, often faster manufacturing of increasing plant capacity, and energy and water increases consumer sales by and displaying safer-process, improved competitiveness of chemical manufacturers and their customers.

DISADVANTAGES IN GREEN CHEMISTRY

Consumer awareness, Lack of policies, the process is slow due to the large scale, lack of scale (time).

CONCLUSION

The ultimate aim of green chemistry is to entirely cut down the stream of chemicals into the environment. To keep close control of pollutants, we can maintain the environment in an acceptable condition for future generations.

-Save Green-Save Environment-Save Water-Save Nation-

Mrs. C. Keerthi Bhavani, M.Sc., Dept of Chemistry



ANTARCTICA

Antarctica is the continent at the extreme southern latitudes of earth, containing the South Pole. It is surrounded by the southern ocean and divided in two by the Transantarctic Mountains. It is the fifth largest continent in area after Asia, Africa, North America, and South America. Antarctica is near twice the size of Australia. About 98% of Antarctica is covered by ice that averages at least 1.9 kilometres in thickness, which extends to all but the northernmost reaches of the Antarctic Peninsula. Antarctica is the coldest, driest and windiest continent and has the highest average elevation of all the continents. Antarctica is considered a desert with annual precipitation of only 200mm (8 inches) along the coast and far less inland.

There are no permanent human residents, but anywhere from 1000 to 5000 people reside throughout the year at the research stations scattered across the continent. Only cold-adapted organisms survive including many types of algae, bacteria, fungi, plants and certain animals such as mites, penguins, and tardigrades. The continent reminded largely neglected for the rest of the 19th century because of its host ice environment, lack of resources and isolation. The Antarctica treaty was signed in 1950 by 12 countries; 49 countries have signed off the treaty. The treaty prohibits military activities and mineral mining prohibits nuclear explosions and nuclear waste disposal, supports scientific research and protects the continent eco-zone. Ongoing experiments are conducted by more than 4000 scientists from many nations.

Together the Antarctica and Greenland ice sheets contain more than 99% of the freshwater ice on earth. The Antarctic ice sheet extends almost 14million square kilometres (5.4million square miles). The Antarctic ice sheets contain 30 million cubic kilometres of ice. Cold meltwater running off Antarctica's ice sheets and into the ocean could dampen the pace of global temperature rise, the ice sheet melts in high emissions by the influx of frigid water. This could knock as much as 0.4c of global temperature rise. The meltwater could have wider impacts on the earth's climate increasing the formation of Antarctic sea ice, enhancing drying trends in the southern hemisphere and reducing drying in the northern hemisphere. It could also cause warming of the ocean beneath the surface layer around the Antarctic coast. The frigid expanse of land at the earth's southern pole is covered by 90% of the planet's ice. If all the ice in Antarctica's ice sheets were to melt, it would raise sea levels by 190 feet.

Antarctica's ice sheet is melting far faster than previously thought, with more than 200 billion tonnes of ice flooding into oceans annually. About three trillion tonnes of ice has disappeared since 1992. The rate of melting has accelerated threefold in the last five years and may lead to sea rises of 25cm by the year 2070 which would have a disastrous impact around the world.

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ROLE OF BUSINESS IN ENVIRONMENTAL PROTECTION

Business is one of the most important entities in the society. Its decisions and actions have the potential of creating a change in society, both good and bad. Businesses are bound by ethics so that they do not misuse the trust of society. Moreover, business creates goods and services using the resources from the environment. The environment is crucial for society and businesses together. It is the responsibility of every business entity to conserve and protect the environment and contribute to stopping the environment from polluting further.

The industry is the major cause of air pollution as they emit pollutants which cause harm to public health and damage the environment by contributing to global phenomena such as climate change, greenhouse effect, and the Ozone hole. Effluent from industrial outlets is discharged into surface waters. Leakages from the fuel and energy industries, as well as industries involving hazardous materials are the main causes of land contamination. Hazardous materials are widely used in a variety of different businesses, including industry and agriculture. If not properly treated, stored, or dealt with, hazardous materials can cause damage to human health, environment, and property.

The environment is everything we depend on; whether it is the trees that give us oxygen, the land we live upon and the rivers that provide us with water. Business enterprises should take lead in solving environmental issues. It is their responsibility to check the consequences of their actions and also to protect environmental resources.

Manufacturing business must comply with the restriction of the use of certain hazardous substances such as Lead and Mercury. Manufacturers are prevented from placing products on the market with more than a certain amount of hazardous substances. Business organizations must ensure that any waste they produce as a result of their business operations is stored safely and securely, treated appropriately and collected for disposal or recycling by an authorized body to do so. The regulations of waste management require all businesses to separate the various forms of commercial waste for recycling plastic, paper, metals, and glass.

Many businesses have realized that going beyond environmental compliance makes good business sense and can help improve their long term success. Reducing energy consumption, minimizing waste, using raw materials more efficiently and preventing pollution can cut costs and improve efficiency, reduce risks and ensure that they are complying with the law. They can boost the reputation among customers, suppliers, investors and the local community. It also helps in increasing employee morale, making it easier to attract, keep and motivate staff and increase business opportunities by meeting customer demand for sustainable business practice.



All types of business organization should be aware of, and take responsibilities for conservation and protecting biodiversity. This not only applies to land-based industries such as farming and forestry but also to all factories, industries, offices and other business activities based on or near biodiversity areas.

The top management should be committed to cultivate, maintain and develop work culture for environmental protection and pollution prevention. This has to be shared by all the employees of all the divisions of the business. They should develop clear-cut by all the employees of all the divisions of the business. They should develop clear-cut policies and programs for purchasing good quality raw material, using the latest policies and programs for purchasing good quality raw material, using the latest policies and programs for purchasing good quality raw material, using the latest policies and programs of disposal and waste management and to technology, using scientific techniques of disposal and waste management and to technology, using scientific techniques of pollution control. The corporate develop the skills of the employees for the purpose of pollution control. The corporate should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should adapt to the laws and regulations passed by the government for the prevention of should passed by the government for the laws and regulations passed by the government for the laws

Going beyond business activities and taking care of the environment can bring business benefits. Now corporate have realized that business activity in an environmentally responsible way is not only a legal duty but also a responsibility. Over the past few years, stakeholders increasingly require corporate organizations to become more environmentally aware and responsible. Corporate Social Responsibility activities of corporate organizations affect their bottom line and the long-term success of their business. The environmental aspect of Corporate Social Responsibility had been debated over the past few decades and it's a hot matter of any business house. Earlier in the traditional business model, environmental protection has been considered only in relation to the "public interest", but now it's a part of the business. Governments of all over the world have maintained the principle of environmental responsibility for ensuring environmental conservation and management as well.

Dr. Reena Raj. M.Com., M.Phil., Ph.D., Head, Department of Commerce

New and beautifut things can grow in your life.... but only if you give it room and let go of the past.



GLOBAL CHANGE MANAGEMENT

Global warming is here, it's man-made, and it will cause serious problems in the years ahead. What's more, humanity has dallied so long that avoiding the worst impacts will now require extremely sharp emissions cuts—and possibly taking carbon out of the air.

The global climate is changing and will continue to change, in ways that affect the planning and day to day operations of businesses, government agencies, and other organisations. The manifestations of climate change include higher temperatures, altered rainfall patterns, and more frequent or intense extreme events such as heat waves, drought, and storms. Scientists have been aware since the nineteenth century of the planetary impacts of carbon dioxide (CO2) and other greenhouse gases in the atmosphere. In recent decades, concern has grown over the issue of global climate change caused by increased accumulations of these gases.

LIFESTYLE CHANGE

Bring about a change in consumer behaviour by means of emission-based pricing, increased awareness, and public and market-based initiatives.

EFFICIENCY

Increase efficiency in the transformation of energy and materials into products and services. This is particularly relevant in industry, buildings, transport and power generation.

Increase efficiency in the transformation of energy and materials into products and services. This is particularly relevant in industry, buildings, transport and power generation.

RENEWABLE ENERGY

Replace fossil energy in power generation, transport, industry, and buildings with renewable energy. Most important sources are solar, bio- and wind energy.

NON-CO2 GREEN HOUSE GAS REDUCTION

Reduce emissions of other greenhouse gases such as methane (CH4) and nitrous oxide (N20) from waste, industry, and agriculture.

LAND-USE CHANGE

Manage forests better to enhance their role as natural sinks of CO2.

CREATING A SUSTAINABLE ENERGY SUPPLY

Fossil energy currently accounts for 80 percent of world energy use, and energy use is responsible for 60 percent of global greenhouse gas emissions. Energy security is a key national policy goal for both rich and poor countries, and the reserves of cheap, fossil energy are both vast and widely distributed. This leads the IEA to predict that fossil fuels will play an even bigger role in 2050 than today.

That is, of course, if the business is allowed to proceed as usual. Immediate action to make energy supply more sustainable is needed. This means generating power from renewable instead of fossil energy resources, increasing power generation efficiency, and shifting to clean energy carriers, such as electricity, hydrogen, and liquid biofuels.

CUTTING EMISSIONS IN ALL SECTORS START USING CLEANCARS, TRUCKS, PLANES, SHIPS AND TRAINS

Transportation currently accounts for about 13 percent of greenhouse gas emissions, and most businesses as usual scenarios project a doubling of transport emissions towards 2050. This need not be; a transport system with near-to-zero emissions is technically possible. Key components are improved energy efficiency and switching to climate-neutral energy carriers. Hence, in our 2050 scenario, 175 percent of road transport is carried out by electric vehicles, the remainder runs on bio fuels and fossil fuels, all aircraft run on bio fuels, and ¼ of all ships run on hydrogen fuel cells, ¼ on bio fuels and ½ on fossil fuels.

PRODUCE FOOD WITH LESS CLIMATE IMPACT

Agriculture currently accounts for 13.5 percent of greenhouse gas emissions, of which methane from livestock and manure and nitrous oxide from agricultural soils make up the lion's share. While there are no technical 'quick fixes' to reduce agricultural emissions, improved agricultural practices, such as restoring cultivated organic soils and improving cropland management, can enable a 30 percent emission reduction compared to business as usual in 2050.

PRESERVE FORESTS AS NATURAL SINKS OF CO2

As growing vegetation binds large amounts of CO2, cutting down forests and letting grasslands turn into deserts (commonly co-termed 'land-use change') has a negative climate effect. While land-use change currently leads to a higher atmospheric concentration of CO2, intelligent land management, reforestation, and measures to stop the deforestation of rainforests can make land use change a net absorber of CO2 by 2050.

DISPOSE OF WASTE WITHOUT WASTING THE CLIMATE

Wastewater and landfills produce about 3 percent of global greenhouse gas emissions, in the form of methane and nitrous dioxide. Through a global adoption of readily available technologies, such as land-fill and sewage gas recovery, emissions can be reduced by more than 90 percent in 2050 compared to business as usual.

LIVE SMARTER TO REDUCE CLIMATE IMPACT

Increased climate awareness and higher prices on emission-intensive products and services will encourage people to change their daily lives to reduce ecological impact. For instance, they will travel more by public transport; eat food with a lower carbon footprint, and lower indoor temperature.

While such a lifestyle change clearly would reduce emissions significantly, calculating an accurate figure for 2050 is extremely complex. In our scenario, the emission reduction from lifestyle change is probably modest. In addition to direct emission reductions, more ecologically aware voters and consumers will put pressure on politicians and business leaders alike to ensure that the technologies with the lowest possible carbon footprint are deployed.

THE WAY FORWARD

The solutions necessary to tackle global warming are available today. Courageous political leadership is key to implementing the scenario. When world leaders gather at the United Nations Climate Change Conference in Copenhagen in December 2009, they need to develop a global policy framework that features:

- A pledge to reduce emissions by 85 percent by 2050, and a plan for how to achieve it.
 This essentially means setting a global cap on emissions and a schedule for tightening it.
- A radical increase in public funding for developing and demonstrating new climatefriendly technologies. While the needed technologies already exist, substantial efforts are needed to reduce costs and speed their implementation at large scale.
- A change in market conditions to make it financially attractive to protect the climate.
 In essence, essentially means giving climate-friendly technologies an advantage by putting a price on emissions and making the polluter pay.

Though it is impossible to bring back the same global construction in nature, we can improve the system of nature gradually using a few simple changes in our lifestyle. So, let us all join our hands to protect and recreate an efficient globe.



Ms. Nithyarathna.R. M.A., M.Phil., Asst.Prof (Dept. of English)



NATURE ALWAYS WEARS THE COLOURS OF THE SPIRIT. RALPH WALDO EMERSON.

Trees provide benefit to our health as well as the health of our ecosystem. As population increases, the destruction of forest also increases. Due to population explosion humans are indiscriminately harvesting forest for their needs. They are unaware that the trees are our life-givers. We get rain, oxygen and many of our needs from forest.

According to an estimate, 11 million hectares of forest are destroyed in the world per year. In India alone, one million of forest is being cut down, which results in the loss of an estimated amount of more than 16,400 crore trees each year.

Deforestation badly affects the productivity of land. It causes soil, water and air erosion, which results in seasonal changes, increase in soil heat, ozone layer depletion, etc,. As the existence of forest today is in danger, human life is also in danger. It is our duty to protect the forest which is in critical situation.

Trees serve as natural sponges. Those are collecting and filtering rainfall and releasing it slowly into streams and rivers. It filters sediments and other pollutants from the water in the soil before it reaches the water sources and also allows water to the centre of the ground. So trees are directly linked with drinking water treatment.

Water availability has direct impact on the health of forest and their inhabitants. Trees are made up of more than 50 percent water in order to grow and stay healthy.

Fresh water is the naturally acquiring water. It includes water in icebergs, bogs, ponds, lakes, rivers, streams and even underground water. Over 68 percent of the fresh water found in glaciers, 30 percent is found in ground water and only 0.3 percent is found on the surface of the earth as lakes and rivers. Fresh water is essential for human, animals and plants to survive.

At present, in India fresh water resources are decreasing day by day due to the global warming and climate changes. Due to this issue agriculture sector is affected severely. Several regions in the country are experiencing water stress. If we are not using the water sources properly, we will suffer under water scarcity in the next few decades. We should take necessary action to prevent water scarcity in future.

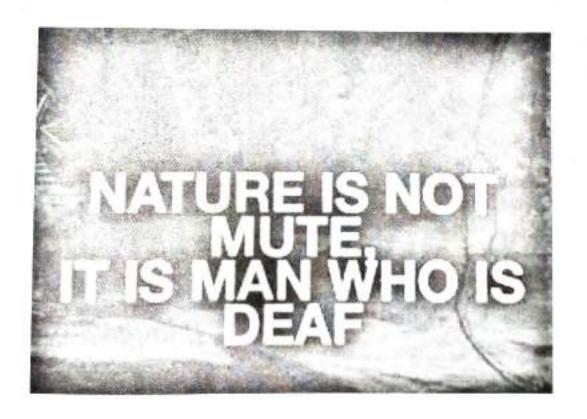


Soil is the earth's fragile skin that anchors all life on earth. Soil is the most precious resource to human. Fertile soil has an abundance of plant nutrients, minerals and organic matter. In addition, fertile soil has a pH range from 5.5 to 6.2. These biological qualities are necessary to support crop growth. It is a goal for every farmer and gardener.

High quality soil can ensure plants thrive and garden sustains itself for years. Instead of throwing grass Clippings, coffee grinds, tea dust and vegetable peelings in the trash, collect them compost it for plants. It provides plant micro organism to be healthy and also helps to keep harmful insects away. Instead of using chemical pesticides, use organic compost. By using this method, we can improve soil quality and grow plants healthy. Trees, water and soil are the treasures of our world, we must put back before they are completely stolen for our children's future.

"A nation that destroys its soil destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people"- Franklin D Roosevelt.

V.S. Gladio Shilpa Vince, M.A., M.Phil., Asst.Prof (Dept. of English)





REVIEW OF "WHERE SHALL WE GO THIS SUMMER" BY ANITA DESAI

ABSTRACT:

"Where Shall We Go This Summer" is a book written by Anita Desai based on the theme, escapism. The story revolves around Sita, who longs to return to her childhood residence named Manori. Her craving for getting back to the island is because of the hypocrisy of her middle class life in Bombay. Sita gets tired of the stressful city life. She yearns to get those days back in her life, when she used to stay connected with nature.

SITA'S DISTRESS:

The book is segregated into three parts, the first part being the contemporary scenes. Sita is a middle aged woman who had had four children. When she becomes pregnant for the fifth time, she revolted with her husband Raman, saying that she didn't want to have the baby. She considers it a catastrophe to give birth to a child into this world filled with destructions. She doesn't want her child to grow in a disgraceful place. This is much evident when she says,

"...what I'm doing is trying to escape from the madness here, escape to a place where it might be possible to be sane again."

Sita doesn't intend to abort the baby that she bores. Rather, she wants her baby to be unborn. She considers Manori as an island of wonders. Therefore she goes there, on a pilgrimage to beg for the miracle of keeping her baby unborn.

BACK TO PAVILION:

One day Raman asks Sita "Where shall we go this summer?" for which she promptly replies that she wishes to go to Manori. The circumstance and Sita's stubbornness forced him to agree with it. As per her decision, Sita along with her two children Karan and Menaka go to Manori. There, she is reminded of her past, where the story shifts to the second section. The next section comprises of the encounters of her memorable childhood. In this section, the intricate details of Manori are explained in depth. The splendour of nature in Manori is beautifully depicted in the lines,

"It was very early in the morning; the fishing fleet that had set out before dawn could still be seen, riding on the billowing line of the horizon, pulled along swiftly as by a giant up into the opal sky."



TIME TRAVEL TO SITA'S CHILDHOOD:

After her mother left them, it was Sita's father who raised her, her sister Rekha and brother Jivan. Her father was looked upon as a saint among the people, because of his super-humanity. As days rolled by, her father passes away due to illness. Then her sister starts work at All India Radio (AIR). Jivan, her brother, disappears after he gets to know about his father's demise and later becomes a headline maker and turbulent trade union leader. Then Sita gets married to Raman and moves to Bombay. The tranquil environment in Manori was an exact contrast to the frenzies in Bombay.

"She saw that island illusion as a refuge, a protection. It would hold her baby safely unborn, by magic."

Sita was not able to accept this new lifestyle of hers. Her heart always ached to go back to her utopian land- Manori. After all these flashes of the past, the story steps into the final section.

CLIMAX OF THE STORY:

This section is the conclusion part. Sita makes attempts to persuade her children to love Manori. But unfortunately, all her attempts go in vain. For instance, when Sita praises the beauty of the village pond that looked viscous, Menaka pinched her nostrils and said, "Oh will they really drink that stinking water?" Her children are acclimatised only to city life and their minds are resisting to accept the dull and boring lifestyle. But their tolerance level gets drained out at a point of time. Karan writes a letter to Raman, asking him to take them back to Bombay. Raman reaches Manori in order to take them back. Does he succeed in convincing Sita and returns back? Will Sita accept her city life or decides to lament about the fate throughout her life? Does she give birth to her fifth child? Or manages to make the baby unborn?

These questions are answered towards the end of the story. One must read the book to get to know the nuances of the story.

NATURE'S APPEAL IN THE STORY:

From the starting pages of the book till the end of the book, Anita Desai has given lots of elements about nature. In fact, the core objective of the story is explaining the significance of nature in one's life. The protagonist's intense love to nature is the theme that is carried throughout the story. The stupendous descriptions of numerous natural landscapes are the silver lining to the story.

"They walked towards the sky which was a vast pink Japanese lantern swinging low over the sea in the great mass of surrounding darkness."

In today's hustle-bustle, nobody has time to hold on and witness beauty of nature. Hence, this book would take the readers on an adventurous ride to pause and admire the intoxicating beauty of nature.

E. J. Keerthana I B.A.English

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SAVE NATURE TO SAVE FUTURE

Nature is neutral. Man has taken from nature the power to make the world a desert or to make the deserts bloom, "There is no evil; only in man's soul!"

We should care our precious nature; make it peaceful; keep it clean and prevent it from the destruction. Nature is the most precious gift given by God to us only to enjoy but not to harm. For our selfishness, we are destroying the trees and water resources. The nature is not selfish because it provides us with so many benefits. In this modern technological world, there are lots of inventions that are getting launched daily with its advantages and disadvantages to the nature.

It is our responsibility to save the declining assets of our nature to make the existence of life forever possible on the Earth. The ecological balance was broken by human beings centuries ago, but now we can see the results of the deforestation. Global warming and extinction. Newton's third law states "For every action there is equal and opposite reaction". Trees are being cut continuously and planted rarely resulting in harmful condition taking its tool towards such as pollution, global warming and ozone depletion.

"Either you protect me or not, I am always there toprotect you. Sincerely: Nature".

Each and every human being should be made to plant at least one sapling in his/her life time. A single tree can be a sustainable source of fuel, food, animal fodder and timber and at the same time absorbs much of carbon dioxide.

Due to the pollution factor increased in the world, the ozone layer has got many of the hazardous holes, of which the animals and the plants get evacuated and destroyed. Water pollution is also one of the reasons for destroying nature.

"Don't let Environment be dirty if you really need a healthy life."

If we do not take any step towards nature conservation, we are keeping our future generations at danger. We should understand the worth and value and try to maintain its natural shape and beauty.

In conclusion, we can say that nature is the best gift, God has given mankind. We must appreciate this gift and preserve it.

"The woods are lovely dark, and deep but I have promises to keep and miles to go before I sleep" -Robert Frost



Save the Environment

Save the Earth.

EARTHWORM: NATURE'S PLOUGHMEN

Farmers are thought of as tending the soil. They produce food and are sure that the environment is able to sustain future generations. It means that precious resources like soil and water should be carefully tended.

Earthworms assist in the care and long unity of the health of large number of soil varieties. They help to aerate soil. It helps the rain water and nutrients get soaked into the area where the plant roots are, unless they are farmed with no-till or other conservation practices.

Another help that earthworms do is to help the soil in breaking down organic matter - the parts of plants that are left in the field. It also helps to build the fertility of the soil and retain organic matter. Hence they are termed as NATURE'S PLOUGHMEN.

> H.D. Ishwarya III B.Com.,





PINNACLES TURNING AS POINTS

Sparrows are the beautiful, tiny brown birds, which live as one in our family. Sparrows are a species of birds than can be easily recognised because it lives very close to humans. One of the reasons why they adapted to the life in human settlements is constant supply of food.

Those days are gone, where people wake up by the chirping sound of the sparrows, feeding the house sparrows as one among their family, kids playing and enjoying with sparrows. Urbanisation evolved and depleted the sparrows. Selfish humans cut down all the trees and built luxurious villas for them. They don't recognise that they destroy the sparrow's small shelter. People don't even care of polluting the air around them, not recognising that they cause harm to the sparrows. The mobile phone towers are a major reason for the sharp decline in its population. It is all the human's selfish activities that lead to the disturbance in the eco system.

Sparrow came to us for the food grains and seeds. Those tiny birds trusted us, but we ruined and became a threat for its life.

Now after recognising the need, let's take crucial action. The world sparrows Day is observed on march 20 every year. Their theme is "I Love sparrows".

Our responsibility is to bring back the little bird by making availability of food grains and water especially during summer. Try to minimize Pollution as much as possible; minimise the use of mobile phones to protect yourself and the environment.

"Better a sparrow, living or dead than no birdsong at all"

The faith in humanity must be restored, let's turn the point, the nadir into a massive pinnacle. Let's together bring back our sparrows, and create harmony.

VISIBLE NATURE BY INVISIBLE GOD!!

Nay!! Nay!! Nature brings joy to the soul. It is quite true that nature is the best teacher. Everything in nature is so sumptuous and flawlessly out of this world. The infinite galaxies, solar system, the sun, planets and never- ending forms of life echo the glory of God. Rose is the queen of all flowers, they are actually pretty in their structure; the thorny stems admonish us that life is not twenty- four carat roses but also have some thorns which is essential part of life.

Orating on seasons, autumn fall is the best teacher in our life to teach us on the gift of letting go. In letting go life, we come to grasp that there is another life unfolding before us...

"Just keep marvelling at all these gifts of our creator!"

Where they came from and why, Oh! Why do I now treasure them?

Nature indeed is God's work of ART!!

Nature illustrates us all the life - transforming lessons of greatness, beauty, patience, uphill battles, abundance and generosity.

The Sun teaches us to shine and lighten the world; the rivers teach us the tidings to move on, overcoming all obstacles. A person also moves forwards his goal like a brook.

The trees teach us to give and offer everything to the world and people. Flowers teach us to spread aroma of our good deeds. Nature is the most beautiful creation of God which provides shelter to all the living creatures on the Earth. It is eternal we are born in the lap of nature and blend back with Nature for our very existence, for if it was not for nature we would not have got the gift of our existence even, we would not have created to admire the nature. Life on the Earth is the greatest gift of nature and it can be found here in several hues and contours.

"As nature gifts us so many utilities for life, it deserves to be protected".

All this that we see is for us to enjoy. We exist with nature which has provided such immense variety to live with, appreciate and enjoy. All these are finally the gifts of nature to man the highest form of life in this world. The creatures in the air and sea and that live on land are all for us to enjoy in some way or the other, as we are the noblest of nature's creations.

Thus the gifts of nature are immense and more we see of them, the more we are apt to admire the creator, Oh! My good Lord!

Noorul Huda II B.Com.,



TREMOR

Tremor is also known as earthquake. It is the shaking of earth's surface caused due to the sudden release of energy in Earth's lithosphere that creates seismic waves. They range in life from those that are so weak, that cannot be felt to those who are enough to toss people around and destroy their lives. The seismicity is the frequency, type and size of earthquakes experienced over a period of time.

Generally the word Earthquake is used to describe any seismic event - whether caused by human or natural, they are mostly caused by rupture of geological faults, but also by other events such as volcanic activity, land sliders, nuclear tests, mine blasts.

An earthquake's point of initial rupture is called hypocentre, which is above the epicentre, the point at the ground level.

There are 3 types of faults which lead to tremor. They are normal, thrust reverse, and strike slip.

Occurrence of these faults is as follows:

NORMAL in areas where the crust is being extended, eg: divergent boundary.

THRUST (REVERSE) - in areas the crust is being shortened. eg: convergent boundary.

STRIKE - SLIP - These are steep structures where the two sides of fault slip horizontally past each other, eg: transform boundaries.

It is estimated that around 500,000 earthquakes occur each year; larger earthquakes occur less frequently, minor earthquakes occur nearly constantly around the world in places like Chile, Peru.

An earthquake of 3.7-4.6 Occurs every year and an earthquake of 4.7-5.5 occurs every 10 years and an earthquake of 5.6 or larger occurs every 100 years; Since 1900, there have been 18 major earthquakes (magnitude 7.0-7.9).

We think most earthquakes are caused by movement of the earth's tectonic plates. Human activity can also produce earthquakes for main activities contributing to this phenomenon like:

- Storing large amount of water behind dams
- Drilling and injecting liquid into wells
- 3. Coal mining and oil drilling.

K. Heba Kousar



SAVE RAIN TO BE AWAY FROM PAIN

Rain water harvesting is the method of collecting rainwater. It is of big importance to the people in the less rainfall areas. They can continue seasonal crop harvesting using collected rain water when there is lack of regular water supply.

It can be purified to make it drinking water which is used for daily application and even utilized in large scale industries.

Water is the elixir of life. Though 2/3 of the world is covered by sea water the potable water is just 1% of water available on this globe. So Rain water harvesting is must,

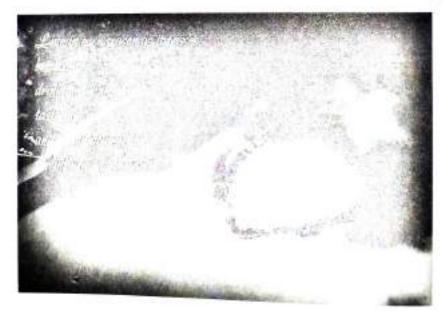
Water! Water everywhere! Not even we have a single drop to drink!!!

When rainfall occurs occasionally, small dams have to be built in different places to hold rain water which help animals to face severe droughts in forests.

Tamil Nadu is the first state in India to implement rain water harvesting scheme. So, let's thank to the effort of our Government. Every drop of water is too precious so save it. Those who initially criticised the Government's initiative praise now. The wells which had tasteless water have now changed drastically. After a little bit of rainfall, the water level and the taste of water has improved substantially. Harvesting rain is like repairing Mother Earth what we have been robbing from her for centuries. Let us continue to harvest rain to sustain plants kingdom and human race on the Earth.

Save Water! Save Future!

Srilekha .V I B.Com.





THE INTESTINES OF THE EARTH!

The density of earthworms in the soil is considered to be a good indicator of a healthy soil because they improve many soil attributes like structure, water holding capacity and moisture content.

Elmer in 2009 published findings that earthworms suppress soil - borne diseases in different vegetables nearly to 70%.

Earthworms are great "soil engineers". As they move through the soil, earthworms loosen and mix it up helping to aerate and drain it. This brings nutrients to the surface, making the soil more fertile and helps prevent flooding and erosion.

Earthworms are barometers of soil health and toxicity.

"Earthworms in appearance are a small and despicable link in the chain of nature. Yet if lost, would make a lamentable chasm".

Worms helps to increase the amount of air and water that gets into the soil. They break down organic matter like leaves and grass into things that plants can use when they eat. They leave behind castings that are a very valuable type of fertilizer Earthworms are like free farm help. Earthworm is called farmer's friend because it makes soil porous.

BENEFITS:

By their activity in the soil, earthworms offer many benefits like increased nutrients, better drainage and a more stable soil structure all of which help improve form productivity. Worms feed on plant debris (roots, leaves, grasses, manure) and soil.

Earthworms are known as farmer's best friend because of the multitude of services they provide that improve soil health and consequently plant wealth.

Earthworms are important to farmers and gardeners because of plouging bread up the soil, allowing air and water to seeds and the roots of plants. Earthworms act like tiny ploughs when they live in a garden. As earthworms move through the soil of a garden, they make tunnels. There are important nutrients that help garden, plants grow and stay healthy.

Farmers can encourage earthworms by supplying large amounts of organic material.

V. Bindhu priya. II B.Com.,



VANISHING OF "PASSERIDAE (SPARROWS)

Scientific name:- "Passeridae"

Life span: - 3 years

"You spread your wings and move high,

O birds! You design the beauty of the sky"

Sparrows are the most familiar bird in the world. It has shared 10,000 years of relationship with mankind. They are a family of small passerine birds. Sparrows are the symbol of joy, simplicity, creativity, friendship and protection. This looks tiny but a very powerful bird.

The decline in sparrow population was the first recorded during the brutish industrial revolution due to the polluted atmosphere.

A new study has warned that sparrows are "alarming" declines in their numbers. The worldwide disappearance of sparrows is a striking signal of the impact of human environment transforming activity.

Before urbanisation sparrows were considered as the "farmer's best friend" It helps farmers by eating all the insects in the farmland when the crops are harvested.

What is happening to that tiny species? Why are they vanishing? Where are they going?

The massive changes in the life style of humans, the rise of global warming, the increase in greenhouse emission area effecting the avian species of the world; a sudden rise in the Electromagnetic radiation from all phone towers and the use of indoor wireless devices have led to mass exodus of the birds.

"We should all be worried that the most common species of bird are declining rapidly.

The sparrows with unique forms, behaviour and songs, add an important component to the joy that humans feel in experiencing nature.

"Chewink! chewink! A sprightly sound spreads its wings and elders around Ringing across the bushy ground Beside my window it flutters down"

Neha Anjum .G



NATURE'S CRY

No value to the sky
If there are no stars
No value to the flowers
If there is no beauty
No value to life
If there is no nature

Nature is smiling
The Clouds are gathering
Farmers are admiring
Mothers are rejoicing
Paper boats are sailing
But a few are drowning
Oh! I am now realising
It is raining!!!
But Now,
Nature is crying

We are destroying!!!
Nature is beautiful all around
Shady trees, birds chirping all around
And the blue sky above the ground
We need trees and fresh air,
But to fulfil their need we don't care
So we should be responsible.



NATURE, THE GIFT OF GOD

Nature is the gift of God, but the human beings are destroying nature. Always natural products and natural ingredients are the good stuffs for human but nowadays we use only chemicals. In ancient days, people used only natural ingredients like fruit for hair growth and for black, shining hair but nowadays we use many shampoos with non preferable, unsafe chemical mixed shampoos. It contains ammonia which causes many defects to human hair and also for brain. People love pizza, burger to eat which they believe that is not harmful for their health but after a few more months they begin to suffer.

LOVE THE NATURE

If we love the nature, we should know what the natural stuffs are in the Earth. Some people don't know to distinguish between natural and chemical stuffs.

Love everything nearby you. Artificial and hybrid varieties combined with chemicals are given lot of preference in the present world. It is dangerous and life threatening.

Nature, Nature, Nature In 1950

Nature, Nature, chemicals In 2000

Nature, chemicals, chemicals In 2015

Nature, chemicals, chemicals in 2019

Chemicals, chemicals In 2025

How are we going to save this world ????

NATURE IS DESTROYED:

People use chemical products even in vegetables, cooking oil. Plastic is also a stuff which affects human health and nature. In 2012, many people in America were affected by sunlight and skin diseases. Plastics are harmful for trees because human beings use and throw plastic cups in empty lands; then it is non-biodegradable. It takes 100 years to degrade. When it goes inside, it stops the roots of the trees to get water, so trees are unable to grow and they die. So this is what is happening to our Earth.



One day there may not be any fresh air. So we need to take care to make this planet happy everywhere.

SAVENATURE:

If we want to save nature, first we should stop using plastic and chemical products. In this world, nothing is possible within a day but it is possible one day. So the people should stop using them; then our Earth will be saved from all these stuff.

CONCLUSION:

The ancient life was better and healthy. Now they are creating many things to destroy our God's gift nature. I think mostly in 2050, people will not eat food. For food, they will swallow a little tablet; for water they will swallow another tablet. Scientists are finding for another Earth but however it is impossible to find another Earth like our loving mother Earth, atleast we should start to save our Earth from now onwards.

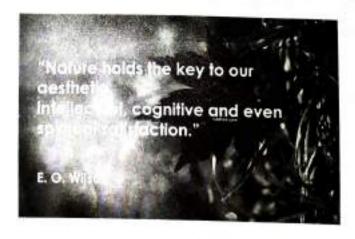
So let us promise,

I will not use and eat any chemical products. I love my Earth a lot. So I will save my Earth.

- S Start loving Earth
- T "Trust me" nature
- Order Earth to give more vegetables and fruits
- P Plant many tree.

Stop using chemicals, start loving nature

J. Jayakrishnika II - B. Sc Chemistry





NATURE - MY BEST FRIEND

Nature is the most beautiful creation of God which provides shelter to all the living creatures on the Earth. We are born in the lap of nature and are blended with it. Nature is a home for all which gives everything it can, but never asks anything in return. It is the best inspiration to all; without nature life is beyond imagination

It gives the valuable oxygen to breathe, food to eat and shelter in its arms but, we are misusing it. It helps in every aspect of life.

People become more selfish as they forget about Mother Nature for their selfish concerns like they cut down forests, killing birds, and animals.

Nature is not only pleasant and beautiful in appearance, but also a fabulous doctor which gives natural medicine. Ayurvedic medicine treatment is ancient and the only methods of curing the diseases before allopathy and treatment has the same demand because of no side effects with the medicine and it is completely made up of natural resources.

Every change in the nature has its own power and uniqueness provided by the God. Season to season, sea looks bright blue in the morning; sky changes its colour all through the day to pale; thus our moods also get changed according to the nature.

Nature has some powerful transformation which changes our mood and behaviour accordingly.

Nowadays, everyone has less time to enjoy nature. In the increasing crowd we forgot to enjoy nature and improve health. We started to use technological instruments for our health fitness. It is very true that nature has power to nourish us and gift us forever. Most of the writers have described the real beauty and advantage of the nature in their writings. Nature has ability to make our mind tension free and cure our diseases.

When I am depressed, I like to spend time with my best friend which is nature. It makes me to keep smile on my face and says that I will be with you and make you to feel good always so, nature is my best friend the best gift from God.

A. Rakshitha III - B.Com (CA) 'B'



TINY EARTHWORM; BIG IMPACT

Earthworms are species of worm that live in the soil. There are three main ecological groups of earthworms based on habitats. They live in the upper layer of the soil and burrow deeply into the soil. They are hermaphrodite, which have both male and female reproductive organs. They feed on live and dead organic matter. Baby worms are not born. They hatch from cocoon smaller than a grain of rice. Earthworm is made of about 100 - 150 segments. Their population in soil depends on the Ph, temperature aeration, texture and moisture of the soil. They thrive well in neutral to slightly acidic soil. There are approximately 2700 different kinds of earthworm. In one acre of land, there can be more than a million earthworms. Earthworm improves soil health and consequently plant health. It can also provide structure, water holding capacity, moisture content and also increases nutrient availability and degrade pesticide residues. Research indicates that earthworm composed organic matter, also called vermicompost which has disease suppressive properties. Earthworm suppresses soil borne disease in different vegetables by nearly 50-70%. The digging done by earthworm leads to aeration and drainage of the soil. In addition, Plant nutrients are released from harvest residues that have passed through the earthworm's intestines.

S.Sheeba
II B.Sc Chemistry



SAVE WATER, SAVE LIFE

INTRODUCTION:

At the rate in which population of India is increasing, It is said that India will surely replace China from its number 1 position of the most densely populated country of the world after 2030. This will lead to high rate of consumption of most valuable natural resource, water which results in augmentation of pressures on the permitted freshwater resources. In order to conserve and meet our daily demand of water requirement, we need to think for alternative cost effective and relatively easier technological methods of conserving water. Rain water harvesting is one of the best methods fulfilling those requirements.



WATER WARS: NATIONAL PROBLEMS FROM A REGIONAL PERSPECTIVE

There have been inter - state water disputes ever since India gained independence. It includes the disputes between Punjab, Haryana, and Rajasthan over Sutlej - waters. The most glaring example is the Kaveri water tribunal to sort out the claims of Karnataka, Tamil Nadu and Kerala. If concerted proactive approach is made, many water problems could be solved. So, in this situation rain water harvesting is the only way to solve these problems.

SOCIO- ECONOMIC BENEFITS TO RAINWATER HARVESTING:

COUNCILS, COMMUNITY AND INDIVIDUALS:

Rainwater harvesting significantly reduces potable water use. A well designed house will save about 90,000 litres of rainwater each year, particularly in the toilet and washing machine which are year round uses.

Rainwater harvesting reduces storm water peak flows and total volume. This improves water quality and waterway health. Rainwater harvesting is therefore climate change resilient for both droughts and intense rain events.

Rainwater harvesting delivers numerous benefits at local and regional levels. Making houses more affordable, keeping creeks and rivers flowing, reduces local flooding, especially in built-up areas provide a reliable supply of water in drought.

HARVESTING RAINWATER MUST FOR GOVT. BUILDINGS

It has become mandatory for new buildings constructed by the state government to install rain water harvesting system. The water stored in the percolation well will be used for maintaining gardens and for other purposes.

A notification to this effect has been issued by the state roads and buildings department, which has already asked the district authorities to install the system in 118 government buildings.

It is learnt that the government has sanctioned a sum of Rs.25,000 for each of the 18 buildings identified by the department.

WATER HARVESTING IN DIFFERENT PARTS OF THE WORLD

In China and Brazil, rooftop rain water harvesting is practised to provide drinking water, water for irrigation, for livestock and to maintain the water table.

In Bermuda and Us, all new buildings include water harvesting are sufficient for the residents. In UK, rain water tanks are used for rain water harvesting. In Australia rainwater harvesting is typically used to supplement the reticulated mains supply.

C. Ramya

B.Sc Chemistry



ALL NATURE SEEMS TO SPEAK THE WORDS OF LAND

INTRODUCTION:

Nature is the most precious and valuable gift from God to us. Nature makes our life easy by providing all the required resources for daily living. We should be thankful to nature for helping, hearing and caring us like a mother.

We are thinking nature is just ocean and forest for our selfish benefits but, Nature is a God given gift to us. Nowadays people don't care about the nature, they have become selfish. They don't plant trees, but they expect rain.

If we reduce usage of natural resources by human beings we can make Nature, a better resource among us.

Let's see how it happens by three ways:

How:- By reducing the usage of vehicles; It will not affect the air and the health of people.

What: By planting many trees around us, we can get pure oxygen from the nature.

Why: Nature is not only the surrounding, it is also about all the resources what we have.

These, are the gifts by god, but now they are being destroyed by humans who are behind their works.

NATURAL RESOURCES:

Man's three basic and important needs are food, water and shelter. Food to eat, water to drink and wood to build house. So, it is not just trees and rivers.

We are not able to survive on the Earth without the nature like air, land, water, fire and sky. Due to technological advancement in the human lives, our nature is declining gradually which needs a high awareness to keep it in balance and to conserve nature's assets.

People don't care about the environment. These may also affect the future generation.

POLLUTION:

Pollution is caused by two wheelers and the vehicles.

Pollution is created due to wastes thrown in water

Dumping of wastage in soil



Deforestation

Mining of coal

If it is continues the earth will become bald.

WHAT TO DO TO PROTECT THE NATURE THE GOD'S GIFT:

Do not use plastics even the Refill pen is also a kind of plastic.

Plant more trees in your surroundings.

Use Bicycle to travel (or) the public Bus.

Throw the waste by segregating the dustbin wastes as bio-degradeble and nonbio-degradable wastes. We should protect and please the Nature. If natural resources disappear, we can't create new resources for our living. It is a precious and valuable gift from the God. Keep it safe.

EVERYTHING GIVEN BY GOD IS NATURE

V. Nithya I B.Com (CA) 'B'



THE SUPPORTING CYLINDER OF THE FARMER

Earthworms, the agriculturalist's friend, basically live beneath the soil. The soil where it lives is always wet, because they cannot survive as their shell always needs to be moist. When these worms live beneath the soil, they make the soil more breathable, more air flows underneath. It consumes all biodegradable materials and converts it into rich manure. Farmers use earthworms for making manure. This process is called vermicom posting. They are called as annelida worms. They are ecofriendly organisms. They aerate the soil and degrade organic matter turning it into plant food. It also loosens the soil and results in a plough condition similar to a ploughed field. Earthworms digest the soil and their waste products are valuable to the farmer because they are a very good source of nutrient for plants. They also have important beneficial bacteria. They make the softer and it is easy for the plants to grow in it. Their excrate make the soil more fertile. They dig big tunnels and it allows the oxygen and water to reach the roots of the plants easily.

Sangeetha. K.M II B.Sc. Nutrition & Dietetics



TEMBLORS - THE TECTONIC PUZZLE

The technology has paved way for solving and finding lot of unsolved mystery in the world, I am one of those discovered by you, but I am confused that why I was turned as threat to all the people. Many of them are unaware of me so I am here to resolve my puzzle through this Article.

Here you can find out who I am, what I am made of, how you play hide and seek with me and win me and safe guard your precious life.

WHO AM 1?

Everyone will be eager to know about a person or a thing which is closer to heart or something that threaten others; I am second kind of thought. I really feel guilty of introducing myself to you, but I find no other go; I am in situation to help you all in solving puzzle game so that you all will be safe and if I lose you will win.

You cannot stop me when I happen but you can avoid, I guess you might have solved the first step of puzzle in finding me out. Yes, I can hear your heart beat in knowing my name. I am the reason for loss of many lives and broke some heart and lands too; I am none other than earthquake.

WHAT MADE ME?

Hope you people all should be good, keeping all our life in concern, I present how earth quake occurs, where it occurs, causes of it and how we can be alert during this period.

The surface of earth called the "crust" is not one solid piece. It's more like a 20 piece puzzle. Earth puzzle piece is called a "Plate". The plates constantly move.

Earthquakes happen when a plate scrapes, bumps, or drags along another plate. People don't feel most of them because the quake is too small, too far below the surface, or deep in the sea. Some however are so powerful they can be felt thousands of miles away.

WHY AM I CLAIMED SO ADVERSE AND AGGRESSIVE?

A powerful earthquake can cause landslides, tsunamis, flooding, and other catastrophic events. Most damage and deaths happen in populated area due to structured collapse, fire and other dangers.

Apart from natural calamities, earth quake is also caused due to human activities like storing large amount of water than limit, drilling and injecting liquid into wells, and by coal mining and oil drilling.



SOME PLACES WHERE I WAS VIOLENT:

Nothing was in my control in many places which led to a catastrophic damage of Nothing was in my control in filedly personal property and livelihoods. In Nepal, an earthquake of 7.8 magnitudes had hit building, property and livelinoous. If the part 1934, on 26th December 26, 2004, an earthquake followed by tsunami had killed around 15000 Indians.

FIRST SAFE GUARDS DURING EARTHQUAKE:

A seismograph records the pattern of shock waves caused by an earthquake. The Richter magnitude scale is based upon the amount of energy released by the rock movements.

PREVENTIVE MEASURES TO SAFE GUARD:

As man has no control over earthquakes they must be considered as unavoidable events. The damage they cause can, therefore, only be limited by taking long-term security measures.

Here I can list some measures to be taken before and after Earthquake,

Respect seismic building standards and any laws on land development and environmental projection especially with regard to building restrictions or bans,

If outside, be careful of collapsing building and falling materials and infrastructure.

If inside, make your way to safe place as quickly as possible under desk or table.

"Occurrence of Earthquake or secondary disasters neither lies fully on nature nor humans; We should be prepared for everything which is anticipated earlier when the event occurs suddenly."

> Haritha R. II. B.Com (CA) 'A'





NO REGION FOR REGIONAL BIRD

"A sparrow is to city what a tiger is to the forest". A major reason for decline of sparrows is due to loss of habitat. Sparrows are widely distributed in the district Hoogly, West Bengal, India but for past few decades. This recent decline around the world has put them in the list of International Union for the Conservation of Nature (IUCN). In order to draw the attention of government agencies and scientific community, more conservation measures are adopted. Based on the study and observation, sound pollution and availability of food are not responsible for decline and also modern infrastructure, does not give space for nest. Rise in pollution levels and pesticides are other reasons for disappearance of sparrows. The infectious diseases 'SALMONELLA' is commonly found during winter and spring. The spread of disease may be promoted by the close proximity of birds. As disease spreads, the individual bird lacks immunity which makes them more prone to disease especially parasitic infection. Another reason for decline is environmental pollutants. Many toxic chemicals are added to the environment which is very harmful for all living organisms which creates congestion especially chlorinated hydrocarbons and polychlorinated biphenyls released in the environment.

> Girija Vincent II B.Sc. Nutrition & Dietetics





WATER - THE BASIS OF LIFE

INTRODUCTION:

Water is one of the most precious gifts given by nature to the human. Life on the Earth is possible only because of water. Water is the most essential source of life on the Earth. As we need water in every activity like drinking, cooking, bathing, washing, agriculture we must conserve such valuable water instead of wasting it. One of the methods to conserve is rain water harvesting.

WATER-THE NATURE'S GIFT

CONSERVATION:

Conserving water is very much important for our future need and also to our next generation. Rain is the major source of water harvesting. It is the process of collecting rainwater and storing it into tanks. The water which flows on the roof of the building is collected through pipes to the ground or to the tanks to preserve the rain water. This stored water can be used later for various purposes.

"Save the water of rain and

Don't let it to drain"

By practising this process, our ground water table level will be increased, so that we may avoid lack of water. The purest forms of water can be also used for drinking and mainly agriculture may be carried out smoothly without water scarcity.

"Save rainwater today to enjoy your tomorrow on the Earth"

Rainwater harvesting plays a major role in protecting water and also it helps to increase ground water table.

It helps in improving the water quality in aquifers. By preserving rain water, we may reduce soil erosion. Harvest the rain water to remove the thirst of earth.

Hence, without water, life on the earth is impossible and it is very important for human survival.

Everyone should save our nature's gift - water for future generation we should not spoil the available natural water resources like lakes, rivers to satisfy our need. And we citizens must pay attention to preserve water.

N.Akshaya.



SAVE RAIN TO BE AWAY FROM PAIN

INTRODUCTION:

Rainwater harvesting is a technique of collection and storage of rainwater in to natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers. One another type of Rainwater harvesting is Roof top harvesting.

The reasons for using Rainwater harvesting systems answer few questions:-

What: Rainwater harvesting will improve water supply, food production, and ultimately food security.

Who: Since rainwater harvesting leads to water supply which leads to food security, this will greatly contribute to income generation.

BENEFITS OF RAINWATER HARVESTING:

The Rainwater that falls on our roof and property is essentially free. All it takes is a method to harvest in to tank or cistern for later use.

Collecting rainwater that falls naturally in the community can reduce the need for imported water.

WHY IS WATER HARVESTING IMPORTANT?

Importance of rain water harvesting rainwater is a renewable, sustainable and a high quality water source for your home.

Rainwater harvesting is so important for lots of different reasons. It has now become extremely common with anyone who's looking for a free, easy and more environment friendly way of using water in their home or commercial premises.

ADVANTAGES OF RAINWATER HARVESTING:

Reduces Demand on Ground water:

Sources of ground water are increasingly being strained in many areas throughout the world. Harvested rainwater can be stored and then used during times of drought and when the ground water supplies have been depleted.

CAN IMPROVE PLANT GROWTH:

Rainwater harvesting can also be used to improve plants and gardens. Using harvested water can also be used to improve plants and gardens. Using harvested water can flush the salt build up from plants and soil. It helps to grow many plants.

CONCLUSION:

Rainwater harvesting is a viable option to supplement city water for non-potable human uses, such as irrigation.

The simplicity of the model and the low overall costs to install the system makes rainwater harvesting easily translatable for use in developing regions.

"Don't let Rainwater run away,

Let it run to the Earth again".

A. Devika Sherlin II B.Com (CA) 'A'



A VOICE FOR THE SPARROWS

It has been long time before we have heard the chirping sound of the sparrow. It is due to the decline of house sparrows, we have lost the morning lovely music. Small, plump, brown, short tail nosed sparrows are associated with human habitation and thus they lend to stay in the regions with structures built of many holes under the tiles. These structures provide shelter and food to both adult sparrows and insects. Due to improved modern buildings, the homage of the house sparrows is destroyed. This has become major cause for decline of house sparrows. Apart from nesting and finding foods, there is a peculiar behaviour in sparrows known as, dust bathing. This dust bathing is done in small pits which keep the sparrow's feathers clean and skin free from parasites such as salmonella which makes the sparrows prone to various diseases. It has now become impossible due to the modern buildings.

The food is also a factor which regulates the numbers of House sparrows. The competition arises when two or more species feeds on the same food. The collared dove and wood pigeon are regarded as the competing species of the house sparrows. After a number of hypotheses, it is proved that environmental pollutants as the reason for the decline in urban-suburban habitual. Ornithologists have found that the zinc and lead concentration in the insecticides and pesticides as the reason for the liver disease and even the death of the house sparrows. In order to protect them, farmers are advised to use organic insecticides such as panchakvya, dasakavya.

House sparrows usually stay in places where illumination level is low like 30-45. Due to usage of electromagnetic waves for communication, the habitats of sparrows are disturbed. There are also other pollutants such as methyl nitrate, which causes death to sparrows. Thus steps must be taken to recover this endangered species which is placed in the red data book of international union for the conservation of nature. And then March 20th is designated as the world house sparrows day. The reason for celebrating world sparrow day is not only to commemorate the event for a day, but also to use it as a platform to highlight the need to conserve sparrows.

A. Arthi Sri I B.A. English



EARTHQUAKE DAMAGE

An earthquake (also known as a Quake, tremor (or) temblor) is the shaking of the surface of the earth, resulting from the sudden release of energy in the Earth's lithosphere that creates seismic waves. Earthquake can range in size from those that are so weak that they cannot be belt to those violent enough to toss people around and destroy whole cities. The seismicity, (or) seismic Activity, of an Area is the Frequency, type and size of earthquake experienced over a period of time. The cord tremor is also used for Non- earthquake seismic Rumbling. At the Earth's surface, earthquakes manifest themselves by shaking and displacing or disrupting the ground when the epicentre of large earthquake is located offshore, the seabed may be displaced sufficiently to cause a tsunami. Earthquake can also trigger landslides, and occasionally volcanic Activity.

The effects of the earthquake are given below, but are not limited to the followings:

Tsunamis: Tsunamis are long - wavelength, long- period sea waves produced by the sudden abrupt movement of large volumes of water. In the open ocean, the distance between wave creates can surpas 100 kilometres (162mi) and wave period can vary from five minutes to one hour. Such tsunamis travel 600 - 800 kilometre per hour.

Floods: A flood is an over flow of any amount of water that reach land. Flood occurs usually when the volume of water within a body of water, such as river or lake exceeds the total capacity of formation. As a result, some of the water flows or sits outside of the normal perimeter of the body.

Landslides and avalanches:

Earthquake along with severe storms, volcanic activity, coast wave attack, and landslides, may persist while emergency personnel are attempting rescue.

M. Priyadharshini



NETWORK AND ITS ADVERSE EFFECT ON SPARROWS

The world is suffering a lot, due to the network and the mobiles. This dangerous network has ultra high frequency and ultra high intensity. Cell phone towers create electromagnetic radiation and this radiation is considered a possible carcinogen by the (WHO) World Health Organization, which also causes many hazards like earth quake, tsunami in the country. Mainly it causes a big effect for the birds and other creatures living in the forest. The cell towers which are situated all around the world cause death to the birds. The radiation that is produced from the cell tower will cause the death of the birds. In the recent years we donot see tiny sparrows which are the extinct species and a study have been conducted to establish the database for their current population in Sep 2008 and the sparrow population was totally declined. It was also found that the place, where the sparrows took rest on the site of the tree has the illumination level low (30-45 lux).

Due to the heavy noise, crowd of travellers and lack of nest sites, they remain at the station because of availability of food in the nearby roadside market. Due to lack of food and shelter, the sparrows suffer a lot and it will cause adverse effect on the growing population. Sparrows suffer a lot from more stress than those living in the country side. In the present trend, people don't allow sparrows to build their nests and there is no proper food for the endangered species. And hence, the population of the sparrows declined and thus, with the network improvement and cell towers it will reduce the population of sparrows and our present generation is not aware of the effect on sparrows in the world. Major steps must be taken to save the creature from the great hazards that is caused in the world.

"SAY NO TO 5 G AND SAVE THE TINY SPECIES"



NORMS OF WORMS

Does the slimy and dirty creature help the human? Yes of course, a dirty and ugly creature serves many good to farmers and hence Earthworm is called as "the farmer's friend". Earthworm helps to maintain the air, water and humidity in the soil. It enriches the nutritional value of the soil which is helpful to the crops. Earthworms eat the organic waste materials such as vegetable waste, dry leaves, seeds etc and pass it through their digestive system and gives out in a granular form which is known as vermicompost. It can improve biological, chemical and physical properties of the soil without the use of waste from homes when used in gardens. Earthworms are not only the friend of farmers; it is the friend of plant lovers.

K. Deepika I B.Sc. Bio-Technology





NATURE'S PLOUGHMEN

Anyone who spends time in cultivation will tell earthworms are farmer's best friend. In fact earthworms may be the most important factor in the success of cultivation. Some people even call earthworms as "Nature's first gardener"!

If you've ever been around a farm in spring; you know that farmers need to plough the soil. Ploughing breaks up the soil and allows air and water to get to seeds and the roots of plants. Earthworms act like tiny ploughs when they live in garden.

As earthworms move through the soil, they make tunnels. Ploughing these tunnels allow air and water to get to the roots of plants.

Without access to air and water, plants would not grow well, which is why you might notice that plants sometimes don't survive if the soil they're in is too dry and compacted.

Earthworms are known as farmer's best friend because of the multitude of services they provide that improve soil health and consequently plant's health. The density of earthworms in the soil is considered to be a good indicator of a healthy soil.

Earthworm makes the soil porous and consumes the dry matter. They partially digest them and then mix with soil. By this, the soil becomes fertile and nutrient availability increases in soil. This all ultimately helps in betterment of soil health, plant health and good crop production. Earthworms also suppress fungal disease in soil helping plants to be healthy. Earthworms excrete material having high concentrations of beneficial microbes which helps to decompose soil residue. Earthworm passes soil through their guts and helps the soil to have neutral Ph. A farmer's main income depends on his crop.

"The plow is one of the most ancient and most valuable of man's inventions; but long before he existed, the land was in fact regularly plowed and still continues to be thus plowed by earthworms".

R. Monisha



EARTHWORM - FARMER'S INDICATOR

MULTITUDE OF SERVICES:

Earthworms maintain the physical-chemical properties of the soil by converting biodegradable materials and organic wastes into nutrient products, emerging from their burrows to deposit the fecal matter on the surface.

Earthworms stimulate microbial activity, mix and aggregate the soil, soil water content and water holding capacity.

The mutual action of earthworms and microbes brings faster decomposition as the earthworm's condition aerates fragments and enhances the surface area of the organic matter for microbial action.

They also increase litter decomposition, soil organic matter dynamics, nutrient cycles, promote plant growth, and reduce some soil-borne diseases.

Earthworm burrows act as a channel for plant growth and as pathways for root elongation especially in compacted zones typically found in deeper soil layers.

It makes the soil porous, increasing the water infiltration rate and reducing soil erosion.

Some-studios even report that earthworms release certain metabolites such as Vitamin B and Vitamin D into the soil, which are good for growth of plants.

EARTHWORM FARMER'S INDICATOR:

The density of earthworms in the soil is considered to be a good indicator of a healthy soil because they improve many soil attributes like structure, water boiling capacity, moisture content and also increase nutrient availability and degrade pesticide residences.

As scientists understand these ecosystem services provided by earthworms, they discover that this earthworm-farmer friendship is a lot deeper than previously imagined.

The soil, in addition to being the habitat for crops, also nurtures other organisms, some of which can cause devastating diseases to plants.

Research indicates that earthworm - composted organic matter, also called vermicompost, has disease suppressive properties.

Elmer in 2009 published findings that earthworm suppresses soil-borne diseases in different vegetables by nearly 50 - 70 % and attributed this to the ability of earthworms to increase the activity of beneficial microorganisms.

Agricultural practices like tillage and pesticide use are known to adversely affect earthworm population in the soil.



THE DIVERSITY OF YOUR LOVE! MY GOD!

IVERSITY OF YOUR LOVE! MY GOD!

Fire Ball to protect from chill and a home planet to live with liquid water on its surface and weather to enjoy! Existence of each species and existence of each thought.

God has given cells of Body and the Heart of living.

Ups and downs of mountains like joy and sorrow of my life.

Cores of planets like cores of my brain.

Oceans of water, moving continents like love of my Mom and Dad and my happiest family.

Moon to think, Sky to protect, Sun to live, Light to work, Date to fear and rest, seasons to enjoy, and Rain to Recall.

The flying of birds, swimming of marine occupants, running of animals, buzzing of insects and the human beings who named them filled my mind with the "Love of God".

Everything is God's Gift to you. How you decorate everything around you is your Gift to God".



EARTHWORM'S FREE HELP

Earthworms are known as farmer's best friends because of the multitude of services they provide that improve soil health and consequently plant health. Research indicates that earthworm composed organic matter, also called vermicompost has disease suppressive properties.

Worms help to increase the amount of air and water that gets into the soil. They break down organic matter, like leaves and grass into things that plants can use. When they excrete, they leave behind castings that are a valuable type of fertilizer. Earthworms are like free farm help.

These are fat worms and skinny too but these worms always seem to work and toil. The early bird gets the worm; the early worm gets eaten.

It is infinitely better to transplant a heart than to bury it to be devoured by worms. It is directly connecting to the heart of the farmer. The worm just digs through the soil consuming nutrients from decaying organic matter. This actually makes a lot of sense. Farmers always think that earthworm's can never distrust any farmer's heart.

> Gunika Pareek I B.Sc., Biotechnology



CIRCUMSPECT CYCLONE

A study of spinning storm contains strong wind and rains. This intense circular storm originates over warm tropical oceans and is characterized by low atmospheric pressure. Heavy rains associated with cyclone leads to floods, which is the major cause of death and damage during cyclone. Recently, Gaja Cyclone which occurred in Nagapattinam, Pudhukottai, Thiruvarur caused loss of livelihood of thousands, death, destruction of natural habitat and power interruption.

"Safety starts with awareness. Awareness starts with you". To safeguard from the hazardous effects of intense circular storm lets carry out the following preventive measures.

- ★ Pay attention to the cyclone bulletins and local radio for official warnings and advice.
- ★ Prepare an emergency kit containing torch, battery radio, water containers, first aid kit, fuel lamp and sealed food.
- ★ Beware of damaged power lines, bridges, buildings, trees and don't enter flood areas.
- ★ Know your nearest safe ground and the safest access to it.
- ★ Trim trees, branches and treetops to withstand risky attack.
- ★ Inspect for any gas leaks.
- ★ Be safe and secure at home.
- ★ Get in touch with the government agencies.
- ★ The more safety taken, the better it is.

A. Apshan Arah

I. B.Sc., Biotechnology





THE HOLY CALL

The divine.....
Created a living planet"
In the thought of
Adding the beautiful thing
To the cosmos

As his hands waved To sow the seeds of life It started breezing And the lives began growing

Blue hills with beautiful clouds
Tall trees with talkative leaves
Roaring seas with kissing sands
Where water falls with the lands call
And rivers flow for the nature to glow.

When all lives
Needed a lead
Man was created by the God
A mighty power from nature's part
All he knew was he is the might
And started forgetting to guard his part (Nature)
And led to the decline of the nature's heart

The day when he realized
That he is responsible for all the cause
He joined with the nature to bring back
What is lost
Because now he knows he's also its part
The divine is now
singing to forgive his all and
Reunited him with
his holy call.

-M. Prameela



TO BE ONE WITH NATURE

Farmers need a lot of friends. Though I have never heard the phrases of earthworm being the friend of farmers, it makes total sense to me now.

Frequently farmers are thought of as tending the soil. These jobs produce food for us and are sure that environment will be able to sustain future generations, that means precious resources like soil and water should be carefully tended.

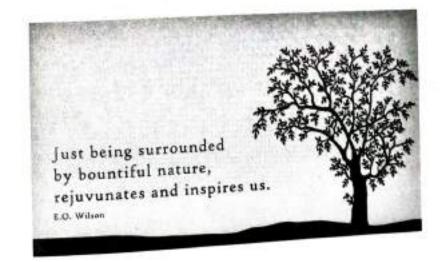
Earthworms assist in the care and longevity of the health of large of soils. To be more specific about what they do, earthworms can help aerate soil; just think about it. How hard can your soil be if they are squiggling around in there? That helps rain water and nutrients get soaked into the area where the plant roots are. This aeration is especially good when crops are formed with no till or other conservation practices are teamed with cover crop or crop that have different type of food system.

Earthworms are known as best friend because of the multitude of service they provide that improve soil health and consequently plant health. Research indicates that earthworm compost organic matter also called vermicompost which has disease suppressive properties.

"Being a farmer means

shaking hands with nature"

Neha .S III B.Sc., Maths





BEAUTY OF NATURE

Nature is a wonderful and awesome creation of God. The beauty of nature mesmerizes every human being. That's why when you see a beauty scenery or a green field, mind just forgets, all other thoughts. Eyes never avoid looking at it. You will also enjoy that pleasant nature to the maximum extent through beautiful greenery of trees, extraordinary heights of mountains of ice and rocks, various cute colours, structures of lowers, growing agriculture farm, gardens, banks of rivers and oceans, panoramic views of beaches, amazing Sunrise, Sunset, moonlight, fully covered fog, drifty clouds in the sky, various reasons, gestures, and unique features of birds, and animals and so on, which are incredible and can't be explained in words.

Nature is not only pleasant and beautiful in appearance, but also proven as a fabulous doctor which gives natural medicine. Ayurvedic Medicine treatment was ancient and was the only methods of curing the diseases, before allopathic and pharmaceutics were invested. Still ayurvedic has the same demand because of no side effects with the medicine and it is completely made up of natural resources.

"If you truly love nature, you will

find beauty everywhere"

Ateequa Yasmeen
III B.Sc., Maths

A.S.B. Jayalakshmi I M.Com.,

Beauty is certainly
a soft, smooth, slippery thing,
and therefore
of a nature
which easily slips
in and permeates
our souls.
-Plato



A DROP HARVESTED IS A CROP HARVESTED

Rain Water Harvesting is the collection of rain water into the man made resources or any natural resources like pond, lake at the same place where it falls from roof tops or ground.

Two main techniques of rain water harvesting are:

- * Storage for future use and
- * Recharge into the ground

It can be used for crop harvesting, gardening, toilets etc. Following are the benefits of rain water harvesting in individuals or city-wide level.

It helps in reducing the water supply bills especially to the institutions.

Rain water recharges to the ground positively affecting ground water quality by diluting fluorides, nitrates, and its salinity.

Recharge of rainwater to the ground prevents sea-water immersion into the freshwater bodies in the coastal areas.

It helps in controlling urban flooding; people do rainwater harvesting from roof tops.

Shilpa. V III B.Sc., Maths

LAW MADE.....

Nature the gift of God
When the trees dance to the tune of wind,
The birds sing to the nature's chain,
When the gentleness of nature is
filled with pleasure,
When the Earth dressed with weather,
When the nature forgets its vastness,
Then the God shows how
Big the place the earth is,
Let us thank God for his
Creation and given us eyes
To see the lovely gift - nature.

Charahya . M



A HOUSE FOR SPARROW!

Birds are common inhabitants of our eco-system. House sparrows are distributed widely in India and abroad. As they are generally associated with human habitation, they tend to stay in region with structures built of many holes under the tiles. These sites may provide nesting sites and green areas for insect foods. According to the latest sparrows census reported by various environmental organisations, there has been 80 percent decline of their numbers during past decades in India. The disappearance of sparrows in India has been widely reported, although responses have been quite muted.

In an effort to draw the attention of the government agencies and their scientific community, more conservation measures and researches on common bird species and urban biodiversity are taken. An investigation has been conducted to know why the population of house sparrows, once a very common bird declines so dramatically not only in India but around the world. Another investigation on an objective was also to see if surrounding environment has any impact on the maintenance of sparrow population. Sparrows residing at railway station are habituated with loud noise, being undisturbed by passing trains. Thus it can be concluded that in spite of heavy noise of trains, crowded travellers and lack of nest sites, they remain at the station because of availability of food in the nearby place. Based on this observation, sound pollution and availability of food are not responsible for their decline. Everyone must think "Who am I to judge a life misspent?"

Malarvizhi .M I B.Sc., Maths.





A LOYAL COMPANION

Did you think that the earthworm is only used as a fish bait? Well, you are wrong.

Earthworms are found in wet soil containing rich organic matter. They can be seen especially during rainy reasons. They are one of nature's top Soil scientists.

A HELPING FRIEND

Earthworms are of great importance for the soil and plants. Earthworms reduce the acidity and alkalinity of the soil and thus create optimum conditions for plant growth. The density of earthworms in the soil is considered to be a good indicator of a healthy soil.

The soil also nurtures other organisms, some of which can also cause devastating diseases to plants. They suppress various soil borne disease and thus safe guards plants from external predators.

AWORRYING TREND

The population of earthworms is declining due to excessive use of pesticides and chemical fertilizers particularly after the green revolution, usage of pesticides and fertilizers. These chemicals enter the respiratory passage of the worms and slowly kill them. Moreover, such chemicals poison the water table and spoil the soil fertility.

Agricultural practices like tillage also affect earthworms in the soil. Soil tillage disturbs the worms and destroys their tunnel system. Excessive tillage completely exposes them and makes them prone to predatory birds and animals.

CONCLUSION:

It is high time we recognize the importance of earthworms and the role it plays in our ecosystem. Excessive tilling should be avoided. Time and space must be left for the worms to grow. We must encourage natural and organic mode of farming which is beneficial both for humans and earthworms. A simple technique called the Zero budget natural farming can be adopted. Use of natural manure for plants should be encouraged. Manures such as neem coated urea which is provided by the government at a very low price should be used. Cow dung is also a wonderful alternative.

We must understand that we all are part and parcel of Mother Nature and every living entity in this planet has their role to play. "Live and Let Live".



OUR PLANET

We live on the most beautiful planet Earth.

It has many resources which humans need to live for every movement like water to drink, air to breathe, food to eat, land to stay, soil to grow the crop, trees to supply oxygen, many more things even a small plant has many medicinal value in it.

In nature everything is chain process; every creature depends upon one other that is beauty of nature. The most beautiful process in nature is rain, which comes from sky, is most needed to earth. Sky has endless clouds with minute to minute changes such as sunrise, afternoon, evening, sunset night, and moonlight. Sometimes summer, autumn, spring, winter give us wonderful experience through its beauty.

There are different types of animals, birds, plants, trees. Everything in the nature has the power and uniqueness provided by the God.

Human is surrounded by nature. He is nothing without the nature. The morning coffee is also taken from nature. We go out of home in morning, walk daily on the grass, which is also a beautiful feeling. Music is also nature which gives us different types of sound. Even medicines are completely taken from the variety of plants. And also we travel froms one place to Another with the use of Natural fuel. In this way there are many things. We are connected very strongly to nature for every single move.

Man can create many mobiles, electronic items and many more things but he could not create anything without nature. That is the power of nature.

The food is the main source which is also taken from nature, but nowadays it is polluted. Nature has power to grow the new variety.

We completely depend on nature. We should have some responsibility to save the nature. Nowadays we spend much time in our mobiles. We do not enjoy nature. People are busier with their work.

Our nature provides us varieties of beauty for us to view, feel and like vegetables, fruits, flowers, attractive birds, animals, blue sky, sand, rivers, sea, forests, mountains valleys and hills. Earlier, we inhaled pure air in office, but now and earlies even the schools are fixed with air conditioners.

So everyone who goes with nature is healthy to us and has a good experience. NATURE is the most beautiful thing. Don't miss it to feel it.

Nature is the best friend and the best gift given by God. We need to thank God and preserve it.

S. Pavithra I B.Sc., Bio-Technology



ECOLOGICAL INDICATORS

INTRODUCTION:-

The sparrows are a family of small passerine birds. They are also known as true sparrows or old world sparrows, also known for a particular genus of the family. Sparrows are among the most familiar of all the wild birds. They are primarily seed eaters. Though they also consume small insects, some species scavenge for food around cities.

DESCRIPTION OF SPARROWS:-

Sparrows are physically similar to other seed - eating birds, such as finches, but have a vestigial dorsal outer primary feather and an extra bone in the tongue. The sparrows are generally birds of open habitats, including grasslands, deserts and scrubland. They are a part of southern and eastern Africa and heavily populated part of South America.

REASONS FOR DECLINE :-

Sparrows, thorough tiny, are very sensitive and strongly immune birds and their sudden disappearance as sentinels of as ecological indicators is a warning to humans about impending environmental disasters. Several speculations have been put forward to account of sparrows deserting our cities, but they all boil down to the simple fact that the rapid changes in the lifestyle of human in urban areas. Non-availability of tiny insects as food due to the loss of vegetation around our modern buildings, our concrete architectures with no nesting sites for sparrows and air-conditioning which leaves no entry or exit points for feeding sparrow. Further increasing noise from automobiles and their gaseous pollutants in our cities, The recent increase in electromagnetic radiations from cell phone towers, the explosive use of diverse wireless devices, may be the reasons for the decline.

SURVIVAL OF THE ADAPTORS:-

Sparrows may not become extinct, but being resilient, they may migrate to safe zones, feed at public granaries, market places, ports and rail stations, nest at nearby sites and adapt to stabilise their population. As the famous evolutionist Charles Darwin said, "It is not the strongest nor the most intelligent that will survive but those that can adapt to changes. Sparrows are so adaptive that not one of them shall fall to the ground".

CONCLUSION:-

How to save sparrows? Make arrangements in your own balcony (or) garden for the availability of food grains and water for sparrows. Try to minimize pollution as much as possible. Minimize the use of mobile phones and use anti-radiation tower to protect yourself and the environment.

DAMAGES DURING EARTHQUAKE

An earthquake (also known as a quake, tremor or temblor) is the shaking of the surface of the Earth.

The damages are

GROUND DISPLACEMENT:-

The main earthquake hazard is ground displacement. If a structure is built across, the ground displacement during an earthquake could seriously damage or rip apart that structure.

FLOORING:-

An earthquake can rupture (break) dams or levels along a river. The water from the river or reservoir would flood the area, damaging buildings sweeping away or drowning people.

GROUND SHAKING:-

The other Main earthquake hazard is the effect of shaking building or by the ground beneath them settling to a difference than it was before the earthquake.

FIRE:-

The fourth main earthquake hazard is fire. These fires can be started by the broken gas lines and power lines, or nipped over wood or coal stoves. They can be a serious problem, especially if the water lines that need the hydrants are broken too.

LIQUEFACTION:-

Liquefaction starts with the forceful shaking of the soft wetsoils and rear rangement of its grain, due to which the soils start functioning as liquids. The load of structures is transmitted to the wet soils that may be changed into quicksand.

OTHER DAMAGES:-

Other hazards that may cause earthquake damages include fire that can be started on the failure of power or gas lines, and sever losses may occur.

In addition, bricks, rocks trees may fall, sewage may enter water supplies and drinking of such water can cause serious disease.

Failure of transportation and means of communication may spoil rescue efforts.

LANDSLIDES AND AVALANCHES:-

Earthquakes, along with severe storms volcanic activity, coastal wave attack, and wildfire can produce slope instability leading to landslides, a major geological hazard.

SOIL LIQUEFACTION:

Soil Liquefaction occurs because of the shaking, water saturated granular material loses its strength and transforms from solid to liquid.

Ramya .D.R II. M.Com.,

TODAY'S LIFE OF SPARROW

There are larger than life, magnificent creatures, blaring their stories of extinction make us sad. Yes, sparrows are slowly being wiped out as our malls and sleek apartment building come up as shining India! Sparrows are important to our ecology system.

A small organisation called the Nature forever society, headed by Mohammed Aliwar and band of sparrow adopted may be the only protection of the frail, gentle sparrow India today. He has done his research in environment science and ecology and has worked for Bombay.

The house sparrow is strongly associated with human habitation and can live in urban or rural settings though found in widely varied habitats and climates. It typically avoids extensive wood lands, grass land and deserts away from human development. It feeds mostly on the seeds of grains and weeds, but it is an opportunistic eater which commonly eats insects and many other foods. Its predators include domestic cats, hawks, owls and many other predatory birds and mammals.

The house of sparrow is culturally prominent. It is looked as a pet and a symbol of lust, sexual potency, commonness and vulgarity. Though it is widespread and abundant, its number has declined in some areas. Sparrows are the cute, helpful and friendly birds; we are the humans to save those creatures.

WATER RESOURCE MANAGEMENT

INTRODUCTION:-

Water is a major component in all living systems. Without water, nothing can live on the Earth. It is the true elixir of human beings, animal life and plant life. Water is becoming more and more precious as its supply continues to be source throughout the world. So water conservation has become the need of the day. This will create awareness of ground water recharging by harvesting rain water. However, there is water scarcity everywhere water recharging by harvesting rain water. However, there is water scarcity everywhere During the rainy seasons, water stagnates in the streets and path ways. It leads to the breeding of mosquitoes. The problem can be avoided if rain water is collected in water breeding tanks. A part of it is found in the ponds and the rest flows as river and gets into harvesting tanks. A part of it is found in the ponds and the rest flows seasonal rainfall. We never know the worth of water till the well is dry.

ROLE OF THE GOVERNMENT IN RAIN WATER HARVESTING:-

In our country, the ministry of water resources is endeavouring to make rain water harvesting a part of everyday life in our villages and cities as a people's movement. The Government of Tamil Nadu leads the nation in implementing rain water harvesting programme. It has made it mandatory for all houses and buildings in the state recalling the importance of recharging groundwater. The CGWB (Central Ground Water Board) is taking steps to encourage it through rainwater harvesting in the capital and elsewhere. Anyone who says sunshine brings happiness has never danced in the rain.

FRIGHTENING WATER SCARCITY:-

Rain Water is the main source of water. Rain water gets into the soil and reaches the water table. We make use of this ground water by digging wells and bore wells. Recently, the ground water level is going down at an alarming rate. In order to prevent this, we should harvest rain water. India receives a good rainfall during monsoon / but most of the water falling on the surface runs off into gutters and rivers. It leaves only a very little amount of water to get into the water table. This leads to water scarcity. To prevent this, the runoff water should be allowed to get into the soil. Thus the surplus rain water can be harvested. The best thing one can be when it is raining is to let it rain.

RAIN WATER HARVESTING:-

Rain water harvesting is collecting of rain water and storing it for later use. Rain water harvesting involves collection of rain water, filtrations and recharge of rain water into the ground. Rain water falling on the roofs of buildings (or) in court yards can be collected through pipes and stored in underground tanks. The main idea is harvesting rain water is to check the runoff water. It helps to meet the increasing demand for water and also prevent the flooding. Take care of Nature and it will take care of you.

CONCLUSION:-

Rain water harvesting increases water availability by checking the declining water table. It improves the quality of ground water by diluting the salt content. It also prevents soil erosion and flooding especially in urban areas. Every Individual should feel the necessity of rain water harvesting. It is the only solution to overcome water scarcity. In short, rain water harvesting is a must for the sustaining existence of all living beings. The system that has been installed at the new buildings of the district collectorate drew the attention of the people who had assembled at the inauguration of the new premises. Five major office complex as of the states secretariat and legislative assembly would also benefit from this government direction. In order to prevent surface run-off we must harvest the rain water for future domestic related and other activities.

DROPS TO COUNT

Every drop of rain water is like blessings of God to the people on the Earth. Fresh rain water falls on the ground like pearls, so everyone should understand the importance of rain water especially in developing regions and rural areas where there is lack of natural water resources. We should try to collect rain water without wasting through roof tops and along streets run off.

We should bring our old traditional harvesting practices using new and effective technologies to make easy water supply, wells and other resources of ground water levels cannot fulfil the portable water need of hundreds of thousands of people. Rain water harvesting is the most sustainable and effective way for many years to make water available in the areas which lack water. Rain water harvesting is very low cost method along with lots of benefits. Its helps in various purposes like household water, field, irrigation, livestock, agriculture and animal husbandry.

It helps in rejuvenating the ground water levels in both directly and indirectly manner. Ground water level can be replenished by rain water harvesting methods of trenches, anicut, dug wells, contour. Other rain water harvesting methods like under ground water tanks, ponds etc help in reducing the use of ground water in at least four to six months.

More and clean rain water can be collected in the rainy season by making large and clean water body.

Surface water cannot fulfil the demand of water for various purposes. Everyone depends on the ground water for the very need. Deforestation, rapid urbanization, rain water infiltration to the sub-soil, continuously decrease the level of ground water. Rain water conservation maintains the level of water in natural water resources.

It reduces the chance of flooding of water on the roads, reduces the risk of soil erosion and improves the quality of water.

P. VARSHA III B.Sc. C.S.



HEALTHY NATURAL ENVIRONMENT

INTRODUCTION:-

Nature is the beautiful thing that God has created for this world. Nature means pathway to purity. In the Bible it means that, God has created the first thing, the Earth and the surroundings. Each day God has created particular creatures especially Adam and Eve in the Garden of Eden. God made so many adventures before the man exposed by saying that Nature is the gift of God. Human beings cannot live without the nature. Saving nature is the beautiful thing all over the world. Clean and neat surroundings make the Earth and it safeguards the people around him. Nowadays, the nature has become worst & even our wastes and unhygienic life killed our earth. In the early ages, the whole Earth was filled with Granary. People could see green images wherever they turned, but now all powered dusts and nuisance killed our Earth. If God has not created anything the earth may look pale. Green is meant for Nature. People should be proud enough to say that nature is the gift given by God.

Nature will be the gift of God only if we preserve and safeguard it. Without nature men cannot live in this world forever. Fresh air from the trees makes our lungs good, and if we inhale the fresh air it would be good. Then comes the organic manure; if fruits and vegetables are produced with organic manure, it may be helpful for our health Issues raised only by the artificial things. People can receive services like food, fibre, energy, drinking water, building materials, natural medicine.

IMPORTANCE OF HEALTHY NATURAL ENVIRONMENT :-

Human beings are part of the natural world; People depend entirely on a healthy natural environment for our wealth and well being. Nature is essential for our lives.

WHY IS NATURE IMPORTANT IN OUR LIFE?

Nature is very important because if there were no nature we wouldn't be alive. Trees are the most important of all the things because they give oxygen to survive.

NATURE AND HUMAN LIFE:-

At the same time, human health and well - being face huge environmental challenges, environmental problems such as contaminated water and industrial pollution also affects human health.

S.NAANCY III - B.A. English



SOIL ENGINEERS

EARTHWORMS ARE RECYCLERS :-

Earthworms play a crucial role in breaking down organic matter and fertilising the soil, simply through their constant eating and pooping. What comes out the other end-known as a worm cast is full of nutrients and bacteria that are beneficial for plants. Scientists have measured up to five times the amount of key nutrients in worm casts compared to surrounding soil.

EARTHWORMS ARE GREAT "SOIL ENGINEERS"-

As they move though the soil, earthworms loosen and mix it up, helping to aerate and drain it. This brings nutrients to the surface, making the soil more fertile, and helps prevent flooding and erosion.

JUICY EARTHWORMS ARE AND IMPORTANT FOOD SOURCE :-

They are protein - rich and feed a number of animals such as the European badger.

EARTHWORMS ARE BAROMETERS OF SOIL HEALTH AND TOXICITY:-

They are very sensitive to soil pollutants such as pesticide residues or unwanted heavy metals, and their bodies are affected by changes in land use such as deforestation to clear the way for intensive farming. This means the health of local worms is proving to be a useful tool to assess the impact of different land usage and pollutants.

NO MATTER HOW CUTE A PANDA LOOKS, IT IS DARWIN'S "LOWLY" EARTHWORMS THAT ARE DOING DIRTY BUT CRUCIAL WORK IN THE SOIL BELOW. EARTHWORMS CAN REPAIR DAMAGED SOIL AND MAY PROVIDE SOLUTIONS TO MAN-MADE PROBLEMS.

Research suggests that earthworms could help to clean up land contaminated with toxic heavy metals such as lead.

Other studies show how earthworms can speed up the restoration of degraded land in the tropics, while research in northern Vietnam found that reduced earthworms diversity due to land use change also had a significant effect on soil fertility, water drainage and soil erosion.

So, earthworms are our underground allies if we treat them right. Earthworms make wonders if we treat them right. Earthworms make it possible for us to live on the planet, simply by eating and pooping, and ploughing up, ventilating and fertilising the soil along the way.

B.NANDITHA III B.Sc.,

CONSERVE NATURE

INTRODUCTION:

We live on the most beautiful planet, Earth which has very clean and attractive nature. We live on the most beautiful planet, but the food to eat, land to live animals and planet, the food to eat, land to live animals and planet. full of greenery. Nature is our pest mend the food to eat, land to live animals and plants for gives us water to drink, pure air to breathe, food to eat, land to live animals and plants for our needs for our betterment.

NATURE IS POWERFUL:

Nature is the environment which surrounds us, cares us and nourishes us every moment. It provides us a protective layer around us to prevent from the damages we are not able to survive on the Earth without air, land, water, fire and sky. Nature includes everything around us like plants, animals, river, forests, rain, lake, birds, sea, thunder, sun, moon weather, atmosphere, mountain, deserts, hills, snow. Every form of nature is very powerful which has the ability to nourish as well as destroy us.

NATURAL ASSETS:

Everyone has less time to enjoy nature. With the increasing crowd, we forget to enjoy nature and improve health. We started using technological instruments for our health fitness. However it is very true that nature has power to nourish us and keeps up fit forever. Most of the writers have described the real beauty and advantage of the nature in their writings. Nature has the ability to make our mind tension free and cure our diseases. Due $_{10}$ technological advancement in the life of human beings, our nature declines gradually which needs a high awareness to keep it in balance and to conserve natural assets.

God has created everything beautifully of which our eyes can never be tired of seeing. We forgot that we too have some responsibility towards the nature for the relationship between nature and human beings. How beautiful it looks in morning with sunrise, songs of birds, sounds of lakes, rivers, air and happy gatherings of friends in the evening in the garden after a long day of work. We forgot to enjoy the beauty of the nature in just fulfilling our duties towards our families.

GLOBAL WARMING:

Sometimes during our holidays we spend our whole day by watching TV, reading news paper, playing indoor games or on the computer but we forgot that outside the door we can do something interesting in the lap of nature and natural environment. Unnecessarily we left all the lights of home on, we use electricity without need which ultimately increases the heat in the environment called global warming. Our other activities like cutting trees and forests increase the amount of Co2 gas in the environment causing Green house effect and global warming.

ECOSYSTEM:

If we want to be happy and healthy always, we should try our best to save our planet and its beautiful nature by stopping our foolish and selfish activities. In order to keep ecosystem in balance we should not cut trees, forests. Let us practice energy and water conservation and we are the real users of the nature so we should really take care of it.

conclusion:

We should fully enjoy the nature without disturbing its ecological balance like caring our nature. Make it peaceful, keep it clean and prevent it from the destruction so that we can enjoy our nature forever. Nature is the most precious gift given by the God to us to enjoy but not to harm.



NEED OF THE DAY

Nature has endowed India with huge water resources. We have perennial rivers like Ganga, Yamuna, Brahmaputra and others along with their tributaries and distributaries in North and Eastern India. We have spring fed and rain fed rivers in central and peninsular India-the major among these being - Godawari, Krishna, Narmada, Tapti and Kaveri.

In spite of huge potential water resources, we are facing water crisis across the country.

Water conservation has become the need of the day. Rainwater harvesting is a way to capture the rainwater at the time of down sour. Store that water above the ground or charge the underground water and use it later.

Rainwater harvesting has become a very popular method of conserving water, particularly in the water areas. Collecting rainwater on the roofs of building and storing it underground for later use has several advantages, it conserves water as a valuable source and stops it from running off wastefully, as sewage water. It provides water during dry season.

Rainwater harvesting can also stop groundwater contamination. With rainwater harvesting all the problems can be solved to some extent if not entirely.



SPARE A MINUTE

Chirping of sparrows has lost somewhere, When was the last time you noticed a

sparrow on your window ??

When the past is reviewed, it was full of birds' and flowers and the population of when the past is reviewed, it was a sparrows was abundant. The chirpy sound made our mornings fresh and happy. They flew on the roof tops of our homes we begin to take them for granted.

HAVE WE EVER TRIED TO KNOW WHAT HAPPENED TO THEM??

We got too involved in this fascinating world and with all chaos around us somewhere this one feeble sound has got lost.

ARE WE THE MURDERERS?

The best answer is to ask yourself. Traditional architecture gave way to modern architecture. Our windows and doors were shut for the sparrows.

"All your expensive gadgets are killing us bringing to extinction....

You built sky scrapers but left no rooms for us" - Sparrows

In 2012, Chief Minister of Delhi Sheila Dikshit declared house sparrow as the 'state bird' of Delhi. The 'world sparrow day' is a day designated to raise awareness of the house sparrow on 20th march of every year.

Sudden disappearance of house sparrow is alarming towards incoming environmental hazards. We are blind enough not to see that decline of sparrows are affecting even us. The recently released movie 2.0 consists of a role of Pakshirajan (king of birds), an ornithologist who seeks vengeance on cell phone users to prevent avian population decline.

What has happened with the vultures and other species on brink of extinction should never happen to sparrows. Twittering or upload status as 'I love sparrows', 'save our sparrows' is not enough. It's time to take fruitful efforts to conserve the tiny social, human associated bird. Don't think it's not in our hands. It is our responsibility to save small, lovable beautiful and harmless bird for environment and for ourselves.

Spill over the rejected grains from your household rather than dump them in the dust bins. Install small sparrow boxes in and around the window, stair cases and balconies wherever chance of sparrow visit is possible.

place a small cup or bowl of water just near bird nesting area to have water bath or to drink, this may avoid dehydration and get rid of thirst. Wisely use the insecticide and pesticides. Use high quality of fuel in your vehicles which is also a critical point to save sparrow.

Last but not the least wherever you see sparrow nest please don't disturb for simple reasons. Try to help them to get some food nearby throwing grains.

Let's put hands and heart together to conserve little homeless house sparrows.

Subiya.Z



RAIN WATER HARVESTING

Water is the elixir of life. Though 1/3 of the world is covered by sea water, the potable water is a little more than just 1% of water available on this globe. Even this 1% is not easily available to us. A part of it is found in the tools and the rest flows as river and gets lost into the ocean.

The water that percolated down the porous soil gets stored alone sustains most of the human race. As the world population has exploded, the pressure on potable water is also high. So, there is a need to preserve rain water to prevent wars between countries on water.

When rains fail occasionally, the animals in the forest migrate to long distance in search of water. Small check dams built in different places hold rain water and help animals face severe droughts in forests.

Human beings have ever been the most ungrateful wretches. They keep on digging bore - wells and use water to the maximum without ever bothering to replenish the water tables. As a result, there is seepage of sea water in bore wells in cities located near the shore. Besides, agriculture is becoming economically un-viable because of less availability of water for irrigation. So, Tamil Nadu state government has promulgated on ordinance insisting on rain - harvesting in all the homes throughout the state.

A 4 feet square pit is dug. The bottom is filled with sand for half a feet height and for about a height of six to eight inches gravel is spread. Then again sand is filled in for half a feet height. Then the four walls of the pit are plastered with brick and mortar. A pipe is routed to the pit form the roof tip. The moment rain falls, it reaches the pit.

As PRIS offered their technical expertise for building the rain - harvesting pit, many came forward to fulfil the government order. Those who resisted were threatened with cutting of water supply by municipal authorities. Tamil Nadu has now got the infrastructure to replenish the fast dwindling water table of the state.

The State has taken steps to deepen ponds to create new check dams in villages where such ponds are not available. Realising the seriousness of the government's involvement, now every home and field has got rain-harvesting facility.

Observers who criticised the government's initiative initially now praise it. The wells which had tasteless water have now changed drastically. After a little bit of rains, the water level and the taste of water have improved substantially. Harvesting rain is like repaying mother earth what we have been robbing for centuries, Let us be grateful and continue to harvest rain to sustain plant kingdom and human race on the earth.

QUOTES FOR RAIN WATER HARVESTING

"WATER LEVEL IS GOING LOW, WHY WE ARE

VERY SLOW; SAVE RAIN WATER!"

"IF YOU WANT TO GET RESPECT FROM NEW

GENERATIONS, THEN PLEASE SAVE WATER".

"HARVEST RAIN WATER TO USE IN DIFFICULT

TIME OF DROUGHT".

S.DHIVYA I B.Sc Physics.,



WATER CRISIS

INTRODUCTION:

Water is a major component in all living systems. Without water, nothing can live on the earth. It is the true elixir of human beings, animal life and plant life. Water is becoming more and more precious as its supply continues to be scarce throughout the world. So water conservation has become the need of the day. This essay will create awareness of ground water recharging by harvesting rain water.

"It is best to read the weather

Forecast before praying for rain" - Mark Twain.

FRIGHTENING WATER SCARCITY:

Rain water is the main source of water. Rain water gets into the soil and reaches the water table. We make use of this ground water by digging wells and bore wells. Recently the ground water level is going down at a learning alarming rate. In order to prevent this, we should harvest rain water. India is going down rainfall during monsoon. Most of the water falling on the surface runs off into gutters and rivers. It leaves only a very little amount of water to get into the water table. This leads to water scarcity. To prevent this, the runoff water should be allowed to get into the soil. Thus the surplus rain water canbe harvested.

CAUSES FOR FRESH WATER CRISIS:

The world is heading towards a water crisis due to natural and man-made hazards. Monsoon failure, rising population, growing industrialization, expanding agriculture, irregular irrigation, over use of the ground water, lack of awareness in rain water harvesting are some of the reasons for fresh water crisis. According to a recent report by the UNO about 2/3 of the population will suffer severe water stress within 30 years.

"We never know the worth of

water till the well is dry" - Thomas

"The best thing one can do when

its raining is to let it rain" - H.W Longfellow.

RAIN WATER HARVESTING:

Rain water harvesting is collecting rain water and storing it underground for later use. Rain water harvesting involves collection of rain water filtration and recharge of rain water into the ground.

"Many a man curses the rain that falls upon his head, and knows not that it bring abundance to drive away the hunger" - Saint Basil

R. DHANUJA I B.Sc. Physics



VISIBLE EXPRESSION OF THE INVISIBLE SUPERPOWER

Nature is the visible expression of the invisible god. William Shakespeare in his play, "As you like it" has very poetically said, 'tongues in trees', books in the running brooks, sermons in stones, and good in everything'. It is quite true that the nature is the best teacher. Everything in nature is so grand and flawlessly perfect. The infinite galaxies, teacher. Everything in nature is so grand and flawlessly perfect on planet earth are just solar system, the Sun, the planet Earth, and infinite forms of life on planet earth are just mind-boggling.

Nature teaches us all the life-transforming lesson of greatness, beauty, patience, hard work, peace, renewal, abundance, generosity, kindness, acceptance, self-reliance and many more. The Sun teaches us to shine and gives light to the world; the rivers teach us the message of moving on, with determination, overcoming all obstacles; and finding a detour round rock-ridden course.

A man must also move towards his goal like a river or a brook if he has to achieve his goals. His path may be full of obstacles, but he must keep moving like a river. As the river starts its journey from high mountains, on its way to the sea flows down many valleys, hills, slips between many ridges, flows, by many villages, towns and cities, passing under many bridges, ultimately it joins the ocean. Similarly, man must pass by and overcome many obstacles before reaching his goal or destination. Similarly trees teach us to give everything to the world and people. Flowers teach us to spread aroma of our good deeds.

I conclude by saying that "Nature" is the best gift given by God to the mankind. It is the best teacher that gives all the lessons required for the peaceful life. We must look forward towards our goal and achieve it. Let the journey of the river be a lesson for the journey of your success.

Aparna I B.Sc., Biotech.,



DEVASTATING CYCLONE AND ITS DISASTER MANAGEMENT AND RECOVERMENT

If there is a chance to stop!!! The natural disasters at monsoon period artificially... what would be the reaction of human beings????

No! Everything cannot be done by man, here; I am to speak about cyclone disasters and its precautions. India has a vast coast line which is frequently affected by tropical cyclones causing heavy loss of human lives and property cyclones occur usually between April and May (This is called post monsoon storms) and also in the months of October and December. While cyclonic storms and damage to the properties can be mitigated when prompt action is taken after receiving timely warnings.

Here's the list of major cyclones that have hit India over last few years, For Example: Cyclonic Laila: It occurred in the year 2010, it was a gap of two decades the Western Coastal part of India was hit by two severe cyclones. It entered from the side of Bay of Bengal From the states of Tamil Nadu, Andhra Pradesh and Srilanka, more than 6500 people died and 117-49 million losses occurred, more than 100 boats were lost at sea. There are many examples to speak about cyclone and its disasters like cyclone Tal in the year 2012 by this more than 70000 people died. After this, Cyclone Phailin in the year 2013; 44 people died due to storm related activities.

In South India, recently due to gaja cyclone 33 people died lacking basic needs like food, water, shelter and clothes; people struggle lot to recover. More than 33 people were killed and 82000 others were affected, there was a huge loss to Nagapattinam.

After this delta region was totally destroyed by delta cyclone, here, more than 82 villages were destroyed. Relating to the natural disaster people make few major mistakes. Here are few safety precautions to reduce damages and to safe guard the life of human beings.

In case if there is heavy cyclone and rain, just fill water buckets and cover them to have drinking water for future days, fill the tank of cars; ensure you have fresh batteries for your radios, also make sure you have adequate suppliers also make sure you have adequate suppliers of prescribed medicines; stock upon non perishable food items if required. These are the suggestions for 24 hours cyclone and pre-planned precautions of cyclone.



In case if there is heavy cyclone and rain, just fill water buckets and cover them to have drinking water for future days, fill the tank of cars; ensure you have fresh batteries for your radios, also make sure you have adequate suppliers also make sure you have adequate supplies of prescribed medicines; stock upon non perishable food items if required. These are the suggestions for 24 hours cyclone and pre-planned precautions of cyclone.

In case, there is 16 hours cyclone just adopt few things like listen to the media regularly for latest updates, gather tools that will be needed for emergency repairs for example; hammers, nail, rope and tarpaulins.

To safeguard oneself, do not touch wet switches, and beware of fallen power lines treat them as if they are live, stay at home; resist the urge to go sightseeing. The water surge caused by the vehicle can send flood water into people's home.

Try to save your lives by knowing all the past disasters that have happened and also try to solve the calamities by knowing the previous cyclone damages and its precautions.

Here what I request people to suggest is "Beware of the calm eyes" of the cyclone and "do not go outside until you are advised to do so" and "do not make unnecessary demands on the emergency services" because everyone needs emergency services. So stay calm; safeguard yourself and also others.

Pooja .A.L II B.Com., (CA) 'B'





SPARROW

The sparrows are small, grey birds. They are present in every part of the world. The sparrows are farmer's friend because the sparrows eat the insects that are present in the agricultural field. So they indirectly help to develop the crops. In olden days there were many sparrows but now the sparrows are decreasing because of so many reasons. If this continues there won't be sparrows in future. The sparrows are called the endangered species.

The main reasons for decline of sparrows are

- (i) Loss of habitat (nest)
- (ii) Loss of food (insects etc)
- (iii) Mobile Radiation
- (iv) Modern agricultural practice.

World's Sparrow day is celebrated on March 20th.

LOSS OF HABITAT

Most of the sparrows are well - adapted to live in water areas, so it is surprising their number have fallen significantly over the past decades. An investigation into this worrying trends find that sparrows living in urban areas are adversely affected by pollution, poor nutrients and mainly due to factory smoke and cutting trees. So the sparrows are not able to build the nest. As humans let us save sparrows by giving some place to build a nest.

LOSS OF FOOD

The second most reason for the decline of sparrows is loss of food. In those days there were plants and trees and so the sparrows were getting food to eat like insects. Due to development, there are less trees and plants. So the sparrows are not getting proper food and nutrition.

MOBILE RADIATION

The electromagnetic fields and radiation created by mobile towers are known to affect, simultaneously indicating that the radiation is also harmful to humans. The effect ranges from the damage to the immune and nervous system of sparrows to interference with their navigating sensors.

MODERN AGRICULTURAL PRACTICE

In Modern agricultural practice heavy use of chemical fertilizers leads to agricultural produce. When the insects are eaten the sparrows die of fertilizers used by farmers. So when we see all those reasons for the decline of sparrows we know that the humans So when we see all those reasons for the decline should correct the mistake what we had are main reason for sparrows decline. So we should correct the mistake what we had made.

Sparrows are Natural bio-indicator for environmental health".

So let us take a step to save little birds life, or else in future there won't be any sparrows.

"Save the sparrow"

"Save Birds Life"

"Save Nature"



SUPER SKIN FOODS OF NATURE

Contains red antioxidants to combat free radicals and Raspberry slow signs of aging.

Rich in Vitamin E replenishes skin ; natural moisture Avocado barrier to keep soft and hydrated.

Helps to reduce blemishes and breakout. Yoghurt -

Amino Acids helps to build and repair muscles. €gg skin tissues.

Rich in omega-3 fats and B vitamins that strengthen Walnut your skin cells.

Citrus -Vitamin C helps with collagen production to keep skin smooth and wrinkle free.

> GIRIJA .V II B.Sc., Nutrition & Dietetics



[&]quot;So let's keep some water for birds on the terrace"

[&]quot;So we should use the mobiles in limit"

[&]quot;We shall plant a tree near the house"

[&]quot;We should not cut down trees"

A FRIEND FOR THE GREEN GUY

Earthworms may lack the charm or excitement of more familiar animals, but their contribution to our world is contrast to its popularity. It plays an important role in ecosystem either directly or indirectly.

An earthworm is a long tube like animal commonly found in soil. Its body is divided into many parts called segments. It contains some tiny air like structures that help to move forward on the surface. Earthworm's contraction and relaxation takes place by body segments.

They exchange the gas with the help of moist skin and Earthworm is warm blooded. Oxygen and carbon dioxide are absorbed through the skin. During rainfall, in soil, oxygen decreases. So, earthworm comes out to get oxygen in the air by raising its body partially.

Many different types of earthworms such as red worms (also called as red wrigglers) are used in decomposing food waste into compost by the process called vermiculture and the manure we get is called Vermicompost. Earthworm feeds on plant debris. A ristotle noticed how they could turn the soil so the called them the intestines of earth. There are 1000 species of earthworm, divided into 3 types. Earthworms that dwell on the soil surface are in compost or leaf litter. eg. (Red, wigglers' Eisenia foetida)

There are that feed and cast within soil and those who construct permanent burrows from which they visit the surface to obtain food, often at night. (eg. Common earthworm, Tumbricus Terrestris)

Benefits to ecosystem

Sometimes earthworms are known as ecosystem engineers, because they significantly modify the physical, chemical and biological properties of the soil profile. Earthworms along with bacteria and fungi decompose the organic materials.

Increasing nutrient availability

Nutrient like phosphorous and nitrogen become more readily available to plants.

After digestion, these nutrients are excreted in the waste of earthworms and become available for the plants to intake and grow.



Earthworms also take nutrients from the deeper grounds and bring it into closer contact with plant root.

Improving soil Structur€

Earthworm burrow alter the physical structure of the soil. They open up small spaces, known as pores, within the soil. Due to this, they help in waste filtration and water and soluble nutrients move down to plant root. This also helps in soil aeration and enhances plant root penetration. Earthworms helps humans by increasing pastoral productivity, facilitating and accelerating mine restoration.

GAYATHRI .M I B.Sc., Bio-Technology



RAIN WATER HARVESTING

Water harvest system was a viable alternate both socio-economically and environmentally.

In ancient India along with sophisticated hydraulic structures, there existed an extra ordinary tradition of water harvesting system, people had indepth knowledge of rainfall and soil types and developed wide ranging techniques to harvest rainwater ground water, river water and flood water in keeping with the local ecological conditions and their water needs.

Traditional method of rainwater harvesting

In hill and mountain regions, people built diversion channels like the guls or Kuls of the Western Himalayas for agriculture.

Rooftop rain water harvesting was commonly practised to store drinking water, particularly in Rajasthan. In the flood plains of Bengal, people developed channels to irrigate the fields.



In the semi-arid and arid regions of Rajasthan, particularly in Bikaner, Phalodi and barmer, alomst all the houses traditionally had underground tanks or tanks for storing drinking water. The tanks could be as large as a big room. One household in Phalodi has a tank that is 6.1 meter deep; 4.27 metre long and 2.44 metre wide. The tanks were connected to sloping roof of the houses through a pipe and rain is stored in underground tanks.

Roof top rain water harvesting is the most common practice in Sikkim, Meghalaya. Nearly every household in the city has a roof top rain water harvesting structure.

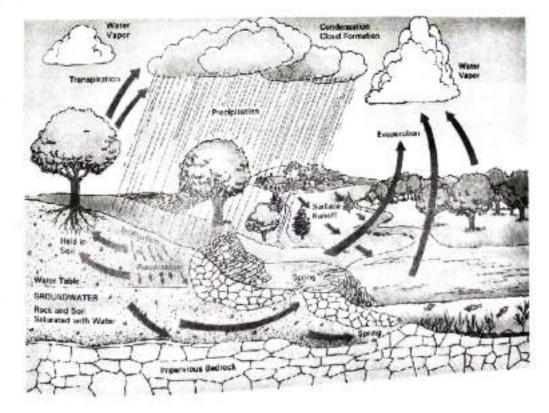
Today, in Western Rajasthan, sadly the practise of rooftop rainwater harvesting is on the deadline as plenty of water is available due to the perennial Rajasthan Canal.

In Gandathur, a remote backward village in Mysore, Karnataka, villagers have installed household's rooftop rainwater harvesting system to meet their water needs.

Nearly 200 households have installed this system and the village has earned the rare distinction of being rich in rainwater. Gandathur received an annual rainfall of 1000mm and with 80 percent of collection efficiency and of about 10 fillings; every house can collect and use about 50,000 litres of water annually.

From the 20 houses, the net amount of rainwater harvested annually amounts to 1.00,000 litres.

Tamil Nadu is the first state in India which has made top rainwater harvesting structure compulsory to all the houses across the state. There are legal provisions to punish the defaulters.





CYCLONE AND ITS PRECAUTIONS

Cyclone:-

In meteorology, the cyclone is a large scale air mass that rotates around the strong structure of low atmospheric pressure cyclones are characterized by inert spiralling winds that rotate about a zone of low pressure.

A cyclone's track is guided through the course of its two-six days life cycle by the steering flow of the sub tropical jet storm.

Symptom:

Barometer initally studies little changes occur in the ocean where ocean surface swells about six feet. Every waves comes in nine seconds and a strong storm occurs which is the symptom of cyclone.

Top Ten Precautions of Cyclone:-

Delay travelling if possible until a heavy Strom has subsided. If caught while travelling, look for covering places such as closed car, parks or petrol stations.

Switch on your car's hazard light if visibility is poor or the roads are too slippery.

Just fifteen (15) Centimetre of moving water can knock you off your feet while sixty (60) c.m. deep can sweep a vehicle away.

Generally, if the water is deeper, then the bottom of your doors or the bottom third of your wheels is not advisable to dry through it.

If youget trapped in your car during flooding, abandon it and climb to higher ground.

Turn off gas and electricity if flooding occurs.

Trees are hazardous; remove dead and rotting branches of trees at home to avoid the risk of them falling during extreme weather conditions. Don't park under trees during a storm.

Make sure your outdoor furniture is safely stored or secured.

Unplug your appliance and devices before storm because you might experience power surge first hand.

Investing sand bangs too place against doorways and lowland vents. During flood, move costly items to the highest floor in your home or a shelf.

LONG LIVE THE SPARROW!

Sparrows are small, plump, brown and grey brids with short tail and sturdy, powerful beak. Members of this family range from 11.4 cm (4.5 in) weighing 13.4 grams to 18 cm (7.1 in) weighing 42 grams. Sparrows are physically seed - eaters. They are indigenous to Europe, Asia and Africa. World Sparrow Day is celebrated on 20th March.

"God loved the birds; and created Trees....

Man loved the birds; and invented cages" ...

Sparrows in literature:

Jesus uses sparrow as an example of divine providence in the Gospel of Matthew.

"Fear ye not therefore, ye are of more value than many sparrows".

-Matthew 10:31

In the final scene of Shakespeare's Hamlet, His eye is on the sparrow

-Shakespeare

Sparrows are represented in Ancient Egyptian very rarely, but an Egyptian hieroglyph symbolised picture of an object representing word, syllable or sound. Sparrows are called as Natural Bio-indicator of Environmental Health.

Reason for the decline of sparrows

Navigation skills of birds and Earth's Magnetic System are co-related. Natural Electromagnetic Radiations are directly proportional to earth oriented magnetic vibration but techno influenced EMR is indirectly proportional to Earth oriented Magnetic vibration. All Mobile phone towers emit microwave radiation, which is a Radio Frequency Radiation (RFR) part of the spectrum of electro magnetic waves. Long term exposure to low level RFR has a damaging effect on the nervous and immune system of small animals. Short termed exposure to pulsed mobile phone rediation with carrier frequency 900 MHz reduce's the reproductive capacity of Insects by 60% Birds are good ecological indicators for low-intensity electro magnetic radiations; They have thin skills and their feathers can acts as dielectric receptors of microwave radiations. Many species uses magnetic, navigation, when microware interferes with their sensor. It misguides them during navigation and preying.



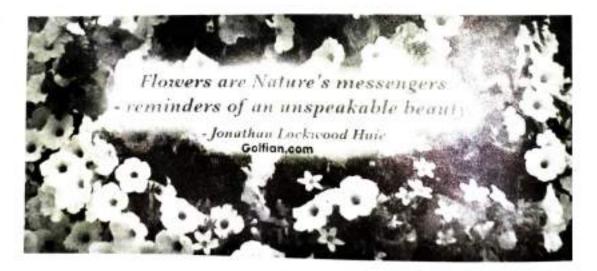
Sparrows are rendered homeless due to modern "Matchbox styled" architecture that makes it difficult for the bird to build nests. These winged companions, who used to build nest in the holes, roof and crevices on traditional houses, are struggling to find a safe corner in glass building. Not just pesticides used during agriculture, but the chemicals used while storing grains, ultimately find way to the systems of sparrows, causing them death. Unlike conventional shops where we used to pack grains and pulses in paper bags, making some allowance for spillage, the plastic bags in the departmental stores don't allow that spillage, which explains the scarcity of food for the poor birds. The depleting population of sparrows is also attributed due to increased use of package foods. Unlike the earlier days, when women used to clean grain outside due to their houses and sparrow would have plenty of food from there. Exclusive use of pesticide and insecticides in the farms and garden is also killing the birds' primary source of food, insects.

Solutions to bring back our winged visitors:-

During summer, people should hang artificial bird nest and put water and food in the balconies. Kitchen waste can be transferred into bio-manure and the decomposition would help in the development of microbes that these birds feed on. Besides water bowls, bird-bath in hot summer afternoon helps birds to rehydrate. Plants and hedges, that are native to the place, can be grown. This encourages sparrows to come back. Sparrows breed 4 times a year! Artificial Nests outside our homes can help them have a constant and safe place for breeding and to roost. Use high quality fuel in the vehicle and maintain the vehicle to minimize pollution.

We can make small and simple wooden homes for the sparrow, so that in our own small way, we will help bring back this little brown bird back into our lives.

Janet Carolin .P I B.A., English





NATURE IN HOLY BOOKS

The earth is green and beautiful and God has appointed you his stewards over it.

"Adopt the pace of nature. Her secret is patience". - Ralph Waldo Emerson

Nature is one of our greatest teachers, a sourse of solace, inspiration, delight, a home and a companion. It is our therapist that makes us relieve. The beauty of nature is made to appreciate and admire and not to harm it. The beauty that God bestowed upon us, i.e., the nature, is soothing the brain, the heart and the soul. Through the gift of God-Nature, we feel so good, we destress. We release our worries and feel free.

We lead and average of lifespan between 60-70 years, but the huge trees and the dense forests are probably on earth for 100's of years. Then why so we make differences in ourselves and the greenery? Is it because only a tree? or is it because we are more important than the nature? But look how God has chosen to give a longer life to a tree, a plant. This is what we have to learn "Respecting nature more than the Mankind".

Beautiful verses from the holy Quran, the Bible and the Bhagavad Gita on the creation of the earth and its beauty are given below.

From the Quran, Al Imran 3:190 "Indeed, in the creation of the skies and the Earth and the movement of the days and nights, there are signs for those who have intellect.

From the Bible, Song of Solomon 2:12 "Flowers are appearing on the Earth. The reason for singing has come. The cooing of doves is heard in our land."

From the Srimad Bhagavatam 2.2.41 "Either, air, fire, water, Earth, Magnets, all creatures, directions, trees and plants, rivers and seas, they are all organs of God's body, remembering this a devotee respect all species.

Thus, nature is made as a resting place, has given shapes to our thoughts, has provided us sustenance, has empowered us and made us grow.

"Look deep into nature, and then you will understand everything better".
- Albert Einstein

- Fouzia Sultana .J



EDGES OF CREATURE

People have been too busy to realise their choral chirping is now a duet.

On the edges of extinction house sparrow population has halved in the past 30 years. And now it has gone to beyond. The house sparrow (Passa domesticus) is no longer what is used to be common and 39 other globally threatened birds is under the Red List of high conservation Concern. The recent ornithologists have reported drastic decline as part of sparrow campaign 5,000 pounds of cultural emblem in terrible trouble.

Reasons are the decline of reduction in food supply, change in agriculture like widespread use of pesticides, lack of nesting, electromagnetic contamination of cellphones, increase of predator species like hawks and cats.

The decline of sparrows is mainly caused by changes of agricultural and contamination of cellphones, and networks.

Causes: The depleting population of sparrows is also attributed to increase of package foods. When women used to clean grain outside, it was food for them. Now they are forced to eat leftover package food. The effect with native plants like adulsa, Mehndi are replaced as non-native worms caterpillars lost insects like aphid to feed on.

What can we do to arrest decline: Kitchen waste could be transferred into biomanure and decomposition of developing microbes. Feed birds beside water bowls, birds bath in hot summer afternoon. It helps to rehydrate and helps sparrows creatures to come back. Sparrows breed four times a year. Artificial nest outside may help a constant safe for breeding and to roost.

How can we bring disappearing sparrows back to our cities?

In 2012, the chief minister of Delhi had declared house sparrow as the state bird of Delhi. After 2 years, Indian postal department released a stamp of house sparrow with rock pigeon. It is fast disappearing from our neighbourhood. Again blame goes to human. It is rendered homeless due to Matchbox styled houses. It was so difficult to build nests.

So decline of sparrows has been increased for avoiding here we can follow the prevention to provide the sparrows by Network Rays and change in human activities.



NATURE IN LITERATURE

BOOKS REFERRED AND THEIR AUTHORS:

The Holy Bible - The New International Version
The Happy Prince - Oscar Wilde
The Fairy Tale - Old UK Version.

INTRODUCTION:

Nature is one among the most precious gift of God. Every literature talks about Nature. Art portrays the beauty of Nature. Nature has a close connection with Music. Nature not only refers to the greenery, flora and fauna but also the minds of people. As I said, Nature has a close connection with the music, so also, it has a close connection with the human mind. The greenery gives a peace of mind.

THE HOLY BIBLE

In the Holy Bible, the book of Psalms - Song of David - portrays nature. The most often read Biblical verse "He makes me lie down in the green pastures, He leads me beside the still water". From the book of Psalms 23: 2, God rests man's burden. He forgives him and leads him in the right path. Here, "The green pastures and still waters are potrayed in the Bible, which was written nearly 2000 years ago but even at that time nature was seen as a pacifying place to mankind.

At the sametime, the sad reality of deforestation is also referred in the Holy Bible. In the Book of James, Chapter 3 verse 7 says, For every kind of beast and bird, or reptile and sea creature, can be tamed and has been tamed by mankind". Man, for his greedy, selfish desires, he started to tame animals and wild life. He also started destroying the precious boon, the Nature.

The First and foremost verse of the Holy Bible says, "In the beginning, God created Heaven and Earth". We are created in his own image. It's our duty to preserve the gift that God has created. He created animals and birds. So we must be thankful to God.

THE HAPPY PRINCE - OSCAR WILDE

Oscar wilde is a great poet and playwright. He is a brilliant wit and has made many works on Nature. "The Happy Prince and other tales" is a combination of five short stories. In that, the well known story "The Selfish Giant" is often heard. We have learnt it from our childhood. Infact, whenever we come across the name Oscar Wilde, the only thing that strike our mind is the story "The Selfish Giant".

In the story, Nature is portrayed beautifully. Nature has a close connection with the children. When the children were sad, the nature was also sad. So, it withheld the season, when the children entered the castle again, the season changed from winter to spring. The plants and trees turned green. Sweet fruits bore. The birds began singing beautifully. Thus, the children, music and nature are inter-connected.

The other story named "The Happy Prince" is also the story of Oscar Wilde. It is a story of a sad Prince's Statue who sees the city of Europe, his Kingdom tiring in poverty. At that time a swallow, a kind of bird, Which has lost its flight during migration, lands on the prince's Statue, Which was made of Sapphire stone. Ruby and Golden leaves. The prince's soul talks to the swallow and asks the bird to help the people with the wealth he had. The swallow and prince became good friends. Here, swallow, a kind of bird is a part of Nature. Here, Nature is protrayed as a Helping Hand. "Thus, From this story, we learn "Nature helps man in all its aspects".

THE FAIRY TALES:

The Short stories that gives life to the supernatural creatures such as Elves, dwarfs, fairy, Mermaid, Witches, Wizard, Goblins and Santaclaus. But, the stories are real life events that happens once around the country side, in different culture and various parts of the world.

THE GIVING TREE:

The story "The Giving Tree" shows the human nature and the sacrifice of a tree for man's greediness. Once upon a time, there was an apple tree at the top of a cliff. A small boy who lived in a small village loved the tree and spent most of his time with the tree. Years passed, the boy green older and got many friends. He stopped visiting the tree often. But the tree always awaited for him. One day, the boy met the tree and he was looking sad. The tree asked him the reason for his sadness. He replied, Oh tree, I need Money!. "The tree asked him to take the apples from the tree and sell it in the market. The boy was so happy and did as the tree told. When he wanted to build a house, the tree gave its branches. When he wanted to build a boat, the tree gave its trunk. Atlast only a stump was leftover and the Boy became an oldman. His wife left him, his children didn't give him a place to stay but the stump was still longing for him. Atlast the story ends with a beautiful Sunset, in a small village, at the top of the cliff where the boy and the tree where chatting with each other. Though there are no branches to climb he is a small boy, the short stump and the old man were happy, Nature here is portrayed as a best friend and a helping hand".



CONCLUSION:

Nature too has pain; they too have feelings. God has created nature to make people happy; and God created people to safeguard the Nature. Nature is doing its duty people happy; but we humans, failed to do our duty towards them. We don't safeguard it correctly, but we humans. Nature and music are the two best things ever in the world. But rather we destroy nature. Nature and Music are around us, wherever we go, they are we are not using it properly. Nature and Music are around us, wherever we go, they are with us, they guard us, they give us pleasure and happiness. But why don't we?



THE FORGOTTEN GIFT

It is not everyday that I wake up at the chirps of bird. The rays of sunlight caress my face from the open window. I could see the parrots hopping branch to branch feeding on the nectar of the white flowers today. There is no morning schedule to hurry me. Being Sunday, I linger a little longer in bed. The cow continue to caw. The leaves rustle a sweet melody completing the chirps and occassional cry of crow. There is so much to see which I have ovelooked for so long and observing around everything looks greener and brighter. The sky looks majestic, beautiful, calm and promising.

Things which are there are always there but for long timel have overlooked it while I'm busy living my routine life. Spring Comes bringing along thousands of colourful petals spreading wide promising new life. It goes away before I open my eyes then comes Summer, Fall and Winter.

From the memory lane, I recollect the memories I cherished, when weekend means adventure over hilly terrains, collecting berries and wild fruits, drinking water from the fresh springs, resting our weary legs lying on the meadow and finding figures in a cloud. It is now replaced with sleeping away the whole day, drinking filtered water and no berries and fruits but junk foods.

Today man forgets the mango tree, the rose bushes, tulips, daisies and fragrant of Jasmines welcoming him as he comes home from office while trying hard to remember office file. He forgets the soothing comfort of nature while trying hard to remember the grudges keeping the wound green. A lullaby sung by a cricket died down and he hears only the city honk, under the bright city light, the moon darkens and the stars disappear.



It is time to unfold the forgotten gift and open our eyes because even a simple phenomemon when viewed with heightened awareness can bring forth much. Every moment, encounter and activity, every experience has within it an unspoken message. There is something in nothing and everything in something. Moment after moment, let's live consciously, hearing the unheard, seeing the unseen, feeling the unfelt and revealing the unspoken.

Amidst our busy schedule, let us take time to think, appreciate and forgive. Let's have a moment of silent prayer for the love and care, encouragement and support we recieve. Let us value what we have because it will no longer have its value when its value is not valued.

The best gift cannot be taught by money. It is there within us. All we have to do is to rumage air old box within us. It is there around us and all it takes to unravel is to give time for ourselves, a moment of introspection, a moment of silence and a moment of appreciation. That's why a hermit asks us to meditate when all are fighting endless battle within us. Medicine can only heal our physical wounds.

Cherish and nourish our positiveness and let negative shrink. Open, unwrap the forgotten gift. Let us value what nature gives us while we can because it is the best gift.





Department Activities

























Women's Day





Alumni Meet















Christmas





















Sports Day



























Graduation Day















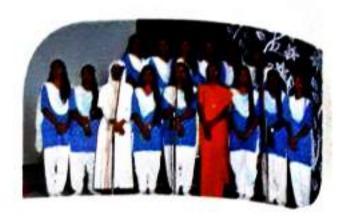






College Day





























National Conference - Computer Science











National Conference - Maths







Pongal Celebration















Science Cxpo









Consumer Club









Extension Activities & Folklore















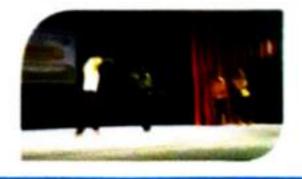


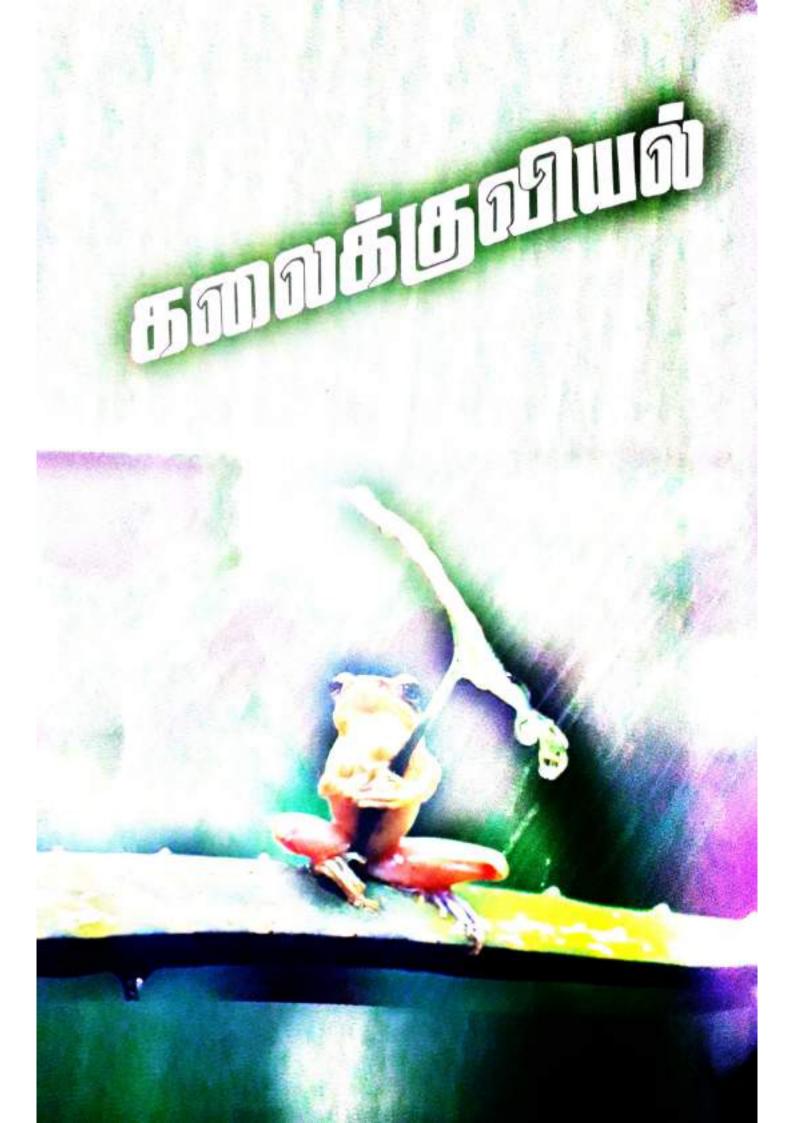












அன்றும், இன்றும்

சுற்று கூழல் பாதுகாப்பு:—

சுற்று கூழல் என்பது சுற்றுப்புறத்தை சூழ்ந்துள்ள இயற்கை கூழலின் சிறப்பை _{குறிக்}கிறது-

சுற்றுகுழுல் என்ற சொல்லை சமூக வொருளாதார குழுல் என்ற சொற்களுடன் ஒப்பிட்டு வேறுபாடு அறிந்து கொள்ளலாம்.

பல சமயங்களில் சூழல் என்ற சொல் இயற்கை சுற்று சூழலையே சுட்டிக்காட்டும் சுற்று சூழலை சூழ்மை என்றும் சொல்லலாம்.

சுற்றுச்சூழல்:∽

நம்மைச் சுற்றியுள்ள உயிருள்ள உயிரற்றப் பொருள்களின் தொகுப்பை தான் சுற்றுச்சூழல் என்கிறோம்.

வருகி வரும் விஞ்ஞான வளர்ச்சியால் விளைந்த நன்மைகளையும் தீமைகளையும் ஆராய்ந்து பார்த்தால் நன்மைகளைக் காட்டிலும் தீமைகளே அதிகம் இருக்கின்றன.

அன்றைய நிலை:~

பண்டைக்காலத்தில் ஒவ்வொரு மனிதனும் நிறைந்த முழுமையான உணர்வைப் வற்றிருந்தான். அவனிடம் தொலைநோக்குப் பார்வை தன்னமைற்றத் தன்மை நிறைந்து தென்பட்டது. அதன் விளைவாய் நல்ல கூழ்நிலையை உருவாக்கி அவர்கள் அமைதியான அர்த்தமுள்ள வாழ்க்கையினை வாழ்ந்து காட்டினார்கள்.

இன்றைய நிலை:−

இன்றைய நிலையில் மெஞ்ஞானம் விஞ்ஞானம் தலைதூக்கி நிற்கிறது. கேள்விகளே அறிவின் விழிப்புநிலை என்ற எண்ணத்தின் அடிப்படையில் அமைதி காணாமல் போயிற்று. வேற்று ஆரவாரங்கள் தலை தூக்கியது பொதுநலமற்ற தொலைநோக்குப் பார்வையற்ற சுயநலச் சமுதாயம் வேருன்றி நிற்கிறது. அதன் விளைவாய் விளைந்ததுதான் இருபதாம் நூற்றாண்டு

ழேல மாசு:--

நில உயிரினங்கள் வாழ்க்கைக்கு மிகவும் இன்றியமையாதது நிலத்தில் கலக்கும் ஆலைக் கழிவுகளும், அணுக்கழிவுகளும் செயற்கை உரங்களும், பிற நச்சுப் வாகுட்களும் நீலத்தின் தன்மையை மாற்றிவிடுகின்றன.

நிலத்தில் விளையும் காய்கறிகளில் இந்த நச்சுத் தன்மை படர்வதால் மனிதனின் ^{உடலி}லும் கலந்து விடுகிறது. குழந்தைக்கு ஊட்டப்படும் தாய்ப்பாலில் கூட இந்த ^{காய்க}றிகளின் நச்சு கலந்திருப்பதாக மருத்துவ ஆய்வறிக்கை ஒன்று தெரிவிக்கிறது.



நீர் மாசு:

சு: தண்ணீரை மாசுபடுத்துவது என்பது நிலத்தடி நீரை மாசுபடச் செய்யும்; தேங்கு _{நிற்குட்} தண்ணீரை மாசுபடுத்துவது என்பது கில்லாமல் போவதால் தண்ணீர் மாசுப்ப_{டுகில}் தண்ணீரை மாசுபடுத்துவது என்பது நடிக்கு வாவதால் தண்ணீர் மாசுப்படுகிறது. தண்ணீருக்கு சரியான வடிகால் வசதிகள் இல்லாமல் போவதால் தண்ணீர் மாசுப்படுகிறது.

வீருக்கு சரியான வடிகால கூடி உலக அளவில் உள்ள தண்ணீரால் 0.01 விழுக்காடு மட்டுமே நாம் பயன்படுத்தும் குழநீர்.

. அந்த தண்ணீரும் தற்போது குறைந்தும், மாசுப்பட்டும் வருவது உயிரினத்துக்_{கே கேடு} விளைவிக்க கூடியதாகும்.

ாவிக்க கூடியதாகும். வீட்டுக் கழிவுகள், ஆலைக் கழிவுகள் என கழிவுகளை இரண்டாகப் பிரிக்_{கலாழ்.} வீட்டுக் கழிவுகள், ஆலைக் கழுவுகள் பெரும்பாலும் நச்சுத்தன்மை உடையதாக இருக்கின்றது. _{முனித} இதில் ஆலைக் கழிவுகள் வெருப்படுத்து. நடித்த கழிவுகள் ஏதோ ஒரு வகையில் மனித்தை அலட்சியங்களினால் அசட்டை செய்யப்படும் கழிவுகள் ஏதோ ஒரு வகையில் மனித்தை சെன்றடைகிறது.

கடலில் கொட்டப்படும் கழிவுகள் மீன்களின் வாயிலாகவோ, தரையை சேதப்படுத்தும் கடலை கொட்டப்படும் கழுவுகள் தானியங்களாகவோ, நீராகவோ காற்றில் கலக்கும் போது நச்சுகள் கூறுவு வழியாகவோ ஏதோ ஒரு விதத்தில் மனிதனைச் சரணமைடகின்றன.

ஒலி மாசு:

ஒலி மாசு என்பது மனதிற்கு ஒவ்வாத இயந்திரங்கள் பிறப்பிக்கும் இரைச்சல் அல்லூ ஒலியாகும். அது மனிதனின் வாழ்க்கை முறைகளையும், விலங்குகளின் வாழ்க்_{கை} முறைகளையும், செயல்பாடுகளையும் வெகுவாக பாதிக்கின்றது.

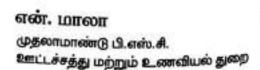
அலுவலகங்களில் பயன்படும் கருவிகள், வாகனங்களின் ஹாரன் ஓசை, ஆ_{லை} இயந்திரங்கள், கட்டிட பணிகள், ஒளிபரப்பு கருவிகள், தரையை சுத்தம் செய்யும் இயந்திரங்கள், கருவிகள், மின் விசை, ஒலி வெருக்கி மின்சாரவிளக்குகள் எழுப்பும் ஒலி , குரைக்கும் நாய்கள் ஆகியவை அனைத்தும் வீட்டின் உள்ளும், வீட்டின் வெளியேயும் இரைச்சல் உண்டாவதற்கான காரணங்கள் ஆகும்.

ഖ്വത്നിക്കര:

உயர்ந்து வரும் வெப்பநிலை மழை பெய்யும் நிலவரங்களை மாற்றக்கூடியது. வறப்சி மற்றும் வெள்ளம் ஏற்படுதலை அதிகரிக்கச் செய்கிறது. பனிப்படிவங்கள் அதிகரிப்பதால் கடல் மட்டம் அதிகரிக்கிறது. கடந்த சில ஆண்டுகளாக அதிகரித்து வரும் புயல் கூறாவரி போன்றவற்றுக்கும் வெப்பநிலை மாற்றங்களின் விளைவுகளே காரணம்.

முடிவுரை:

சுற்றுப்புறச் சூழல் பாதுகாப்பு என்பது வேறுபாடுகளற்று மணித்தலம் முன்னடுத்து^{த்} செய்ய வேண்டிய வேலையில் மிகவும் முக்கியமான ஒன்றாகும். இவற்றை தவற^{விடும்} ஒவ்வொரு தருணங்களிலும், நாம் பூமியின் ஆயுளைக் குறைத்துக் கொண்டிருக்^{கூறோற்} என்பதை அனைவரும் உணர வேண்டும். அன்றாடம் நிகழும் சிறு சிறு செயல்களின் ^{மூலம்} நமது சுற்றுப்புறத்தைக் காக்கும் கடமை நம் அனைருக்கும் உண்டு.





உயிரின் ஆதாரம்

மன்னுரை:

உழுதுண்டு வாழ்வாரே வாழ்வார் மற்றெல்லாம் தொழுதுண்டு பின்செல்பவர்

என்று தெய்வப்புவைர் வள்ளுவர் தொழில்களிலைல்லாம் உயர்ந்தது உழவுத்தொழில் என்று _{கூறியு}ள்ளார். நமது நாட்டின் முக்கியத் தொழிலும் உழவுத் தொழில்தான். இந்த உழவுத் தொழிலை _{நம்பித்தா}ன் நம் நாட்டின் வெரும்பாலான மக்கள் வாழ்கின்றார்கள் என்பது குறிப்பிடத்தக்கது ஆகும். _{விவசாய}த்தின் சிறப்பு:

மனிதன் உயிர் வாழ முக்கியமானது உணவு ஆகும். இந்த உணவை உற்பத்தி செய்ய உறுதுணையாக இருப்பதுதான் உழவுத் தொழில், நமது நாட்டின் முதுகெலும்பாகத் திகழ்வது இந்த உழவுத்தொழிலே ஆகும்.

இந்தியா ஒரு விவசாய நாடு என்று அழைக்கப்படும் நம் நாட்டின் அதுவும் கிராம மக்களின் முக்கியத் தொழிலாக இந்த உழவுத்தொழில் உள்ளது. இந்த உழவுத்தொழில் சிறப்புற நடந்தால்தான், நம் நாட்டின் உணவுப்பஞ்சம் தீரும். உழவுத் தொழிலை மையமாக வைத்துத்தான் நமது நாட்டில் பசுமைத்திட்டம் வகுக்கப்பட்டது.

உழவு என்பது தொழில் மட்டுமல்ல;

உயிரின் ஆதாரம்.....

இன்றும் அரசாங்கம் உழவர்களுக்குப் பல சலுகைகளை அளித்து, நமது நாட்டில் உழவுத்தொழில் சிறப்புற நடக்க வழிவகுத்து உள்ளது. குறிப்பாக கூட்டுறவு வங்கிகள் மூலம் உழவர்களுக்கு உழவுத் தொழிலுக்குப் பணம் அளிப்பதோடு, உரம், பூச்சி மருந்து என பலவகையிலும் உதவி புரிகிறது உழவுத் தொழிலுக்கு அரசாங்கம் அளித்த ஆதரவும், பசுமைப்புரட்சியுமே இன்று நம் நாட்டில் உணவுப் பஞ்சம் இன்றி, உணவில் தன்னிறைவு ஏற்பட்டுள்ளது. இதற்கு முக்கிய காரணம் நமது மக்களின் உழவுத் தொழிலே ஆகும்.

விதை விதைத்தால் பணம் முளைக்கும் என்றால் இந்த உலகில் அனைவகும் விவசாயிகளாகி இருப்பர்.....

விவசாயத்தின் பயன்கள்:

உழவுத்தொழில் நம் நாட்டில் சிறப்பாக இருந்தால்தான் நாட்டில் உணவு பஞ்சமின்றி, கால்நடைகளும் நன்கு வளர்க்கப்படும். உழவுத்தொழிலே நம் நாட்டில் பெரும்பாலோருக்கு வேலை வாய்ப்பினை அளித்து வருகிறது. கிராம மக்கள் நகரில் குடியேறாமல் தடுப்பதே இந்த உழவுத்தொழில் தான். இதனைக் கருதிதான் நமது தமிழர்கள் உழவுத்தொழிலுக்கு நன்றி தெரிவிக்கும் வகையில் பொங்கல் பண்டிகையை ஏற்படுத்தினர்.

क्राकर्मकांक्योः

^{உழுவுத்}தொழிலுக்கு வந்தனை செய்வோம் என்ற மகாகவி பாரதியின் வாசகத்தின்படி இந்த ^{உழுவுத்}தொழிலை போற்றுவோம்! விவசாய நாடு நமது பாரத நாடு என்ற பெருமையை இனியாவது ^{ஏற்படுத்}த முயல்வோம்.

பக்திக்கு பலி கேட்பவனா?

பசிக்கு உணவளிப்பவனா?

சிந்தத்தப்பார்......

ந. ஜீவதர்ஷினி பி.ஏ. ஆங்கீலம் இண்டாமாண்டு



ம**ண் அ**ரிப்பைத் தடுப்போம்

முன்னுரை:

மரம் வளர்ப்போம், மழை வெறுவோம் என்றால் மட்டும் போதாது, மனித வாழ்க்_{கை} இயற்கையை அடிப்படையாக கொண்டே நடக்கிறது . அறிவியலில் எவ்வளவுதான் முன்னேற்றம் அடைந்தாலும், இயற்கை மனித வாழ்க்கைக்கு மிக அவசியமானது. மறுந் வளர்ப்போம், மழை பெறுவோம் மக்களை காப்போம்.

மரங்கள் வளர்ப்போம் :

இன்றையச் சூழலில் மோட்டார் வாகனங்கள் மற்றும் தொழிற்சாலைகளின் மூலும் சுற்று குழல் மாசுப்படுவதை மரங்கள் தடுப்பதாலும், மரங்களால் நமக்கு ஏற்படுகின்_ற பயன்களாலும், வீட்டுக்கு ஒரு மரம் வளர்ப்போம் என்ற தீட்டத்திற்கு உட்பட்டு மரங்களை வெட்டாமல், பயிரிடும் நிலங்களைச் சுற்றியும், சாலை ஓரங்கள், ஆறுகள் மற்றும் கால்வாய்களின் கரை ஓரங்களிலும் மரங்களை வளர்ப்போம்.

மரங்களின் பயன்கள் :

மரம் நமக்கு இயற்கையின் வாக்கிஷங்கள். மரம் உணவுப் வாருட்களையும், மருந்துப் பொருட்களையும், தூய காற்றையும், நறுமணப் பொருட்களையும் மற்றும் இளைப்பாற நிழுலையும் தருகிறது. மரங்கள் காய்ந்தப் பிறகும் கூட விறகாகவும், கரியாகவும் பயன்படுகிறது.

மரங்களின் இலை, வேர், தண்டு, மொட்டு, பூ, காய், கனி என இவையனைத்தும் நமக்குப் பயன்படுகிறது. மரக்கூழிலிருந்து காகிதம் தயாரிக்கப்படுகிறது. தீப்வெட்டி, தீக்குச்சி, இரப்பர், எண்ணெய் வித்துக்கள், மேலும் பல வொருட்கள் மரங்களால் நமக்கு கிடைக்கின்றது.

மரங்களால் ஏற்படும் நன்மைகள் :

எல்லா இடங்களிலும் மரத்தை வளர்ப்பதினால் மாசுக்களை நீக்கி, மழையைப் பெருக்கி விவசாயத் தொழிலை வளர்த்து, இயற்கை வளத்தால் எங்கும் பசுமை பொங்கும் பாரதத்தை உருவாக்கலாம். எனவே அனைவரும் மரம் வளர்ப்போம். மரங்களை வளர்ப்பதால் சுற்றுச்சூழல் மாசடையாமல் பாதுகாக்கலாம், மரங்களை வளர்ப்பதால் நம் வீடு மட்டும் இல்லாமல் நம் தாய்நாடும் மிகப் பசுமையாக காணப்படும்.

மழைநீர்:

அனைவருக்கும் அடிப்படைத் தேவை தண்ணீர்; ஒரு நாட்டின் நீர் வளத்தை வைத்தே மக்களின் வலிமையும், வறுமையும் பேசப்படுகிறது. மழைப் பெறுவதற்க்கு முக்கிய காரணம் மரம் வளர்த்தல்.

> "துப்பார்க்குத் துப்பாய துப்பாக்கித் துப்பார்க்கு துப்பாய தூவும் மழை".



என்ற வள்ளுவரின் குறளுக்கேற்ப உணவுப் பொருள்களை விளைவிப்பதும், தானே உணவாக அமைவதும் மழை. மழைக்கான, நிலத்தடி நீர் குறைவைத் தடுக்கவும், நீர் வளத்தை பெருக்கவும், நீரின் தரத்தை உயர்த்தவும், கடல்நீர் கரையைத் தாண்டி உப்புகுவதைத் தடுக்கவும், மழைப் பயன்படுகிறது. ஓசோன் பாதிக்காதவாறு காக்கவும் மழை பயன்படுகிறது. அனைவரும் மரம் வளர்த்து மழை பெற்று, வானமும் பூமியும் சேதமடையாதவாறு காப்போம்.

மண் அரிப்பு :

மண் அரிப்பு என்பது விவசாயத்திற்க்கு மிக ஆபத்தாகும். மரம் வளர்ப்பதால் மண் அரிப்பைத் தடுக்கலாம். மரம் வளர்ப்போம் மண் அரிப்பைத் தடுப்போம்.

முடிவுரை:

இந்த உலகம் வளம் பெற இயற்கையை போற்றி வளர்க்க வேண்டும். அதுமட்டுமல்லாமல் மாசு கட்டுப்பாடு வாரிய பணியாளர்கள் அடிக்கடி செய்தித்தாள்கள், பத்திரிக்கைகள், தொலைக்காட்சிகள் போன்றவற்றின் மூலம் மக்களிடம் ஏற்படுத்தும் விழிப்புணர்வு தன்மையை மக்கள் அலட்சியப்படுத்தாமல், அவற்றை ஏற்றுக் கொண்டு நடந்தால் மரங்களை பாதுகாத்து, நாம் மழையைப் பெற முடியும். மரம் என்றால் தாயின்மடி. அத்தாயின் மடியை அழிக்காமல் பாதுகாப்போம். மரம் வளர்ப்போம் ! மழை வெள்ளத்தை அதிகரிப்போம்! மண் அரிப்பைத் தடுப்போம்!

> பி. பவித்ரா மி.சி.ஏ இரண்டாமாண்டு





இயற்கையை வாழ வைப்போம் !

நம்மை சுற்றியுள்ள உயிருள்ள உயிரற்ற வொருள்களை தான் நாம் சுற்றுகுழல் என்கிறோழ் ஒரு மனிதன் ஆரோக்கியமாக வாழ்வதற்கு சுற்றுச் சூழல் பெரும் பங்கு வகிக்கின்றது. ஆனால் இப்பொழுது பல அறிவியல் மாற்றங்களால் இயற்கைக்கு மிகப்பெரிய தீமை மட்டும்தான். இது இயற்கைக்கு மட்டும் இல்லை நமக்கும் சேர்த்துதான் என்பதை புரிந்துகொள்ள வேண்டும்.

சுற்றுச்சூழல் மாசடையும் முறைகளும் அதன் விளைவுகளும் :

காற்று மாசுபாடு, நீர்மாசுபாடு, மண்மாசுபாடு, ஒலி மாசுபாடு, உணவு பொருட்கள் மாசுபாடு என வரிசை நீண்டு கொண்டே செல்லும்.

நம் அன்றாட வாழ்க்கைக்குக் தேவையான அனைத்தையும் நாமே மாசுபடுத்தி கொண்டு மருத்துவமனை வாசலில் நிற்கிறோம். அக்கால மக்கள் சுற்றுபுறத்தை மாசுபடுத்தினாலும் அதனை சரி செய்வதற்கான வழிகளையும், கடைப்பிழத்தனர். இயற்கையை கடவுளாக வணங்கினர் ஆனால் நாம் அதனைப்பற்றி கவலைக் கொள்வதே இல்லை.

பருவநிலை மாறுதல்களின் விளைவை உணர்ந்த முதல் தலைமுறையாகவும் அதனை சுடி செய்யும் கடைசி தலைமுணைறயாகவும் நாம் தான் இருக்கிறோம்.

-ஜே. இன்ஸ்ல்

ஆம் இப்பொழுது இயற்கையை நாம் பாதுகாக்காவிட்டால் நமது சந்ததியினருக்கு அதன் பயன்கள் கிடைக்காது.

மாசுபட்ட காற்றை சுவாசிப்பது புகைப்பிடிப்பதற்கு சமம் என்று அறிக்கைகளும் வெளியானது. வாகனங்களிலிருந்து வெளிவரும் புகை ஒரு அரக்கன் போல் நம்மை அச்சுறுத்துக்கிறது. ஆடம்மு வாழ்க்கைக்கு ஆசைப்பட்டு இயற்கையை இழந்து செயற்கையாக வாழ்ந்து கொண்டிருக்கிறோம்.

எதிர்கால சந்ததிக்கு வொருள் சேர்த்து வைக்கும் மனிதர்கள் கொஞ்சம் சுத்தமான காற்றை விட்டுச் செல்ல எண்ண வேண்டும்.

சுற்றுச்சூழல் பாதுகாக்க சில எளிய குறிப்புகள்:

வீடு கட்டும்போது வீட்டின் பின்புறம் சிறிய நிலத்தில் தோட்டம் அமைக்க இடத்தை உருவாக்க வேண்டும். மக்கும், மக்காத குப்பைகள் என நம் வீட்டில் சேரும் குப்பைகளை பிரிக்க வேண்டும். கூடுமானவரை சொந்த வாகனங்களை தவிர்த்து பொதுப் போக்குவரத்து வசதிகளைப் பயன்படுத்தலாம். பிளாஸ்டிக் பைகளை வாங்கி பயன்படுத்துவதை தவிர்க்க வேண்டும். இயற்கை அன்னை, அவளிடத்தில் சுரக்கும் தாய் பாலை மழை நீராக தருகிறாள் மாறாக நாமோ அவளுக்கு விஷத்தை பரிசளிக்கிறோம். அது மீண்டும் நம்மையே சேரும் என்பதை மறந்துவிடுகிறோம். எனவே இயற்கையை வாழு வைத்து நாமும் வாழ்வோம்.

> சுற்று சூழலை பாதுகாப்போம் ! சுற்றாரோடு பல தலைமுறைகள் மகிழ்ச்சியாக சேர்ந்து வாழ்வோம் !



மாசுக் கட்டுப்பாடு

முன்னுரை:

மனிதன் வாழ்கின்ற இந்த உலகம் இயற்கையால் உருவாக்கப்பட்டது. ஆனால் இன்று மனிதன் அவன் தேவைக்கு ஏற்ப இயற்கையை அழித்து கொண்டு இருக்கிறான். இதனால் நூம் சந்திக்கும் பிரச்சனையும் அவற்றை தடுக்கும் முறையும் பற்றி காண்போம்.

_{குழ்நி}ை மண்டல பாதிப்பு :

நம்முடைய அன்றாட வாழ்க்கையில் வீடுகளிலிருந்தும் தொழிற்சாகைகளிலிருந்தும் நீறைய கழிவுப்பொருள்கள் வெயியேறுகிறது. கழிவுப் பொருள்கள் உரிய முறையில் வெறியேற்றாததால் காற்று, நிலம் மற்றும் நீர் சூழ்நிலைகள் மாசு அடைசின்றன. இதனால் இயற்கையின் சமநிலை பாதிக்கப்படுகிறது.

நீலம் மாசுபடுதல் :

நாம் உணவு பொருள் பெறுவதற்கான மூலக்காரணம் நிலம் ஆகும். ஆனால் தற்போது நீலத்தின் சத்து குறைந்து கொண்டே வருகிறது. தொழிற்சாலை கழிவு, மருத்துவ உயயோக கழிவு, அதிக விளைச்சளுக்காக வேதிபொருள் தூவுதல் போன்ற காரணிகளால் நிலம் மாசுபாடு அடைகிறது.

தடுக்கும் முறை :

உயிரி மருத்துவக் கழிவுகளை எரித்து சாம்பலாக்க வேண்டும். அதே நேரத்தில் வேளாண்மைக்கு வேதி பொருள்களை பயன்படுத்தாமல் இயற்கையான இலை, விலங்குகளின் கழிவு பொருளை பயன்படுத்த வேண்டும்.

நீர் மாசுபடுதல் :

நீரின்றி அமையாது என்ற திருக்குறளுக்கு ஏற்ப நீர் இல்லாமல் இந்த உலகம் இயங்காது ஒவ்வொரு சொட்டு நீரையும் பாதுகாக்க நாம் நடவடிக்கை எடுக்க வேண்டும். நீரில் பல்வகையான கழிவு பொருள் கலந்து மாசுபாடு அடைந்து விடுகிறது. இதனை பயன்படுத்தும் மனிதனுக்கு பலவகையான பாதிப்பு ஏற்படுகிறது.

தடுக்கும் முறை:

தொழிற்சாலை கழிவுகள், சாயப்பட்டறை கழிவுகள் நீர் வளங்களில் கலப்ப**தை தடுத்து** மறுசுழுற்சி செய்து பயன்படுத்த வேண்டும்.

காற்று மாசுபடுதல் :

அனைத்து உயிரிகளும் வாழ்வதற்கு காற்று மிகவும் அவசியமானது. ஆனால் காற்றில் நச்சு நிலை அதிகரித்து கொண்டே இருக்கிறது. இந்த நச்சுகாற்றை சுவாசிப்பதால் புற்றுநோய், சுவாசகோனாறு ஏற்படுகிறது.

தடுக்கும் முறை :

தொழிற்சாலையில் இருந்து வரும் புகையினை நீண்ட புகை துண்டுமூலம் வெளியேற்ற வேண்டும். வாகன புகை தடுக்க வாகனத்தை அடிக்கடி பமுது பார்க்க வேண்டும். பிளாஸ்டிக் பொருள்களை எரிப்பதை தடுக்க வேண்டும். மரங்கள் வளர்ப்பதன் மூலம் மாகவை மரம் எடுத்து கொண்டு ஆக்ஸிஜனை வெளியேற்றுகிறது. ஓசோன் வாத்தல் :

ன் வாத்தல் : காய்ன் – டை – ஆக்ஸைடு முதலான நச்சு வாயுக்கள் வளிமண்டலத்துக்கு _{செல்}லு காய்ன் – டை – ஆக்ஸைடு முதலான நச்சு இதனால் சூரிய கதிர்கள் நேரடியாக ப கார்பன் – டை – ஆக்ஸைடு முதலான நட கார்பன் – டை – ஆக்ஸைடு முதலான நடி நேரடியாக பூடி போது ஓசோன் படலத்தீன் அடர்வு குறைகிறது. இதனால் சூரிய கதிர்கள் நேரடியாக பூடி போது ஓசோன் படலத்தீன் அடர்வு குறைகிறது. இதனால் சூரிய கதிர்கள் நேரடியாக பூடி போது ஓசோன் படலத்தீன் அடர்வு குறைகிறது. போது ஓசோன் படலத்தீன் அடர்வு குறைக்கு! அடைகிறது. அதனால் தோல் பாதீப்பு, அதிக வெப்பநிலை போன்றவை ஏற்படும். உன்னுடியு அலட்சிய செயலால் ஓசோன் அடர்த்தியை குறைக்காதே!

கனிம வளத்தால் பாதிப்பு :

வளத்தால் பாதப்பு . நிலக்கரியில் உள்ள கந்தகத் துகள்கள் அமில மழை உருவாகக் காரணமாகிறது. நிலக்கரியில் உள்ள கந்தகத் துகள்கள் அமில மழை உருவாகக் காரணமாகிறது. நிலக்கரியில் உள்ள கந்தகத் துக்கியில் குடியில் துக்கியில் குடியில் துக்கியில் குடியில் துக்கியில் கொளியில் துக்கியில் துக்கியில் கொளியில் துக்கியில் கொளியில் துக்கியில் திக்கியில் துக்கியில் கொளியில் உள்ள கந்தகத் துக்கியில் திக்கியில் துக்கியில் திக்கியில் தியில் திக்கியில் தியில் திக்கியில் திக்கியில் திக்கியில் திக்கியில் திக்கியில் திக் மாறுபாட்டிற்கும் புவி வெப்பமாதலுக்கும் காரணமாகிறது.

கார்பன் தனிமைப்படுத்துதல் :

மரங்கள் கார்பன் – டை – ஆக்ஸைடை எடுத்து கொண்டு ஒளிச்சேர்க்கையின் மூரு அதை உடைத்து, கார்பனைப் புதுமரப் பகுதிகளில் சேமிக்கின்றன. கார்பள்-வூ -ஆக்ஸைடை ஆழ்கடலிலோ அல்லது எண்ணெய் கிணறுகளிலோ அல்லது _{சில} நீா்நிலைகளிலோ நேரிடையாகச் செலுத்தி தனிமைப்படுத்தலாம்.

முடிவுரை:

நம் நாட்டில் நிலவுகின்ற நிலையை பார்த்தால் எதிர்கால இந்தியா கேள்வி குறியா_{கும்} நிலை உருவாகி உள்ளது. நம்முடைய அவசர தேவையாலும், பல செயல்களாலும் பல்வேற . முக்கிய காரணிகளை மாசுபடுத்துகின்றோம். இதனை தடுத்து உரிய முறையில் கையாள வேண்டும். 2020–ல் வல்லரசு ஆகிறோமோ இல்லையோ 2020–ஆம் ஆண்டு மாசு அடைந்த நாடாக மாறப்போகிறது இந்தியா!

> சுத்தமாக இருந்த நாட்டை சுடுகாடாக மாற்றாதே ! இளைஞர்கள் நினைத்தால் எதுவும் முடியும் ! – தமிழா !

> > രെപ. ന്രക്ക് ക് பி.காம், மூன்றாமாண்டு



ஒன்று படுவோம் ! சமுதாயத்தைக் காப்போம் !

சுற்றுச்சுழல் பாதுகாப்பு என்பது சுற்றுசூழலை தனிமனிதனோ, அமைப்போ அல்லது அரசாங்கமோ இயற்கை சூழலுக்காகவும் மனிதனின் நன்மைக்காகவும் பாதுகாக்கும் ஒரு அரச் கிக்கையாகும். மக்கள்தொகையினாலும் மற்றும் தொழில்நூட்ப வளர்ச்சியினாலும் நிறந்தரமாக பாதிக்கப்படுகிறது. இதை உணர்ந்த சற்றுச்சூழல் சில நேரங்களில் நிரந்தரமாக பாதிக்கப்படுகிறது. இதை உணர்ந்த சற்றுச்சூழல் சீரழிவிற்கு காரணமான செயல்களைக் கட்டுப்படுத்தி அரசாங்கங்கள் சுற்றுச்சூழல் சீரழிவிற்கு காரணமான செயல்களைக் கட்டுப்படுத்தி நடிவுக்கைகளை எடுக்க தொடங்கியுள்ளன.

1960 களில் இருந்தே சுற்றுச்சூழல் இயக்கங்கள் மனிதர்களின் செயல்பாடுகள் பற்றிய கூழிப்புணர்வை ஏற்படுத்தியுள்ளது. மனிதர்களின் நடவடிக்கைகளினால் சுற்றுச்சூழலின் தூக்கம் எந்த அளவிற்கு பாதிக்கப் படுகின்றது என்பது தெளிவாக தெரியவில்லை. இதற்கான நூத்காப்பு நடவடிக்கைகள் சில சமயங்களில் கடுமையாக எடுக்கப்படுகின்றது.

கல்வி நிறுவனங்கள் இப்போது சுற்றுச்சூழல் பாதுகாப்பு முறைகள், சுற்றுச்சூழல்கல்வி, சுற்றுச்சூழல் பொறியியல் போன்ற படிப்புகளை வழங்குகின்றன. மனிதர்களின் வூறுப்பில்லாத நடவடிக்கைகளின் காரணமாக சுற்று சூழல் பாதுகாப்பு தேவைப்படுகின்றது. கழிவு உற்பத்தி, காற்று சூழல் மாசடைதல் மற்றும் பல்லுயிர் இழப்பு (நுண்ணுயிர்கள் மற்றும் உயிரினங்களின் அழிவு) முதலியவை சுற்றுச்சூழல் பாதுகாப்பு தொடர்பான மூச்சனைகளாகும்.

தந்த்யாவில் சுற்றுச்சூழல் பிரச்சனைகள்

2004 ல் எடுக்கப்பட்ட ஒரு செயற்கைக்கோள் படம், வட இந்தியாவின் கங்கைக்கரையில் கெட்டியான மெல்லியப் புகையை காட்டுகிறது.

இந்தியாவில் நீர் மாசுபாடு அதிகரிக்கசெய்வதில் திடக் கழிவும் ஒன்றாகும்.

எனவே திடக் கழிவு சேராமல் பார்த்துக் கொள்ள வேண்டும்.

கற்றுச்சூழல் சட்டங்கள், நெறிமுறைகள் மற்றும் கல்வி மூன்றும் பின்னிப்பிணைந்து சுற்றுச்சூழல் பாதுகாப்பிற்கு வழிவகுக்கின்றன.

இந்த காரணிகளில் ஒவ்வொன்றும் தேசிய சுற்றுச்சூழல் முடிவு மற்றும் தனிப்பட்ட சுற்றுச்சூழல் நடத்தைகளையும் பாதிக்கின்றன. உண்மையான சுற்றுசூழல் பாதுகாப்புக்கிடைக்க சமுதாயம் ஒன்றுபட்டு சுற்றுசூழலை பற்றிய முடிவுகள் எடுப்பது அவசியமாகின்றது.

கழிவுகளை அழிப்போம்

சுற்றுசூழலை பாதுகாப்போம்.

வே. பிந்துபிரியா வ.காம் முதலாமாண்டு



இயற்கையை இரசிப்போம் - பாதுகாப்போம்

முன்னுரை:

ஒரு மனிதன் பூமியில் வாழ உண்ண உணவும், உடுக்க உடையும், இருக்க இட_{்டும்,} இன்றியமையாதது. அதுப்பால நல்கர் தாய்மையாகாமல் பாதுகாப்புடன் இருந்தால் நிற் அமைந்துள்ளது. இவைகள் மாசுபடாமல் தூய்மையாகாமல் பாதுகாப்புடன் இருந்தால் நிற் அமைந்துள்ளது. ஐவைகள் பால்ப்பட்ட எனவே சுற்றுபுறச்சூழமை பாதுகாப்பாக வைத்திருக்கு வேண்டும் என்று கூறுவதே இக்கட்டுரையின் நோக்கம் ஆகும்.

பொருளுக்கு:

நம்முடைய நீலம், நீர், காற்று ஆகியவை பலவிதமாக மாசு அடைகின்றன. அவற்றை தப்புகூட்ப நல்ப, நா, கூறு எவ்வாறு பாதுகாக்க வேண்டும் அதனால் ஏற்படும் நன்மைத் தீமைகள் என்னென்ன என்பதைப் பற்றி விரிவாகக் காண்போம்.

சுற்றுச்சுழல் அழக :

வானம் நீலநிறமும், இரவில் பால்வண்ண நிலவும், பகலில் நெருப்பென சூரியனும், வெண்மை, கருமை, செம்மை என காலத்திற்கேற்ப மாறும். மேகங்களும் பருவ காலத்திற்க தக்கவாறு மழையைத்தரும். இவற்றின் செயலால் பூமியில் மரமும், செடியும், கொடியும் அதில் தேன்சிந்தும் பூக்களும், அந்தப் பூவை சுற்றிவரும் வண்டுகளும், அதன் அருகிலையு காய் கனிகளும் உருண்டு, திரண்டு, குவிந்தும் அனைவரையும் கவர்ந்து இழுக்கும், குரங்குகளும், அணில்களும், பறவைகளும் தீன்ற பழங்களும், தீன்னாத பழங்களும் மரத்தில் தொங்கிக் கொண்டிருக்கும். இயற்கையான மலை, அருவி, பூங்காக்கள் போன்றவை நம் கண்ணுக்கு குளிர்ச்சியையும், மனதிற்கு மகிழ்ச்சியையும் தருவது இயற்கையான தாவர இனங்களின் தொகுப்பாகும். இவற்றை காண நமக்கு கண்கோடி வேண்டும்.

இயற்கையை பாதுகாப்போம் :

இயற்கை – மனிதனை நோயின்றி, இன்பமாக ரசனையோடு வாழு வழிச்செய்யும். அதனால் இயற்கையை அழிக்காமலும், அவை மாசுபடாமல் இருக்க காடுகளை அழிக்காமல், மலைப்பகுதியை வெட்டி வீடு கட்டும் நிலங்களாக மாற்றாமல், நீர் நிலைகளை அசுத்தமடையச் செய்யாமல் இருக்க வேண்டும்.

முடிவுரை:

எனவே இனியாவது சுற்றுச்சூழலை சுத்தமாக வைத்துக் கொள்வதின் மூ^{லம்} இயற்கையை பாதுகாக்கலாம்.



இயற்கையை இரசிப்போம் - பாதுகாப்போ_{ம்}

முன்னுரை:

நகர் . ஒரு மனிதன் பூமியில் வாழ் உண்ண உணவும், உடுக்க உடையும், இருக்க இடியுட் ஒரு மனிதன் பூமியில் வாழ் உடைந்று என மூன்றும் மனிதனைச் சுற்றி, குழுவுக இன்றியமையாதது. அதுபோல் நிலம், நீர், காற்று என மூன்றும் மனிதனைச் சுற்றி, குழுவுக இன்றியமையாதது. அதுபோல நல்க, தா. அமைந்துள்ளது. இவைகள் மாசுபடாமல் தூய்மையாகாமல் பாதுகாப்புடன் இருந்தால் நூற் அமைந்துள்ளது. இவைகள் பாகப்பட்ட எனவே சுற்றுபுறச்சூழலை பாதுகாப்பாக வைத்திருக்கு நீண்ட நாட்கள் நோயின்றி வாழலாம். எனவே சுற்றுபுறச்சூழலை பாதுகாப்பாக வைத்திருக்கு வேண்டும் என்று கூறுவதே இக்கட்டுரையின் நோக்கம் ஆகும்.

பொருளுணு:

நம்முடைய நிலம், நீர், காற்று ஆகியவை பலவிதமாக மாசு அடைகின்றன. அ_{வற்றை} எவ்வாறு பாதுகாக்க வேண்டும் அதனால் ஏற்படும் நன்மைத் தீமைகள் என்னெ_{ன்ன} என்பதைப் பற்றி விரிவாகக் காண்போம்.

சுற்றுச்சுழல் அழகு :

வானம் நீலநிறமும், இரவில் பால்வண்ண நிலவும், பகலில் நெருப்பென சூரியனும் வெண்மை, கருமை, செம்மை என காலத்திற்கேற்ப மாறும். மேகங்களும் பருவ காலத்திற்கு தக்கவாறு மழையைத்தரும். இவற்றின் செயலால் பூமியில் மரமும், செடியும், கொடியும், அதில் தேன்சிந்தும் பூக்களும், அந்தப் பூவை சுற்றிவரும் வண்டுகளும், அதன் அருகிலேயு காய் கனிகளும் உருண்டு, திரண்டு, குவிந்தும் அனைவரையும் கவர்ந்து இழக்கும், குரங்குகளும், அணில்களும், பறவைகளும் தின்ற பழங்களும், தின்னாத பழங்களும் மரத்தில் தொங்கிக் கொண்டிருக்கும். இயற்கையான மலை, அருவி, பூங்காக்கள் போன்றவை நம் கண்ணுக்கு குளிர்ச்சியையும், மனதிற்கு மகிழ்ச்சியையும் தருவது இயற்கையான தாவர இனங்களின் தொகுப்பாகும். இவற்றை காண நமக்கு கண்டோ வேண்டும்.

இயற்கையை பாதுகாப்போம் :

இயற்கை – மனிதனை நோயின்றி, இன்பமாக ரசனையோடு வாழ வழிச்செய்யும் அதனால் இயற்கையை அழிக்காமலும், அவை மாசுபடாமல் இருக்க காடுக^{ளை} அழிக்காமல், மலைப்பகுதியை வெட்டி வீடு கட்டும் நிலங்களாக மாற்றாமல், நீர் நிலைக்கை அசுத்தமடையச் செய்யாமல் இருக்க வேண்டும்.

முடிவுரை:

எனவே இனியாவது சுற்றுச்சூழலை சுத்தமாக வைத்துக் கொள்வதீன் ^{மூலம்} இயற்கையை பாதுகாக்கலாம்.



இந்தியாவின் ஏற்றுமதி இறக்குமதி

முன்னுரை

வேளாண்மை என்பது லத்தீன் வார்த்தைகளில் இருந்து வருகிறது. அது மண்ணையும் கலாச்சாரத்தையும் குறிக்கிறது. இத்தகைய சிறப்பு வாய்ந்த விவசாயத்தைக் குறித்து இக்கட்டுரையில் காண்போம்.

தந்தியா ஒரு விவசாய நாடு :

இந்திய பொருளாதாரத்தில் மிக முக்கியமான பங்களிப்பாக விவசாயம் உள்ளது. நாட்டின் _{வொத்}த பணியாளர்களில் பாதிக்கும் மேலானவர்கள் விவசாய வேலை செய்கின்றனர். ஒட்டு வொத்த வாகுளாதார வளர்ச்சியில் விவசாயம் முக்கிய பங்கை கொண்டுள்ளது. உலகில் கோதுமை மற்றும் அரிசி உற்பத்தியில் இந்தியா இரண்டாவது இடத்தில் உள்ளது. 2011 ஆம் அண்டில் 2 மில்லியன் டன் கோதுமை மற்றும் 2.1 மில்லியன் மெட்ரிக் டன் அரிசி ஏற்றுமதி செய்யப்பட்டது.

<u>கந்திய வீவசாயத்தில் உணவு பொருட்கள் :</u>

இந்தியாவின் வேளாண்மையில் அரிசி, கோதுமை, பருப்பு வகைகள், தேயிலை, காபி, புதிய காய்கறி, புதிய பழங்கள், உலர்ந்த பழங்கள், தேங்காய் கம்பு, வகைகள், சணல், ஆமணக்கு, பருத்தி, எண்ணெய் உள்ளிட்டவை விளைவிக்கப்படுகின்றன.

விதைகள் கீழ்நோக்கி

எறியப்பட்டால் தான்

விருட்சங்கள் மேல்

நோக்கி வரும்

விழும் போது

விதையென விழு....

எழும் போது

விருட்சமாய் எழு...

விவசாயத்தின் முக்கியத்துவம் :

இந்தியாவின் மொத்த உள்நாட்டு உற்பத்தி 2009 ஆம் ஆண்டில் 18.6% ஆக **இருந்தது. இது** பண்ணை உற்பத்தியில் உலகளாவிய ரீதியில் 2வது இடத்தைப் பிடித்தது. காபி, பருத்தி போன்ற பல விவசாய பொருட்களின் முதல் ஐந்து உற்பத்தியாளர்களிடையே இந்தியா உள்ளது.

இந்திய நாடு, நேபாளம், பங்களாதேஷ், ஆப்பிரிக்கா மற்றும் பிற நாடுகளுக்கு அரிசி மற்றும் கோதுமையை ஏற்றுமத் செய்யும் நாடு.

இந்தியா தற்போது மீன்பிடி மற்றும் மீன் வளர்ப்புத் துறையில் வேகமாக வளர்ந்து வருகிறது. பல்வேறு வகையான மீன் வகைகள் எல்லாம் சேர்த்து மொத்தம் இந்தியாவில் 6 லட்சம் மெட்ரிக் டன் மீன்கள் உள்ளது. இதில் உலகின் மொத்த நாடுகளுக்கும் பாதிக்கும் மேலாக ஏற்றுமதி செய்யப்படுகிறது.

கரும்பு 25000 ஆண்டுகளுக்கு முன்பு இந்தியாவில் கண்டுபிடிக்கப்பட்டது. சர்க்கரை பயிர்ச்செய்கையில் இந்தியாவிற்குள் மட்டுமல்லாமல், சில வர்த்தகர்கள் அதனை ஐரோப்பாவிற்கு ஏற்றுமத் செய்தனர்.

1960–70 வரை இந்தியாவின் உள்நாட்டு தேவைகளை பூர்த்தி செய்வதற்காக ப_{ை உணிவு} 1960–70 வரை இந்தியாவின் உள்நாட்டு சூற்கிய அரசாங்கம் விவசாய கொள்_{கைக்} வொருள்களை இந்தியா இறக்குமதி செய்தது. இந்திய அரசாங்கம் விவசாய கொள்_{கைக்} வொருள்களை இந்தியா இறக்குமதி செயத்து. உத்திரப் பிரதேசம், பஞ்சாப் மற்றும் மேற்குவங்கு இருத்தும் கொண்டு வந்தது. ஹரியானா, உத்திரப் பிரதேசம், பஞ்சாப் மற்றும் மேற்குவங்கு இருத்தும் கொண்டு வந்தது. ஆகிய மாநிலங்களில் அதிக அளவு பண்ணை உற்பத்தி அதிகரித்துள்ளது.

மாநிலங்களில் அதிக அளவு பண்ணை உறகத்த உள்நாட்டு உற்பத்தியில் விவசாயத்தின் _{பங்கு} அந்த நேரத்தில் 1970–ல் இந்தியாவின் வமாத்த உள்நாட்டு உற்பத்தியில் விவசாயத்தின் _{பங்கு}

நேந்தது. இந்திய அரசாங்கம் விவசாயம் தவிர இந்தியாவின் விமான போக்குவரத்து துறை, _{தொழித்} 43% இருந்தது.

நுட்பம் மற்றும் உற்பத்தித் துறை போன்ற துறைகளில் கவனம் செலுத்துகிறது.

விவசாயத்தின் முக்கியத்துவம் :

யத்தன் முக்கயத்துளம். கீறித்துவ சகாப்தத்தீன் முதல் நூற்றாண்டு தான் வேளாண்மையின் மிக முக்கியு_{யின்} கூறித்துவ சகாபத்ததன் மூற்ற ஐந்நி வளர்ச்சி. விரிட்டிஷ் காலத்தில் விவசாயத்தின் மிக முக்கியமான வளர்ச்சியாக பருத்தி, கருந்_{டி} மற்றும் இண்டிகோ போன்ற வர்த்தக பயிர்கள் பயிரிடப்பட்டது.

உலகளாவிய விவசாயம் :

மேம்பாட்டிற்கும் விவசாயத்திற்கும் மிக நெருங்கிய தொடர்பு உண்டு நாகரிகத்தின் விவசாயம் பசியால் வாடும் மக்களின் திருப்திக்காக உணவை உற்பத்தி செய்கிறது. உ_{லகில்} கிட்டத்தட்ட ஒரு பில்லியன் மக்கள் வறுமைக் கோட்டிற்குக் கீழே வாழ்கின்றனர். கால்நடைகளுக்_{கு} தீவனம் வழுங்குவதற்கும் மனிதனுக்கு உணவு வழுங்குவதற்கும் உலகெங்கிலும் தானியங்கள் வளர்க்கப்படுகின்றன. அவை உலகளாவிய விளை பொருட்களில் 73 சதவிகிதத்தில் வளர்ந்து உலகளாவிய கலோரி உற்பத்தியில் 74 சதவிகிதம் பங்களிப்பு செய்கின்றன.

இந்திய வேளாண்மை :

இந்தியாவில் 70 சதவிகிதத்திற்கும் அதிகமானோர் விவசாயத்தை அடிப்படையாகக் கொண்டு வாழ்சின்றனர். தற்போதைய மக்கள் தொகை சுமார் 1000 மில்லியனாக உள்ளது. இது தற்போதைய நூற்றாண்டின் நடுப்பகுதியில் சுமார் 15000 மில்லியனில் நிற்கும் எள எதிர்ப்பார்க்கப்படுகிறது.

முடிவுரை:

ஆகவே இன்றைய நிலையில் அழிந்து கொண்டு வரும் விவசாயத்தை இளைஞர்கள் சாதாரணமாக எண்ணாமல் விவசாயத்தை காப்பாற்ற பாடுபட வேண்டும். விவசாயத்தை மற்றிய விழிப்புணர்வை மக்களிடையே ஏற்படுத்த வேண்டும்.

இளைய சமுதாயத்தை உருவாக்குவோம். அழிவில்லா விவசாயத்தை உண்டாக்குவோம்.

> எம். தீயா பி.பி.ஏ., (சி.ஏ.) முதலாமாண்டு)



தூய்மையைப் பாதுகாப்போம் !

முன்னுரை:

"நோய்க்கு இடங்கொடேல்" என்கிறது ஒளவையின் ஆத்திகுடி "நோயற்ற வாழ்வே குறைவற்ற செல்வம்" என்கிறது பழமொழி. நோயற்ற வாழ்வுக்குச் சுற்றுச்சூழல் பாதுகாப்பு இன்றியமையாதது. தீர்த்தூய்மைகாத்தல் :

சாக்கடை நீர், தொழிற்சாலைக் கழிவுநீர் ஆகியவை கலப்பதால் ஆறுகளும் நீர்நிலைகளும் மாகபடுகின்றன. இதனால் நல்ல குடிநீர் கிடைப்பது அரிதாகிறது. நோய் பரவல் எளிதாகிறது. எனவே நீர்த்தூய்மைகாக்கத் தொழிற்சாலைக் கழிவுநீரைத் துய்மையாக்கும் முறையைக் கையாண்டு நச்சுத்தன்மையோக்க வேண்டும். படிய வைக்கும் தொட்டிகள் கட்டிக் கழிவுநீரைத் தேக்கி, மிதக்கும் மாககளை அகற்றவேண்டும். காற்றோட்டத் தொட்டிகளில் உள்ள கழிவுநீரில் சுண்ணாம்பு சேர்த்து, நச்சுத்தன்மைநீக்கி, வாய்க்கால் வழியே வெளியேற்ற வேண்டும்.

நிலத்தூய்மைகாத்தல்

பயிர்களுக்குச் செயற்கை உரங்களையும் பூச்சிகொல்லி மருந்துகளையும் அதிகமாகப் பயன்படுத்துவதால் நிலத்தின் தரமும் குறைகிறது ; தூய்மையும் கெடுகிறது. உணவு பொருள்களிலும் நச்சுத்தன்மையுகுகிறது. இவற்றைத் தடுக்க இயற்கை உரங்களையே பயன்படுத்தவேண்டும்.

காற்றுத்தூப்மைகாத்தல் :

நிலவூர்திகள், தொழிற்சாலைகள், அனல்மின் நிலையங்கள், அணுமின் உலைகள் முதலியவற்றால் வெளிப்படும் புகை, தூசு, சாம்பல், கதீர்வீச்சு முதலியன காற்றையே யாழ்படுத்துகீன்றன. ஆதலால், நாம் மாசுமட்ட காற்றையே உட்கொள்ள முடிகிறது. நம் உடல்நலமும் கெடுகிறது. ஆதலால் தொழிற்சாலைகளை மாசு கட்டுப்பாட்டு வளியத்தின் பரிந்துரைப்படி அமைத்து நடத்தவேண்டும்.

மாணவர் கடமை:

மாணவர்கள் தங்கள் ஓய்வு நேரங்களில் சுற்றுச்சூழல் பாதுகாப்பின் இன்றியமையாமையை மக்களுக்கு விளக்கீச் சொல்லவேண்டும். கண்ட கண்ட இடங்களில் துப்புதல், குப்பைக் கொட்டுதல், சிறுநீர் கழித்தல், மலங்கழித்தல் முதலியன தவிர்க்குமாறும், குடிநீரைக் காய்ச்சிப் பருகுமாறும் அறிவுறுத்த வேண்டும்.

पार्कलीका :

ஒவ்வோராண்டும் குன் ஐந்தாம் நாளை உகைச் சுற்றுச்சூழல் பாதுகாப்பு நானாகக் கொண்டாடி வருகீறோம். அதன்படி ஒவ்வொரு நாளும் நம் இருப்பிடத்தையும் சுற்றுச் சூழலையும் தூய்மையாக கைத்துக் கொள்ள வேண்டும். இல்லையேல் நம்மைநோய்கள் நெருங்கும் நமது வாழ்நாள் சுருங்கும்.

"புறந்தூய்மைநீரா னமையும் அகந்தூய்மை

வாய்மையாற் காணப்வடும்"

என்னும் வள்ளுவர் விக்கை என்றும் மறவாமல் அகத்திலும் புறத்திலும் தூய்மைகாப்போம்.

மண்புமுக்களின் பயன்கள்

உழுவனின் நிலத்தை மண்புமுக்கள் நொழப்பொழுதும் வீணாக்காமல் வாழ்நாள் முழுவுறும் உழுது கொண்டே உள்ளது. விவசாயிகளிடம் இருந்து தனக்காக எதையும் பெற்றுக் கொள்ளாடும் விவசாய நிலத்தில் உள்ள கழிவுகளை மட்டுமே உண்டு. அதற்கு சமமான உரத்தினை கொடுந்துக் கொண்டே உள்ளது. மண்புமுக்கள் பூமியில் துனையிடும் செயல்பாட்டை மூன்று வகைகளாகும் பிரிக்கலாம்.

முதல் வகை மண்புழுக்கள் மண்ணின் மேற்பரப்பில் ஒரு அடி ஆழத்திற்குள் வாழ்_{படை} இவை வேகமாக ஊர்ந்து செல்லும் செயல்படைத்தவை. இவை கழிவுகளையும், இதர உறி_{ர்வு} வொருட்களையும் உரமாக மாற்றும் தன்மைகொண்டவை.

இரண்டாம் வகை மண்புமுக்கள் பூமியின் மேலிருந்து ஒரு அடி ஆழத்திற்கு கீழேயும், முன்று ஆழம் வரையிலும் வாழக் கூடியவை. இவை மண்ணில் உள்ள உயிர்மப் பொருட்களை உண்பதூடி மட்டுமல்லாமல் விவசாய கழிவுகளையும் உட்கொள்கிறது. மண்ணின் உட் பகுதியில் மேலும் கீழும் நகருவதால் மண்ணிற்கு நல்ல காற்றோட்ட வசதியை ஏற்படுத்தித் தருகிறது.

மூன்றாம் வகை மண்புழுக்கள் பூமியின் மேற்பரப்பில் இருந்து மூன்று அடிக்கு கீழும் பத்து அடி வரையிலும் வாழ்பவை. இவை நிலத்திற்குள் நீர்ப்பிடிப்பை அதிகமாக்கும் வகையில் செயல்படுகிறது. பனித்துளி நீரினைக் கூட மூன்று அடிக்கு கீழ் கொண்டு செல்லும் தன்மைபடைத்தவை.

> "புழுவுக்குங் குணம் நான்கெனக் கும்மதே புழுவுக்கிங்கெனக் குற்ற பொல்லாங்கில்லை புமுனிறூங்கடை யேன்புனி தன்தமர் புழுவுக் கெவ்விடத் தேன் சென்று கூடவே"

> > –தேவாரம்.

எஸ் பரமேஸ்வரி ^{நீ. நீ. ஏ.}, (சி. ஏ.) முதலாமாண்டு

16 விசும்பின் துளிவீழின் அல்லால்மற் றாங்கே பசும்புல் தலைகாண்பு அரிது. If no drop falls from the clouds, not even the green blade of grass will be seen.



வான் சிறப்பு

முன்னுரை

"வான்புகழ் வள்ளுவர் வான் சிறப்பு" என்று ஓர் அதிகாரத்தையே அமைத்து, மழையின் _{திற}ப்பை விளக்கிக் கூறியுள்ளார். அவ்வளவு வருமைவாய்ந்த மழை தானே தன் வரலாற்றைக் கூறினால் எப்படி இருக்கும் கேட்டுப் பார்ப்போமா? இதோ, மழை தன் வரலாற்றைக் கூறத் தொடங்குகிறது.

மும்பு:

கதிரவன் தன் செங்கதிர்களால் கடல், ஆறு, ஏரி, குளம் முதலியவற்றிலுள்ள நீரை ஆவியாக்குகிறது; அது மேலே சென்று முகிலாகிறது. அந்த முகிலின் மீது குளிர்காற்றுப் படும் போது முகிலும் குளிர்ந்து மழையாய்ப் பொழிகிறது இவ்வாறு மழையாகிய நான் பிறக்கிறேன்.

வியப்பு:

நான் பிறக்கும்போது எனக்கு நிறமில்லை, மணமில்லை. எந்த மண்ணில் வீழ்கிறேனோ அதன் தன்மையைப் பெறுகிறேன். நீங்களும் அப்படித்தான் யாரோடு சேர்கிறீர்களோ அவரது பண்டைப் பெறுகிறீர்கள். இதனையே திருவள்ளுவர்

"நிலத்தியல்பான் நீர்திரிந் தற்றாகும் மாந்தர்க்கு

இனத்தியல்ப தாகும் அறிவு"

என்னும் குறள்வழி விளக்குகிறார். இதனால்தான் சேரிடம் அறிந்து சேர் என்று உங்களுக்கு ஒளவையார் அறிவுரை கூறினார் போலும்.

சிறப்பு:

"விசும்பின் துளிவீழின் அல்லாமல் மற்றாங்கே

பசும்புல் தலைகாண்பு அரிது"

என்றார் வள்ளுவர். அதுமட்டுமல்லாமல் நானின்றி ஓரறிவு உயிராகிய புல்லும் **இல்லை** என்**கிறாரே** வள்ளுவர்; அப்படியானால், நான் எவ்வளவு சிறப்புடையவன் பார்த்தீர்கனா! மாரியல்தை காரியமில்லை என்று ஒளவை கூறியுள்ளார்.

பயன்கள் :

உயிரினமும், பயிரினமும் வாழவும், வளரவும் நான் மிகவும் பயன்படுகிறேன். உலகில் ஒழுக்கம் நிலைக்கவும், தானமும், தவமும் தழைக்கவும் காரணமாக உள்ளேன். இதை நான் தற்பெருமையாகச் சொல்கிறேன். இது திருவள்ளுவர் கூற்று. நீங்கள் குளிக்கவும், குடிக்கவும், உழவும், தொழிலும் முறையாகச் செய்யவும் வேண்டிய நீரை என்னால்தான் வெறுகிறீர்கள். நானில்லையேல் நீர்நிலைகள் வற்றிப் போகும் ; "நெடுங்கடலும் தண்ணீர்மைகுன்றும் தடிந்தைழிலி தான் நல்காதாகி விடின்" உங்களுக்குத் தேவையான மின்சாரத்தை உற்பத்தி செய்வதற்கும் நான் நீரை வழங்குகிறேன். உப்புச் சுவையுடைய கடல்நீரைக் குடிநீராய் மாற்றும் அறிவியல் புதுமைபுரிந்து வருகிறேன். காய்ச்சி வடித்தல் முறையில் எந்நீரையும் நன்னீராக்கும் அறிவியல் முறையை உலகிற்குக் கற்றுத்தந்தவன் நானே.

क्राक्रम् ।

கைம்மாறு வேண்டா கடப்பாடு மாரிமாட்டு என்னாற்றுங் கொல்லோ உதை? என்று வள்ளுவர் என்னைப் புகழ்ந்துள்ளார். நீங்களும் கைம்மாறு கருதாமல் பிறருக்கு உதவும் வள்ளலாய் மாறுங்கள் ; புகழைச்சேருங்கள்.

பயிர் சாகுபழ

ஒரு பிடி சோறுக்காக வாழ்க்கைப் பந்தை உதைத்து விளையாடுகிறோம். இந்த உயிர் காக்கும் உணவுப்பந்து நம்மை மிரட்டுகிறது. "தனியொருவனுக்கு உணவில்லையெனில் இகத்திலு அழித்திடுவோம்" என்றார் பாரதியார்.

அதிகச் சத்து மற்றும் மருத்துவக் குணங்கள் நிறைந்தப் பாரம்பரியமிக்க வநல் ரகங்களைக் கூழுந்துக்கு கிரும்புமாறு விவசாயிகளுக்கு இயற்கை சாகுபடி செய்து மீண்டும் இயற்கை விவசாயத்துக்கு திரும்புமாறு விவசாயிகளுக்கு இயற்கு சாகுபடி செய்து மீண்டும் இயற்கை விவசாயத்திக்கு திரும்புமாறு விவசாயிகளுக்காடை அடுத்த வேளாண் விஞ்ஞானி "நம்மாழ்வார்" அறைகூவல் விடுத்துள்ளார். புதுக்கோட்டை அடுத்த விவசாயிகளுக்கானக் கருத்தரங்கு நடந்தது. இதை துவக்கிவைத்து இயற்கு பாதுகாப்பது குறித்த விவசாயிகளுக்கானக் கருத்தரங்கு நடந்தது. இதை துவக்கிவைத்து இயற்கு வேனாண் விஞ்ஞானி நம்மாழ்வார் பேசினார். உணவு தானியங்களின் உற்பத்திவு வேனாண் விஞ்ஞானி நம்மாழ்வார் பேசினார். உணவு தானியங்களை கறியாக அதிகரிப்பதற்காக வெளிநாடுகளிடம் ஆலோசனைகள் பெற்று நவீன ரக தானியங்களை கறியாக வுதல் ரகங்களை அறிமுகம் செய்தனர்.

இவற்றைச் சாகுபடிச் செய்வதற்காகப் பல வகையான இரசாயன உரங்கள், பூச்சிக் கொல்வு மருந்துகள், வேனாண் இயந்திரங்கள் பயன்படுத்தப்பட்டு வருகிறது.

இதன் விளைவாக நம் முன்னோர்கள் சாகுபடிச் செய்த பாரம்பரியமிக்க நெல் ரகங்கள் படிப்படியாக மறையத் துவங்கியது. ரசாயன உரங்கள் மற்றும் பூச்சிக் கொல்லி மருந்துகள் பயன்படுத்துவதால் மண் வளம் பாதிக்கப்பட்டு விளை நிலங்கள் பாலைவனங்களாக மாறிவிடுகிறது. கால்நடைகளுக்குத் தீவன (வைக்கோல்) தட்டுப்பாடு ஏற்பட்டுள்ளது.

இவை எல்லாவற்றுக்கும் மேலாக நவீன ரக நெல்லில் இருந்து கிடைக்கும் அரிசியைச் சமைத்துச் சாய்பிடும் மனித இனம் வித விதமான நோய் தாக்குதலுக்கு உள்ளாகி பரிதவித்து வருவதைக்காண முடிகிறது.

இந்த நிலை மாற வேண்டும் என்பதற்காக நம்முன்னோர்கள் பின்பற்றியப் பயிர் சாகுடி முறைகளை நாமும் பின்பற்றவேண்டியது அவசியமாகிறது.

இதற்காகத் தொண்டு நிறுவனங்கள் உதவியுடன் பாரம்பரியமிக்க நெல்விதைகளைத் தேடிக் கண்டுபிடித்து அவற்றை இயற்கை விவசாயமுறையில் சாகுபடிச் செய்ய வேண்டும்.

> பி. ஜான்சி வீ.வி.ஏ., (சி.ஏ.) முதலாமாண்டு



புங்கன் மரம் – நம் தேவதை

காற்றில் உள்ள வெய்பத்தையும், மாசுவையும் குறைக்கும்.

பத்து அடி முதல் நாற்பது அடி வரை வளரும். அதிக இலைகளை கொண்டிருக்கும்.

லேசான காற்றுக்கே அசைந்து, கொடுத்து, குளிர்ச்சி நிறைந்த காற்றைக் கொடுக்கும்.

காற்றில் உள்ள மாசுக்களை கார்பன்டை ஆக்னைடு) வடிகட்டி நல்ல காற்றினை (ஆக்சிஜன்) நமக்கு தரும்.

வளிமண்டலத்து காற்றினை மாசில் இருந்து பாதுகாக்கும்.

காற்றில் உள்ள வெப்பத்தை தணிக்கும் திறன் கொண்டது.

வவீடுகளின் அஸ்திவாரங்களையே, சுவர்களையோ பாதிக்காது.





தயற்கையின் கொடை விவசாயி

கடலில் இருக்கும் அலைகள் கரையைத் தொடுகின்றன, காற்றில் இருக்கும் மொழி தென்றலை உணர்கின்றன, நெருப்பில் இருக்கும் ஒளி சொற்களால் மிளிர்கின்றன, மண்ணில் இருக்கும் நாம் அன்பை சுவாசிக்கின்றோம் !

நாம் ஒரு வேளை உட்கார்ந்து சாப்பிடுவதற்காக விவசாயிகள் ஒரு வேளை கூட, உட்காராமல் உழைக்கின்றார்கள் ; விவசாயிகள் நாம் வாழ்வதற்காக விதையை விதைக்கின்றார்கள், நாம் விவசாயத்தை அழிய விடாமல் விதையை விதைப்போம் ! கை கொடுப்போம் !

கு. யாஹவி பீ.ஏ. ஆங்கீலம் இரண்டாமாண்டு



விவசாயி

மலரை ரசிப்பவர்கள் வேரின் உழைப்பை என்றும் அறிவதில்லை! உணவை குசிப்பவர்கள் விவசாயிகளின் உழைப்பை மதிப்பதில்லை! இன்றைய உணவுக்கு இருக்கும் மகிழ்ச்சி நாளை கிடைக்குமா போசி ? விவசாயத்தை மூச்சுப் போல் சுவாசி விவசாயியை உயிராய் நேசி! வியர்வை வடிந்து சாகுபடிசெய்து உன் வயிற்றை நிரப்புபவன் விவசாயி!

> எஸ்**. பிரியா** பி.எஸ்.சி (சி.எஸ்) முதலாமாண்டு



விவசாயத்தைப் பாதுகாப்போம்

விவசாயம் தொழில் அல்ல தமிழுனின் வாழ்வியல் கலை ! உணவை நமக்கு அளித்து அவன் வயிற்றில் ஈரத்துணி கட்டுவான் ! துணியின் ஈரம் காய்வதற்குள் வயிற்றில் அடிக்கும் அரசு கடன் ! <u>இறந்தும் இருந்தான் நமக்கு உணவளிக்க !</u> பாதத்தீன் வலி எண்ணி சேற்றில் கால் வைக்க மறுத்தால் மறுநாள் நம் நிலைமை என்னாகும் ! மீனவனை காப்பாற்றாதவன், மீத்தேன் எடுக்க வருகிறான் ! பாலைவனம் ஒன்றை காண, பாதாளம் வரை செல்கிறான் ! விவசாயத்தைக் காப்பாற்றாதவன், நம் தாய்நாட்டையா காப்பாற்ற போசிறான் !

பவித்ரா வ.சு.ஏ இரண்டாமாண்டு



மண்ணின் வரம் ! மனிதனின் அறம் !!

ന്നുറ്റ് നമ്മുള மரம்.....காற்று மரம்......நிழல் மரம்...... உயிர் கிளி வளர்த்தேன் பறந்து போனது; அணில் வளர்த்தேன் ஒழுப் போனது; மரம் வளர்த்தேன் இரண்டும் திரும்பி வந்தது! மனிதர்கள் இல்லாது மரங்கள் வாழும், மரங்கள் இல்லாது மனிதர்கள் வாழவே முடியாது! மரம் மண்ணின் வரம் வளர்ப்பதே மனிதனின் அழம்.....!

நா. மம்தா, பி.ஏ.ஆங்கீலம் இரண்டாமாண்டு



மரம் வளர்ப்8பாம்

மரம் ஒன்று வளர்ப்போம் பயன் பல பெறுவோம் ! தைகுவோரம் நட்ட மரம் அது இதமான நீழல் தரும் ! தந்தை நட்ட தென்னை மரம் தரும் இளநீர் சுகம் தரும் ! காட்டில் வளரும் சந்தன மரம் நாட்டிற்கு பல வளம் தரும் ! நட்ட மரத்தை வெட்டுவது நாம் செய்யும் துரோகம்!

வி.சோபா பி.ஏ. ஆங்கீலம் இரண்டாமாண்டு



ஐம்பூதங்களோடு வாழ்க்கை

இவ்வுலகை தன் நெஞ்சோடு அரவணைத்தாய், எங்கள் உடலுக்கும் உயிர்க்கும் வொருள்தந்து உயர்ந்தாய், சிறு புழுவும் உயிர் வாழ உணவளிப்பாள் அன்பாய், மரம் அனைத்தும் அசைந்தாட வழினிடுவாள் பண்பாய், வனமைல்லாம் செடி கொடியாய் அவள் வாழ்வாள் செழிப்பாய், தன் உழைப்பால் வரும் வியர்வை தனை தருவாய் மண்டுயாய்! அவள் படைப்பை நீ சினந்தால் உன்னை எதிர்ப்பாள் ! ளிமலையின் அனலாய் அப்படைப்பை நீ நேசித்தால், உன்னை அணைப்பாள் பனிக்கால குளிராய், நாம் பிறந்தநாள் முதல் அவள் பயணம் தம்மோடு ஐம்பூதமாய், நம் பயணம் முழந்தபின் அவள் மடியில் அனைவரும் ஒர் ஒரமாய்.....!!!



கவளாண்மை **அ**ழிப்பு – தொழிற்சாலைகள் வளர்ப்பு !

_{கிவசாயி}கள் கரங்களை உரங்களாக்கினர் விவசாயத்தை வளர்ப்பதற்காக !

அவர்கள் வியர்வைகளை விதைகளாக்கினர் பயிர்களை வளர்ப்பதற்காக !

ஆற்றில் நீரைடுத்து ஆரவாரமாய் வளர்த்தனர் மக்களின் பசியை தீர்ப்பதற்காக !

விவசாயிகள் விவசாயத்தை வளர்ப்பதற்காக விதைகளை வளர்த்தனர் !

(ஆனால்)

நாம் விவசாயத்தை அழிப்பதற்காக தொழிற்சாலைகளை வளர்க்கின்றோம்.

१०कारूप्यां० १०कंकनर्रका विकार्श्यां०

கொட்டும் மழையிலும்

കെടത്സാനു മിക്കണ്ഡന്നൂരണ്ടോ !

கள்ளமில்லா உள்ளத்தோடு

கொஞ்சி விளையாடுவதற்கு

மழையில் விளையாடுவதற்கு

மாடி வீடுகளை கட்டினோம் !

மாடி வீடுகளை கட்டிய பிறகு

ஏன்?

நாம் மழையை தேடுகின்றோம் !

ச. **ரோகா** (3.g) ஆங்கிலம் இரண்டாமாண்டு





கூற்றுச்சூழலை பாதுகாப்&பாம்

குழுலை மாசுபடுத்துவோம்.... புதிய புதிய நோய்களை பெற்றிடுவோம்... வேஹென்ன சொல்ல கவிதையில் ...

குழுந்தைக்கும் புரிந்திடும்... குழலை பாதுகாக்க வேண்டும் என்று ! சமுதாயமே உனக்கேன் ട്രെമിധമിல്ക്കാ ക്യൂക്കാ பாதுகாக்க...! மரத்தை வொட்டுகிறோம் இரக்கமில்லாமல் குளத்தை... மூடுகிறோம் யூகம்மில்லாமல் நெகிழியை (பிளாஸ்டிக்) ளரிக்கிறோம் புத்தியில்லாமல்.... காறி துப்புகிறோம் பழக்கவழக்கம் இல்லாமல்.... குப்பையை... தெருவில் வீசுகிறோம் அறிவில்லாமல்..... வீட்டுக்கொரு மரம் வனர்ப்போம் தூர்ந்துபோன குளத்தை திருத்துவோம் ! நெகிழியின் (பிளாஸ்டிக்) பயன்பாட்டை நிறுத்துவோம் ! குப்பையை தொட்டிக்குள் போடுவோம்.... இயற்கையை காப்போம் ஆரோக்கியமாய் வாழ்வோம்...!

க.சரண்யா

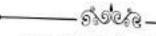
பி.எஸ்.சி (சி.எஸ்) முதலாமாண்டு



தேனீக்கள்

தேன் நிறைந்த பூமியில் *കൃ*ർത് വേക്കണവിക ^{தைன்றல்} காற்று வீசும் நேரத்தில் ழ^{த்து குலுங்கு}ம் வண்ணப்பூக்களின் ^{பூதை} உறிஞ்சும் என் விருந்தினரே தேனை உறிஞ்சும் என் விருந்தினரே வருங்கள்! _{நீர் செ}ய்த இந்த அருங்காட்சியை தன் உள்ளங்கள் பல மக<u>ிழ்ந்தன</u> ! _{சிறிய} உருவத்தால் தன் சிறகுகளை ஊன்றுக் _{கோலாய்} கொண்டு நிற்கும் தேனீ கூட்டங்களே! தந்நீல மக்களின் அமைதிக்கு எத்தகைய பங்கத்தையும் அளிக்காமல் தன் _{சிறகடிக்}கும் எம் தேனீ தலைவர்களே! தன் குட்டிகளை காக்கும் தாய்க்கு நீகரானவர்களே! உம்மை வாயால் _{புகழாம}் என் மனதால் சிந்திக்கின்றேன்.

எம். பர்வதா பி.எஸ்.சி – வேதிபியல் முதலாமாண்டு.



மழையின் அழகு

வரு மழையே! வானம் இம் மனிதனுக்கு ஈந்த வரும் பரிசு! முகில்களிடையே எழுந்த போரின் வகுமுரசு! இடி முழங்கி ஆர்த்த போது வருக் கெடுத்த குருதி நீ! மின்னற் வெண்கள் உருக்காட்டி இருள்காட்டில் உலவுங் காலை உதிர்ந்த வெரும் மலர்க்காடு நீதான்! வெள்ளி உருக்கதனைப் பணிசேர்த்துப் பாய்ச்சி விட்ட ஒளிமுத்தின் கூட்டம் நீ! உயிரும் நீ!

மழைச் செல்வா! உன் சாயல் உவப்பின் எல்லை, உன் அணைப்பாலே பசுமை என்னும் கழவியினை ஈன்றெடுக்கும் மக்கள் எல்லாம் கும்பிட்டு வாழ்த்துகின்றார், உன்னை இங்கே அழைக்கின்றார்! நீ வந்தால் களைத்த நெஞ்சில் ஒளியேறப் வெறுகின்றார்! உன்னாலே தான் தழைக்கின்ற உலகம் வெப்பம் நீங்கித் தணிகின்றது. கோடியைனும் வைரத்தின் துளிகள் வீசக் கொடிசெடியில் மின்னுகிறாய் இன்பம் பொங்கப் பாடிவந்து பொழிகின்றாய் விண்ணும் மண்ணும் படித்திருக்கும் மாசுகாற்றைத் தூய்மை செய்ய ஒடியிக உழைக்கின்றாய் மாரியே! உன் ஒப்பற்ற உழைப்புக் கோர் உவமை கூறத் தேடியலுத் திட்டார்கள் கவிஞர் உந்தன் திறம்பாடி வாழ்த்தலன்றி வேறென் செய்வோம்?



உலகநியதி

வீறு நடைபோட்ட சுனாமிக்கும் மனிதாபிமானம் உண்டு.. பூமியை சுருட்டிக் கொள்ளாமல்... வாலை சுருப்டிக் கொண்டது ! மனிதா ! நீ மட்டும் ஏன் ? நமக்காக மரணிக்கவர்களை... மனசார மதிக்க மறுக்கிறாய் ? இது தாண உன் மனிதாபிமானம் ? பரண் மேல் சரணடைந்த பழைய புத்தகத்தை தூசு தட்டலாம் மண்ணுக்குள் புதைந்து விட்ட உன் மனிதாபிமானத்தை மீண்டும் தட்டி எழுப்ப முடியுமா? எதையும் எதிர்பாராமல் ஏராளமாய் அன்பு காட்டும் சில அபூர்வ மனிதர்கள் இங்கு இருக்கிறார்கள்! – ஆனால் அவர்களை இவ்வுலகம் பாசக்காரர்களாக நினைப்பதில்லை வெறும் – பைத்தியக் காரர்களாகவே மதிக்கிறது !

6ஜ. ஓவியா பி.ஏ. ஆங்கீலம் இரண்டாமாண்டு



மனிதன் மறந்தான்

உண்ணக் கனி
ஒதுங்க நிழல்
உழுக்கு மருந்து
உணர்வுக்கு விருந்து
அடையக் கழல்
அடைக்கக் கதவு
ஆழுகு வேலி
ஆடத் தூளி
தடவத் தைலம்
தாளிக்க எண்ணைய்
எழுதக் காகிதம்
வரிக்க விறகு
மரம்தான் மரம்தான்!

சி.ரேவதி

பி.ஏ. ஆங்கீலம் இரண்டாமான்டு



மனித்தெயம் பசிர்ந்துண்ணும் மனிதாபிமானம்

உள் படிப்பு எதிர்காலம் ! உள் நடிப்பு இறந்தகாலம் ! உள் உழைப்பு கஷ்டகாலம் ! உள் வெற்றி இஷ்டகாலம் ! உள் வாழ்க்கை பொற்காலம் ! உள் நாடிதரடிப்பு ஆயுட்காலம் ! உள் நாடிதரடிப்பு ஆயுட்காலம் ! வாத்தத்தல் உள் காலங்கள் மாறுகின்றன நீ காலத்தை போல் இரு காத்திருக்காதே இனி ! கழ்நிலைகளுக்கு ஏற்றதுபோல் மாற்றிக்கொள் சுயநமைின்றி வாழக்கற்றுக்கொள் ! காத்திருப்பை கண்டிப்பேன் என உறுதிக்கொள் ! மனிதாபிமானம் என்பது மணிதனுக்கு மட்டும் அல்ல நாம் நேசிக்கும் மண்ணிற்கும் உண்டு !

> **வை. பிரியா** பி.ஏ. ஆங்கிலம் இரண்டாம் ஆண்டு



உழவனின் செம்மை

வெயினால் கருத்த தோல், நலிந்த உடல், காய்ந்த வயிறு, என்றாலும் மருத நிலத்தின் மாமன்னர்கள் இந்த விவசாயிகள் !

உல் அழுக்குடன், உள்ளம் அமுக்கு இல்லாமல் எல்லோருக்கும் சோறு போட்டு தன் வயிற்றை காய வைப்பவன் தான் உழவன் !

பணம் சம்பாதிக்க ஆயிரம் வழி இருக்கிறது ஆனால் உணவை சம்பாதிக்க விவசாயம் மட்டும் தான் இருக்கிறது !

— டெல்பின் டாலி. ஏ (பி.காம்) முதலாமாண்டு



தயற்கையின் நிலை

மண் அணிந்த நிலமும் நிலம் ஏந்திய விசும்பும் விசும்பு தைவரு வளியும் வளி தலைஇய தீயும் தீ முரணிய நீரும் என்றாங்கு ஐம்பெரும் பூதத்து இயற்கை போல

என்று, பஞ்சப் பூதங்களின் இயல்பை மிகவும் அழகாகப் புறப்பாடல் (02) மூலம் _{படுவு} செய்திருக்கும் உலகமானது இந்த ஐம்பேராற்றல்களை அடிப்படையாகக் கொண்_{டி} தொன்றுதொட்டு இயங்கிவருகின்றது.

பண்டைக்காலத்தில் மக்கள் இப்பேராற்றல்களையே இறைவனாக வழிய_{்டி} வாழ்க்கையையிகவும் சிறப்பாக வாழ்ந்து வந்தனர்.

நம்மைச் சுற்றியுள்ள உயிருள்ள உயிரற்ற வொருட்களின் தொகுப்பைத்தான் சுற்றுச்சூடி என்கீறோம்.

வளர்ந்துவரும் அறிவியல் வளர்ச்சியால் விளைந்த நன்மைகளையும், தீமைகளையும் ஆராய்ந்து பார்த்தால் நன்மைகளைக் காட்டிலும் தீமைகளே மிகுதியாக உள்ளன.

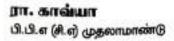
நாள்தோறும் பெருகிக் கொண்டே போகும் மக்கள் தொகையால், இயற்கை வளங்கள் அழிக்கப்பட்டுக் கட்டிடங்கள் மற்றும் தொழிற்சாலைகள் அமைத்தலால், அத்தொழிற்சாலைகளில் இருந்து வெளியேறும் புகை உள்ளிட்ட பலவும் சுற்றுச்சூழலை வெகுவாகப் பாதிக்கின்றன.

இவை மட்டுமல்லாமல் மின்னியல் வளர்ச்சியின் காரணமாக புதிது புதிதாகக் கண்டு பிடிக்கப்படும் வாருட்களின் கழிவுகள் பெரும்பாலும் எளிதில் அழிக்க இயலாத ஒன்றாக உள்ளது.

இதன் விளைவாக, ஆண்டுதோறும் உயர்ந்து கொண்டே போகும் வெயில் மற்றும் தீடீரெனப்பெய்யும் பேய் மழை அதனால் ஏற்படும் வறட்சி மற்றும் பெருவெள்ளமும் சுற்றுச்சூழலில் சமனற்ற நிலையை உருவாக்குகின்றன.

> "புறந்தூய்மை நீரான் அமையும் அகந்தூய்மை வாய்மையால் காணப்படும்"







மலைகள்

_{மணை} உருவாக்கம்

மூலை உருவாக்கம் என்பது, பூமியில் மலை எவ்வாறு உருவானது என்ற கேள்விக்கு உரிய மூலை உருவாக்கம் என்பது, பூமியின் செயல் முறையாகும். புவியின் மேலோட்டில் உள்ள கூறு கள் வெரிய அளவில் நகர்ந்த காரணத்தால் இச்செயல் முறைகள் நடைபெறுகின்றன.

_{மடித}ல், உடைதல், பொங்குதல், ஊடுறுவல், உறுமாறுதல், முதலிய செயல்கள் அனைத்துமே _{மூலி} உருவாக்கச் செயல்முறையின் பகுதிக் கூறுகளாகும்.

_{மலை}களின் உருவாக்கம் மலைகளில் இடம் பெற்றுள்ள புவியியல் கட்டமைப்புகளுடன் தொடர்புகொண்டு இருப்பவை எனக் கருத வேண்டிய அவசியம் இல்லை.

புவியோட்டின் செயல்முறைகளின் அடிப்படையில் குறிப்பிட்ட நிலப்பரப்பின் அம்சங்களைப் புரிந்து கொள்வது நிலவுருவாக்கவியல் எனப்படும்.

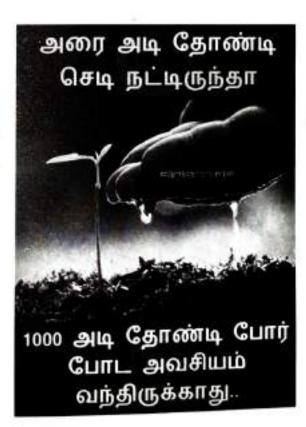
_{மலைகளி}ன் வகைகள் _{மு}ன்று வகைகளாகப் பிரிக்கப்படுகின்றன. அவை

ளிமலைகள்,

மழப்பு மலைகள்,

செங்குத்து மலைகள்

என்பனவாகும். உள்ளூர் அளவு கோல்களின் அடிப்படையில் அப்பகுதி மலைகளை மேலும் பலவாறாக பிரித்து அறியலாம்.



நா.சாந்தினி முதலாம் ஆண்டு (பி.காம்)



நகைச்சுவை

பாக்பர்:

கணவன் உடம்பை சோதித்துவிட்டு இன்னும் 8 மணி நேரம் தான் நீங்கள் கணவன் உப்படை உட்டத்தற்குள் உங்களுக்கு பிழத்தமான விஷயங்கள் உயிரோடு இருப்பீர்கள், அதற்குள் உங்களுக்கு பிழத்தமான விஷயங்கள்

ഥനതേരെ 5 ഥത്തി :

கண்ணீர் மல்க விஷயத்தை மனைவியிடம் பசிர்ந்தான், மனைவு

துடித்தாள்.

கணவன் :

எனக்கு உன் கையால் வெங்காய தோசையும், கெட்டி சட்னியும் செஞ்சு

கொடும்மா இன்னும் 7 மணி நேரம் தான் பாக்கியிருக்கு.

шперер 7 roesoft :

ராத்திரி சாப்பாட்டுக்கு மீன் குழம்பு வச்சி குடும்மா, இன்னும் 5 மணி _{நேரம்}

தான் நான் இருப்பேன் .

இரவு 10 மணி :

நல்ல பசும்பாலில் உங்கையால் கொஞ்சமா சக்கர போட்டு எனக்கு

கடும்மா இன்னும் மூணு மணி நேரம் தான் இருக்கு.

இரவு 12 மணி :

தூங்கும் மனைவியை எழுப்புகிறான்

மணைன் :

பேசாம படுங்க....காலையில் எழுந்ததூம் ஆயிரம் வேலை இருக்கு.

சொந்தகாரங்களுக்கு சொல்லி அனுப்பனும், ஐயருக்கு ஏற்பாடு

பண்ணனூம், சுடுகாட்ல புக் பண்ணனும்.

உங்களுக்கு என்ன காலை எழுந்திருக்கிற வேலை கூட இல்ல... ஜாலியா போயிருவீங்க !

ச. நவனிதா (பி.காம்) முதலாமாண்டு



தியற்கையின் அரவணைப்பு மனிதர்களின் நிராகரிப்பு!

செந்நிற ஆடையை உடுத்திக் கொண்டு செங்கதிரவன் உதிக்க நீலவானம் அவனை மார்பில் தாங்குசிறான். மழைநீராகிய அமிழ்தத்தை மேகமானவள் பொழிய,

கடல்தாய் அவளை மடியில் ஏந்துகிறாள்.

சுற்றித் தீரியும் சிட்டுக்குருவிக் கூட்டங்களை – படர்ந்த

மரமானவன் கிளைகளால் அணைக்கிறான்.

அதீகாலைப் பனி தரும் காதல் கலந்த முத்தங்களை

புல்லானவள் தன் கன்னங்களில் ஏற்கிறாள்.

வளங்களையும் நலங்களையும் தரும் இயற்கை அன்னையை

மனிதர்களே நீங்கள் காக்க மறந்தீர்களே !

கே. வினிதா, (பி.ஏ.) ஆங்கிலம்



டுயற்கையை தேசிப்போம்

வாழும் இடம் வாழும் இயற்கை வாடி கூடாதே ! ஊர் வாழும் கூட்டுக் குடும்பம் ச<u>ிதறிப்</u>போனால் கேடு விளையுமே! நிழல் தந்து உரம் தந்து ஊண் தந்து மமை தந்து ஊர்த் தந்த காடுகள் களைய நாடு சுடுகாடாசிடுமே ! பனி வெப்பமேறி ஆவி நிலையாய் மக்கள் வாழும் அவலநிலை உருவாகிடுமே ! ஆக்கம் கொண்ட அறிவியல் நோக்கம் சரியாய் இருந்தால் ஆபத்து பூமிக்கில்லையே குழ்நிலை தன்னில் கும்ந்து வாழும் உயிர்கள் யாவுக்கும் உரியவை இயற்கையே ! மானுடம் தவிர்த்த மற்ற யாவைக்கும் கேடு விளைவிக்கும் குணம் கெட்ட குணமே !



ஆற்றிவு கொண்ட அறிவிலி மானுடன் ஆசை அதிகமாக அரளி நஞ்சாய் அழிக்கிறான் இயற்கையை ! குழ்நிலையாவும் சுழல்கிறது நஞ்சாக ! சுவாசித்திடும் காற்றிலும் கரும்புகைகள் கலந்திருக்குது நஞ்சாக ! கட்டுடல் மேனிக்கொண்ட கலையரசி போல் இருந்தவள் கற்பிழந்த மலராய் காலம் முழந்த பூவாய் கழிவுகள் சேருமிடமாக கண் கலங்கி நிற்கின்றாள் அவள் தான் கடலன்னை ! இத்துடன் நிறுத்துங்கள் இயற்கையை நேசிப்போம் ! மானுடத்தின் நேசிப்பிலே மற்ற உயிர்களும் மகிழ்வுடன் வாழ்ந்திடுமே !

> **துா. லக்ஷ்மிபிரியா** (பி.காம்) முதலாமாண்டு



வாழ்வின் கூரகசியம்

டைக் கட்டி வேலை செய்யும் படிப்பாளியை விட எவருக்கும் கை கட்டாமல் வேலை செய்யும் விவசாயிகள் என்றும் உயர்ந்தவர்கள்

வெருபவன் கை மேலும் உழுவனின் கை கீழும் இருக்கிறது என் தேசத்தில்

வாழ்வில் ஒவ்வொரு முறையும் உங்களை தூக்கி எறிந்தவர்களுக்கு நன்றி சொல்லுங்கள் அவர்கள் தான் உங்களை முனைக்க வைத்தவர்கள்



வெறுப்பாக யாராக இருந்தாலும் நேசிப்பது நீங்களாக இருங்கள்

– அன்னை தெரசா

நிராகரிப்புகளைக் கண்டு நெஞ்சு உடையாதே! உன்னை யாராவது தூக்கி எறிகிறார்கள் என்றால், இறைவன் உன்னை மேலே தூக்கிவிடுகிறான் என்று அர்த்தம்.

பசி என்பது ஓர் உணர்வு தான், ஆனால் பணமில்லாத போது ஏற்படும் பசி அவமானமாகி விடுகிறது



மண்புழு விவசாயிகளின் நண்பன்

_{நர}ன் உன் உயிர் தோழனாக இல்லாமல் இருக்கலாம் ஆனால் என் உயிர் உள்ளவரை நல்ல தோழனாக இருப்பேன் !

_{உன்னை} நண்பன் என்பார்கள் உன் தேவை முடிந்தபின் உன்னையே தேவாங்கு என்பார்கள்

_{காசு} கொடுத்து கடவுளைப் பார்த்து, கடைசியில் கடவுள்கிட்டேயே காசு கொடுத்து, _{காசு} வேணும்னு கேட்கிறவன் மனிதன் அதுபோல,

மண்புமுவை அழித்து, மண்புமுவை விவசாயிகளின் நண்பன் என்று கூறுவதும் மனிதன் தானே !

சிட்டுக்குருவியின் நிலை

சிட்டுக் குருவிகள் அந்தக் காலத்தில் நேரடியாக பார்க்க முடிந்தது. இந்தகாலத்தில் அது சாத்தியம் இல்லை, அது காட்சிப் பொருளாகவே உள்ளது. மனிதர்களுக்கு ஒற்றுமையின் உணர்வினைத் தரக்கூடிய பறவைகளில் ஒன்று இது. இதனால் பல நன்மைகள் ஏற்பட்டது. மனிதனின் கண்டுபிடிப்புகளால், இச்சின்னஞ்சிறு பறவைகள் அழியத் தொடங்கின. மனிதனின் அறிவியல் வளர்ச்சி எவ்வளவு வளர்கிறதோ, அவ்வளவு பாதிப்புகள் பல உயிரினங்களுக்கும் ஏற்படுகின்றன. பறவைகளைக் காப்போம் மகிழ்ச்சியான வாழ்வை வாழ்வோம்!

வெ. ரேஷ்மா பி.காம் முதலாமாண்டு



சமுதாய மாற்றம்

அந்தி சாயங்கால வருகைக்கும், இரவின் அமைதிக்கும் வாசலில் காத்திருப்பது?

நீலத் திரையில் யாரோ? வரையக் கொண்டு வந்த வண்ணக் கிண்ணம் ! குரியனின் கால் தடுக்கி சிந்தி விட்டது! ஆனால் சிந்தியது எல்லாம் சித்திரமாகாதே! புரிகிறது! மரணப் படுக்கையில் பகல் புன்னகைக்கிறதோ? விடைபெறும் குரியனை உரைக்க அசைக்கையில் தங்கம் தகதகக்கின்றது. என் கிராமத்து சகோதரி

ஒரு கீழிந்த பாவாடைக்காரி கேட்கிறாள் ? ஏன் இந்த வானம் ? என்னைப் போல கீழிந்த ஆடையை அணிந்திருக்கிறது !

உழைத்தவன் கரமா ! இந்த அந்தி ? முத்தமிட்ட கன்னமா ? இந்த அந்தி ?

கூரியன் கொடுத்த இரத்த தானமா இந்த அந்தி ? பாவி மனிதர்கனே! பணம் தேடும் மனிதர்களே வானத்தை விமுங்கும் அளவிற்கு வசதி நமக்கிருந்தும்...

பட்டினியால் பரிதவிக்கும் பரிதாபங்கள் எத்தனையோ ?

செத்தாலும் மேன்மக்கள் மேன்மக்களே !

ஒவ்வொரு அந்தியும் ஒரு சாயங்கால கவிதை ! இதை மொழிப் பெயர்க்க வேண்டாம் ! இதை எந்த மொழியிலும் வாசிக்கலாம் !



வாயும் மனிதர்களே! வீழ்றிஞக்கும் இளைஞர்களே! வீழ்றிஞக்கும் இளைஞர்களே! புதையலை வானத்தில் போட்டுவிட்டு பூமியில் என்ன புதையலை வானத்தில் போட்டுவிட்டு பூமியில் என்ன தான் தேடுகிறீர்கள்? தான் தேடுகிறீர்கள்? தான் தேடுகிறீர்கள்? தீங்கள் அனைவரும் நாளைகளை சேமிக்கும் அவசரத்தில்.... தன்றைய அன்றாடம் அல்வைர தொலைக்கிறீர்கள்!

_{குனிந்}து குனிந்து கூன் விழுந்த மனிதா.... _{வானத்}தை யார்க்க நீ நிமிர்...... _{வானம்} முழுவதும் உனக்கு! ஏன் நீ வரப்புக்கு போராடுகிறாய்....!

இந்த உலகத்தில் வரிய திரையில்... வரையப்பட்ட அரிய ஒவியம் இந்த அந்தி......

கு. கோதிப்பிரியா (பி.எஸ்சி) முதலாமாண்டு



மரத்தின் பயன்கள்

இயற்கை நமக்கு பலமாம் அது இறைவன் கொடுத்த வரமாம் இயற்கை என்பது பல பகுதி அதில் மரங்கள் என்பது ஒரு பகுதி மரங்கள் வளர்ப்போம் பச்சை மரங்கள் வளர்ப்போம் பல மரங்கள் வளர்ப்போம் அதில் பழ மரங்கள் வளர்ப்போம்

மரம் வளர்ப்போம்! மழை பெறுவோம்! வளமுடன் வாழ்வோம்!

பறவைகள் வருவது தினம் அதில் பாடுவது மனம் வானை தொடுவது மரம் அதை மேகம் தொடுவது தினம் மரம் அசைந்து மழையை அழைக்கும் அதில் இசைந்து வருவது மழை மரத்தை அழிப்பது மிருகத்தனம் அதை வேடிக்கை பார்க்காதே! மனித சக்தியை ஒழிக்காதே!



விவசாயியின் துயரம்...

என்னை உங்களுக்கு தெரியாது உங்களை நன்கு நான் அறிவேன் யாவம் நீங்கள் யாரோ போட்ட பாதையில் மிடுக்காய் நடைபோடுகிறீர்கள் !

வெயில் பாராது மழைக்கு அஞ்சாது தினம் உழைத்தேன், வீடு நீலம் வைத்து கடன் வாங்கி பூமியில் போட்டேன் !

இயற்கை சதி செய்தது, மானம் போனது, பசி வஞ்சித்தது, அரசு வேடிக்கை பார்த்தது, உகைமே இருண்டது!

அதிகமாக ஆசை கொள்ளவில்லையே என் நீலத்தில் உழுது , எம் மக்கள் பசியாற அதீல் நான் இளைப்பாற, கனவு கண்டது தவறா ? பாட்டன் சொன்னது வாய்யா ? உண்மையா? நூன் வஞ்சிக்கப்பட்டவனோ இல்லை பிழைக்கத் தெரியாதவனோ ? இருக்கட்டும், என் கவலை ஒன்றுதான் இயற்கை விவசாயம் மறந்துப் போகும். அடுத்த தலைமுறை உணவுக்கு கையேந்த போகும் ! அத்துடன் எம் நாட்டு மக்களும் கையேந்துவர் ! **കൽ് ൽീ**ന്ദ്രപ്രൽ ബിഖச്സി

-கெகப் பிரியா.க (മി.കസ്) കുടയനവാൽൻ.



மரம் என்பது இயற்கை வரம் மரம் என்றால் தாயின் மடி மரத்தில் கோடி நன்மைகள் உண்டு மரத்தால் எந்தவிதம் தீங்கும் இல்லை மரம் இருந்தால் இயற்கையின் சுத்தமான காற்றை சுவாசிக்கலாம் மரம் வளர்ப்போம் !

பி.லாவண்யா (வி.காம்) முதலாமாண்டு



காணாமல் போனசிட்டுகுருவி

தும் வேறு என்று வேறுபடுத்தாமல், மானுடத் தலைமுறையைச் செழிக்கச் செய்ய உன் உதவிகரங்களைப் பெற்று இன்று உனக்கு உபத்திரவங்களைத் தந்து உன்னைக் கொன்று சிதைத்துச் செல்லும் நன்றியில்லாப் பிறவிகளாக மாறிக்கொண்டு வருகின்றனர் மனிதர்கள் ! கண் விழித்துப் பாகுங்கள் ! சிதைந்துக் கொண்டு போவது சின்னஞ்சிறு பறவை சிட்டுக்குருவி மட்டும் அல்ல செழித்து வளர்ந்த மானுடத் தலைமுறையும் தான் !

கே. ஜெய்கீர்த்தனா (பி.எஸ்சி) இரண்டாமாண்டு



மண்ணின் பெருமையை அறிஃவாம் மழை பெறுஃவாம்...

மண்ணின் மணமகவே.... மழை என்னும் திருமகளே... உன் புன்னகையில் பூக்குதடி எங்கள் மனம் வாழ்வளிக்க வந்தவள் நீ... வல்லைமகள் பல செய்தவள் நீ...

மரம் வளர்ப்போம் மழை பெருவோம் மண்அரிப்பை தடுப்போம்.

ை வாவிஸ்ரீ (நி.ஏ.) ஆங்கீலம் இரண்டாமாண்டு





*இ*யற்கையின் கைவண்ணம்

சிற்பியின் கைவண்ணம் சிலையிலே **കൂകിൽ ക്തൈഖൽത്തൻ அതെസ്റ്റി**ക്കേ சேமிய்பதற்கு மழைத்துளி இயற்கையை இரசியுங்கள் ஒருத்துளி

> மழை மண்ணை தொடும் ஓசை அதை கேட்டதும் குதித்தாட ஆசை மழையும் மண்ணும் மணம் விட்டு பேசும் அவை பேசும் ஓசை, மணமாய் வீசும்....

மார்கழி மாதத்தில் விழும் பனி, கீளி கொத்தித் தின்னும் கனி, இயற்கையின் ஒப்பனையோ தனி, வேறென்ன வேண்டும் இனி....

மு.விஸ்பா



இயற்கை என்னும் தகுதியை கொண்டேன் செயற்கை என்னும் தாக்கத்தில் தவிக்கிறேன் தண்ணீர் இன்றி ! பாதுகாப்பை கொடுத்த எனக்கு பாதீப்பை கொடுப்பது சரியா ? என்னிடம் முறையாக பெற்று கொண்டால் உனக்கென கவலை மனிதா கொடுப்பது என் கடமை ! வெற்றுக் கொள்வது உன் உரிமை ! சரியாக பெற்றுக் கொள் சரிவின்றி வாழ கற்றுக்கொள்... !

கா. காவியா



Parent - Teacher meet







NSS, RRC& YRC







Placement







Valedictory & Farewell

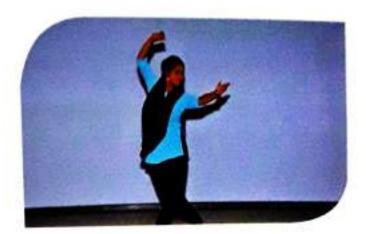




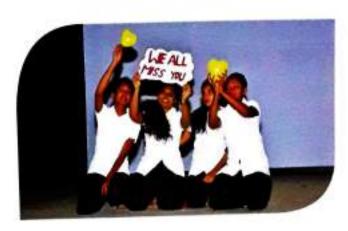


Valedictory & Farewell











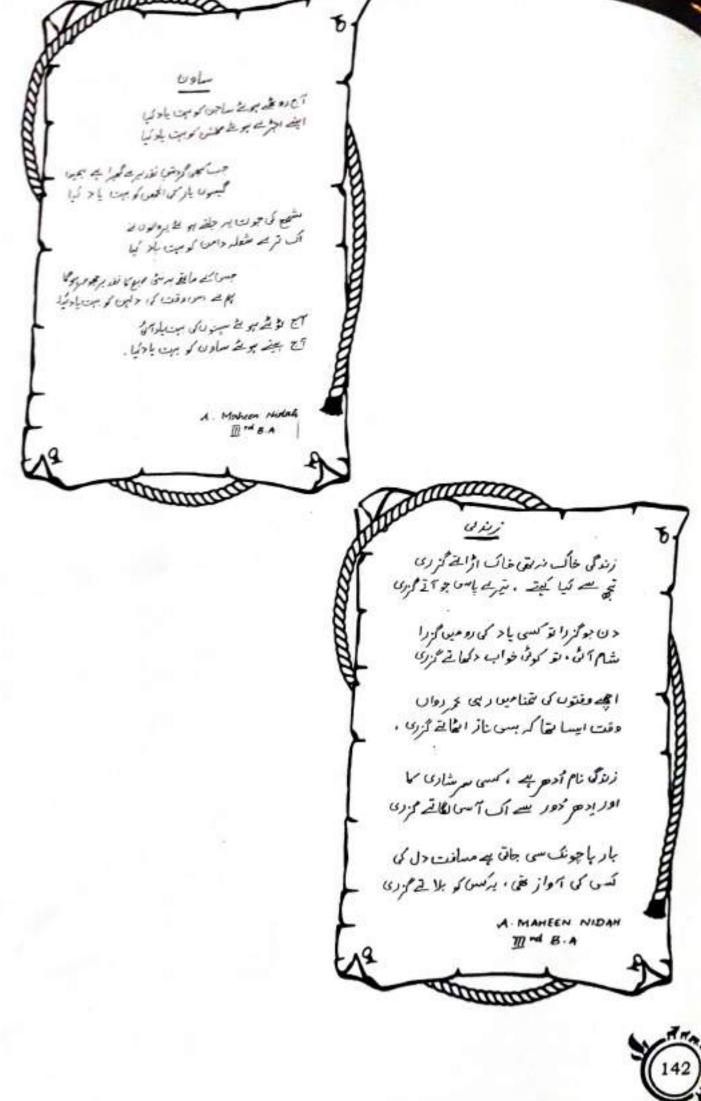




AESTHETICA TELUGU URDU KANNADA FRENCH







ماول ماول کے لغوی معنی اردگرد کے ہیں یعنی ہروہ چیز ہو جاندار برابرا اثردکھتی ہے سے ماول کتے ہیں۔ بھوئی فور پر زمیں، فغا اور یان کو ماول کتے ہیں جس میں لا ميانان ، فيمان اور كيميان جزادومنا مرشال بوت ين - سع توجه م يو ي ديا اور كا شات مين اسع ما ول كما ما نا به-اولیات درا مل ماول کے مطالع کو کہتے ہیں جس سے بعین ماول کے تمام موامل ، جزادومنام اوران ك خرمات وكزوريون كرباري مي بعته علتانيده ولك كاطالعه دوا مل ممانتات ادمیات، مغرانیه، تاریخ، معاشیات میمانیاتی مناوی، اور آبی علم کے مطالعہ ہر مفتعل ہوتاہے۔ با و ایماتی شعوز عوام کی ما ول سے وا تغیت کو ما و ایاتی شعور کہتے ہیں۔ ما وایاتی شعور عام خود ير دوتم كا يوتايد-ايك شعور برائ شعوريين وى ماول كم ياديد بي بلغة توبيت ہیں بیکن جانے ہو ہیں گھا بین کرے دوموا شعور برائے علی بعنی ما والے بارے میں ہو مع جانا جائد اس بر على مع بها جائد و عام مر جود عن شعو والد على بوتا ہے جل معاشر سے غیر دور دار افاد شعور کر مل انتہائے ہیں۔ براولاست الإلباق شعود برهائ كمسط منتف شح كى مشادرى تغريبات كاسهارا الما ما تا يه من من من اكريد. مراحث عليه اطلاع المريد شاط من حبك بالتوار بنيا وون شوں ہم علانے کے بے طاعتی فلائع اعلیٰ بھی اضافت، دقعے ، کتا بھے ، ہو مؤن عدد لى بالنب الدين بيمان يراول المن كريد برق مديا يعنى في ب ويثريو اورانثرنيث كاسمأل عاجاتا دحرن کی سی یمی باد بيثرنكان بارباد SU. 4/4 2. جبون سکی بنلٹ ہم آؤ پي لاڪ ت ATERQUA YASMEEN BSC Mathe Final year



