

Annual Report of SDG activities and outcomes- 2020-21

Ruia College became a signatory to UN SDG Accord on 30 June 2020, when at the time only 6% of its members were Colleges/Institutions world over.

Initially an awareness was created among the stakeholders namely Faculty of College and students about what is SDG, its targets and indicators. Following activities aligned to SDG goals were conducted by various departments in the year 2020-21;

Department of Botany organized an online session on a webinar entitled “Van Sampada Van Shakti Van Mahotsav!” under ‘Van Mahotsav 2020’ – Our forests, their existence and contributions on 7th July 2020 pertaining to SDG 15-Life on Land. The speaker was Dr Shashirekha Sureshkumar, former Head of Botany Dept , Mithibai College. Van Mahotsav is an annual Indian tree planting festival, occupying the first week in the month of July. It was initiated in 1950, by K. M. Munshi, the then Union Minister for Agriculture and Food to create an enthusiasm in the mind of the populace for the conservation of forests and planting of trees.

The main objectives of the activity were to inculcate tree consciousness and love of trees amongst the people, to increase production of fruits and add to the potential food resources of the country, to help create shelter-belts around agricultural fields to increase their productivity, to inculcate the importance of shade and ornamental trees for the landscape, to celebrate the importance of growing and saving forests and to create awareness about the bad effects of deforestation.

Departments of Botany, Life Science and Zoology jointly organized a webinar entitled “Mangroves- Life Guards of Mumbai” on 27th July 2020, on the occasion of International Day for the Conservation of Mangrove Ecosystem 2020 pertaining to SDG 15-Life on Land. The speaker for the session was Mr. Hemant Karkhanis who is an Associate Manager in Mangrove Department.

The main objectives of the session were to spread awareness about the mangrove forests and its rich flora and fauna, to inculcate consciousness about the importance of existing mangrove forests and urge to protect the ecosystem, to spread awareness about the threats and challenges to mangrove ecosystem and to celebrate the importance of growing and conserving mangrove forests. Over sixty students including the faculty members from all the three departments were present for the webinar.

Departments of Commerce and Botany organized an Interdisciplinary Webinar on 29th October 2020 on “Sustainable Agriculture In India- Why Does It Not Scale-Up”

pertaining to SDG 2 - Zero Hunger and SDG 12 -Responsible Consumption and Production.

The webinar was conducted to make students aware about sustainable agriculture, its challenges, issues and to understand the initiatives taken towards organic farming as a step towards sustainable agriculture in India. Ms Vaishnavi Pawar, who has worked as a Researcher at Vikas Anvesh Foundation India (Tata Trust), was the speaker. The attendees found the webinar very relevant , as it guided them how to do research in the near future and gave some idea of how to do composting. It also provided inputs on how the sustainable agriculture is advantageous for farming practices. UG and PG Students, Faculty of Arts and Science attended the session. A total of 53 students attended the webinar, including 1 from Nagaland University.

Dept of Life Science conducted 3 survey projects pertaining to SDG- 03 -Good Health and Well being with 4 TYBSc students in July/August 2020. The titles of the projects were;

- 1) Digital Detox - an Aid to Wellbeing of an Individual
- 2) FOMO JOMO-Fear of missing out vs Joy of missing out
- 3)The Perspective of Happiness

These were questionnaire based online surveys conducted with the background of Covid pandemic when it was at its height. The hypothesis was that on one hand there is increase in digital dependence and with lockdown it would only be more pronounced. But then at the same time it causes anxiety and depression. The questions in the form were aimed at understanding means of detox taken up by subjects from various age groups. Also it was interesting to note with covid whether people who used to be so much in fear of missing out the fun have now accepted that its not possible to be a part of every other happening or event and that they are now ready to miss out on things happily. Whether people have changed their perspective on happiness, what used to be of utmost importance for being happy now with the changed situation if it has lost its relevance.

It was observed that perspectives of happiness have changed and that people are now believing in minimalistic expectations and sources of happiness. Also people are ready to miss out. Digital detox is required and people were made aware of it through this survey. Those having high scores of digital dependency were suggested some interventions. They were asked to follow any of those interventions and after a month they were again asked to fill the form, they did show improved digital scores (lower than before). This definitely has had a positive impact on individuals.

During the year 2020-21, 5 more projects under SDG -03 were initiated with 19 SY BSc students on topics like 'Menstrual Health-PCOD/PCOS', 'Spirituality', 'Silent Depression', 'Lifestyle and menstrual health', 'Prevalence of Allergies'.

Dept of Commerce and Ruia Cell for Gender Sensitisation and Equality organized an Interdisciplinary Webinar on "Gender Issues in Covid 19"(SDG -05- Gender Equality) on 20th July 2020. The Covid-19 pandemic adversely impacted society and the global economy. Increased incidences and experiences of domestic violence, economic losses, psychological, health and safety issues, multiple forms of discriminatory practices and inequalities across genders, mainly women and girls have been observed across the globe. Given the fact that Covid-19 is not gender blind, it becomes imperative to understand and to inculcate a gender-sensitive approach in response to the pandemic. In continuation with the activities of the Cell and in pursuance of UGC guidelines, this webinar was conducted to create awareness with respect to rising gender issues and their challenges. The Webinar unfolded many issues faced by women and grave challenges faced by transgenders and sex workers in particular. The sessions gave valuable inputs as well as discussed about change in the approach required from the people. The 1st topic was "Gender Issues –various dimensions" by Dr. Geetali V.M., Retd. Faculty, Department of Chemistry, Fergusson College, Pune & Founder Member and Advisor of Nari Samata Manch since 1985 & Editor, Milun Sarya Jani & Purush Uvach Initiative. The 2nd topic was "Issues of Sex workers and Transgenders" by Ms. Meena Seshu, Master in Social Works (Social Welfare Administration), TISS & General Secretary of the Sampada Grameen Mahila Sanstha [SANGRAM], a Health and Human Rights NGO. The session gave valuable insights into inculcating values and appreciating the role of women and men in the society by using a heartfelt dialogue, classification / vertical division of patriarchal hierarchy. It also enlightened about multifaceted challenges faced by sex workers and transgenders and how it is important to accept them and make them a part of the mainstream activities. This webinar provided an opportunity for sharing and discussing different approaches for raising awareness for various gender issues not only for women and girls being the most vulnerable in general but also sex workers and transgenders in particular. In all 104 faculty members attended the webinar with 77 female participants and 27 were male participants.

Dept of Green House Management (SDG-1. Poverty SDG- 2. Zero Hunger, SDG-3. Good Health and Well-being, SDG- 11. Sustainable Cities and Communities, SDG- 12. Responsible Consumption and Production, 13. Climate Action) arranged a lecture on Terrace gardening- Subhash Palekar Natural Farming (SPNF) method on 11th February 2020, by Padmashree Shree Subhash Palekar. Techniques of Natural Farming were

discussed. Need to do away with chemical fertilizers, insecticides, pesticides and carry out farming with naturally available resources were impressed upon. Growing millets and fruit trees on one's terrace was also encouraged. The lecture was attended by 100 people – students, teachers, professionals, hobbyist and farmers.

Students of GHM Dept organized a Virtual Exhibition of wild vegetables on 12th Oct 2020 on google meet platform. Information about various wild vegetables indigenous to Maharashtra was presented by the students. Health benefits, medicinal values and delicious recipes were discussed. The importance of consuming one's traditional fruits and vegetables as against the popular demand for exotic vegetables were impressed upon in keeping with the slogan 'Vocal for Local'. These could be domesticated and cultivated instead of eating imported exotic vegetables grown in totally different soil and under different climatic conditions as well.

The GHM dept celebrated "World Nature Conservation Day" (SDG-6 - Clean Water and Sanitation SDG-13 – Climate Action, SDG-14 - Life Below Water, SDG-15 - Life on Land

on 28th July 2021. The students expressed their concerns about the need of conserving the flora, fauna of the urban area in the form of power point presentations, videos and group discussions. They highlighted about the deterioration of the quality of life due to excess of pollution, global warming and climate change. Some of them depicted the loss of Mahua plants in the hills around Kalwa due to deforestation and human encroachment. Extinct, rare and endangered species of plants, were also discussion and the various means to conserve and restore them as well.

The main objective was to spread the awareness about depleting effect of the changing weather conditions due to the impact of global warming, human activities and irresponsible human behaviour.

The students collected the data after going through various case studies, articles and looking around their neighbourhood.

Dept of Chemistry, MSc students, in groups of 2 to 3 students each, during the year 2020-21, worked on 14 different projects like;

1. "Water pollution due to poor domestic waste management" (SDG-6 Clean Water and Sanitation) to determine cause of poor sanitation, easy flooding in Mumbai, benefitting public and municipality. The project helped deter public from using local water bodies as *nirmalya* disposal sites and raised public awareness by means of online surveys and infographics. (Survey Population: 48).
2. "Waste segregation practices of shop owners in Mumbai" (SDG- 11 Sustainable Cities and Communities), addressing large amounts of waste disposed by shop owners in urban scenario. Dialogs with shop owners helped in dissemination of information and encouraging them to be a responsible part of a sustainable city. They showed the will to alter practices and that a centralized system could be set up to enable change. (Survey population: 50 shop owners).

3. “Wastes accumulated due to toothbrushes” (SDG-12: Responsible Consumption and Production), to explore the statistics about landfill wastes contributed by toothbrushes

(Survey population: 80). It was noted that the youth is aware of the waste crisis and is willing to change and that to bring the change in responsible consumption, more marketing of the alternatives and their easier availability could be helpful.

4. “Can consumer behaviour be held accountable for e-Waste issue?” (SDG-12: Responsible Consumption and Production), to explore the statistics of e-Waste in India, and to study consumer behaviour. It was noted that awareness about methods of safe disposal and recycling of e-Waste is lower than expected. Information needs to be spread to make every citizen understand about the harms of irresponsible disposal of e-Waste.

5. “Impact of fast fashion on the environment” (SDG-12: Responsible Consumption and Production), to explore the statistics of waste disposed by fashion industry into landfills

To raise awareness about how fast fashion contributes to the waste crisis and to look for alternatives.

6. “Edible Water Bottles” (SDG-11: Sustainable Cities and Communities). Waste crisis is intensified by disposable water bottles made of plastic. Alternatives for plastic water bottles – gel based edible water balls can eliminate need for plastic. The students attempted to make these water balls.

7. “Eco-infrastructure with eco-bricks” (SDG-11: Sustainable Cities and Communities), to replace cement and bricks with eco-bricks made of single use plastics, thus resolving waste crisis and reducing Carbon emissions at the same time. Students made Eco-bricks by compressing waste single-use plastics into brick shapes using pressure, packed them with cementing agent. The Eco-brick product made was strong, each brick used about 500 g of waste plastic, thus encouraging recycling.

8. “Solid Waste Management at Household Level” (SDG-11: Sustainable Cities and Communities) to raise awareness about waste segregation and anaerobic fermentation or composting of wet waste

9. “Preparedness of Indian Market towards e-Vehicles” (SDG-7: Affordable and Clean Energy). Survey was done to collect data on consumer behaviour in India, checking on public opinions and myths concerning e-vehicles, willingness to switchover if it means reducing carbon emissions. Survey indicated that public transport in India is preferred. Those opting for private vehicles are willing to purchase electric vehicles if charging points are conveniently placed.

10. “Unacknowledged plastic – Sanitary Napkins waste in Urban Sprawl Area” (SDG-11: Sustainable Cities and Communities). Survey was done to collect data on which products are being used in Urban Sprawl (slum) areas, and how disposal is carried out. Alternative products were explained to the population. Some were aware about the ongoing waste crisis due to sanitary napkin wastes, and were willing to switch to menstrual cups given more information.

11. "Production of Biofuel from Sugarcane Bagasse Waste by Facile Fermentation Method" (SDG-7: Affordable and Clean Energy). Students prepared cost effective bio-ethanol from bagasse using yeast fermentation, bypassing toxic chemicals and use of expensive enzymes.

Process was optimized on a small scale, but it can be scaled up for larger amounts of bagasse treated. A purification step will be needed before use in hybrid fuel engines.

12. "Biofertilizer from household wastes" (SDG-11: Sustainable Cities and Communities)

Students prepared bio-fertilizer from household wastes, and analysed its use on plants.

Finely divided household waste was suspended in rice water, culture was added and left undisturbed for two weeks. The resulting slurry was centrifuged, centrifugate used as fertilizer. The prepared biofertilizer had noticeable positive impact on growth of plant as compared to control when fed on alternate days, in a 10x dilution.

13. "Producing paper from drumstick waste" (SDG-12: Responsible Consumption and Production). Drumstick fibres were blended, digested in alkali, later neutralized with acid. Homogenous fibres were set into paper moulds.

14. "Use of beetroot (beta vulgaris) extract for preparing natural indicator" (SDG-12: Responsible Consumption and Production), to replace toxic indicators like phenolphthalein which are drained after use. Beetroot extract was prepared and results were compared with that of conventional acid base indicators.

Dept of Biotechnology (SDG-7- Affordable and Clean Energy) organized a guest lecture on "Fundamentals and Scope of Sustainable Bioenergy Research" on 30th January 2021. Dr. Aditya Sarnaik, Postdoctoral Research Associate, Arizona State University, USA was the invited speaker for the session. The talk highlighted the immense amount of energy which can be generated through the biomass and the diverse biological resources which can serve the purpose. The talk focussed on how sustainable activities can be achieved in all the routine day activities eg- Sustainable use of requirements while performing the practicals in the laboratory. The lecture also featured the immense use of computer simulation system and softwares such as Python and Matlab to analyze the functional pathways which are affected by the incorporation of gene mutation.

Environment Awareness and Sustenance Committee in collaboration with RUR GreenLife Pvt Ltd -Green Awareness and Action Program -GAAP, organized 5 online training sessions for the students of Arts and Science, in February and March 2021. 122 registrations were received including students and faculty. The interactive sessions conducted were understanding concepts of sustainability, home composting, insights into segregation at source, kitchen gardening, and knowledge sharing. Students actively participated in all sessions and completed the assignments given. The topics for assignments were waste audit at home and community, bucket composting, growing microgreens, plastic audit and quiz.



RUIA COLLEGE

Explore • Experience • Excel

Shikshana Prasarak Mandali's

Ramnarain Ruia Autonomous College

NAAC Reaccreditation A+ grade 3.70 CGPA

Empowered Autonomous Status awarded by University of Mumbai

College of Excellence

by the UGC, New Delhi

Estd. 1937

Now students are aware about the environment, pollution, and what can be done to decrease pollution and manage waste.

Outcomes of the awareness created and the activities conducted;

1. SDG was included in the curriculum and passed through respective Board of Studies in many departments.

2. Students presented their SDG projects in Research Convention and Conferences.

i. Vidhi Dedhia, TY BSc student of Life Science, presented poster on 'Digital Detox' at **1st Student Research Congress** under the theme of Innovations for Better Health organized by SVKM's Dr Bhanuben Nanavati College of Pharmacy co-hosted by University of Mumbai on 28-30 Sept 2020.

ii. Vidhi Dedhia of TY BSc Life Science submitted her SDG research project 'Joy of Missing Out (JOMO) – could it be the current choice of the youth?' in Humanities, Languages, Fine Arts category, UG level for Selection Round of 15th Inter Collegiate/ Institute/Department **Avishkar Research Convention: 2020-21** for Zone, University of Mumbai.

iii. Sneha Shinde, Shreeya Mukumdar and Saleha Shaikh SY BSc students of Life Science submitted their SDG research project 'Prevalence of Allergies' in Medicine and Pharmacy category, UG level for Selection Round of 15th Inter Collegiate/ Institute/Department **Avishkar Research Convention: 2020-21** for Zone, University of Mumbai.

iv. Vidhi Dedhia of TY BSc Life Science, participated in the research poster presentation of the Two-day Transdisciplinary **International Web Conference** titled 'The Pandemic Turn: Challenges, Direction and Innovation In New Order', organised by KET's V. G. Vaze College (Autonomous) on 25th and 26th February 2021. She presented a poster titled, 'Digital Detox - Important for the well-being in the course of pandemic' and received **second prize** for it.


With the enthusiastic contribution and support by all the stakeholders, the College has adopted SDG as one of its Best Practices and ideas for SDG activities to be conducted in the next year have already taken roots.

SDG Goal – 2, 12, 15

S. P. Mandali's
Ramnarain Ruia Autonomous College
DEPARTMENT OF BOTANY, LIFE SCIENCE &
ZOOLOGY

On the Occasion of 'International Day for the Conservation of Mangrove Ecosystem 2020' jointly organize a Webinar on

Mangroves: Life Guards of Mumbai
By



Mr. Hemant V. Kulkarni
Associate Member,
Mangrove Foundation
Co-ordinator, Botany Centre, Government College, Mumbai

Date: 27th July 2021
Time: 11 am to 12:30 pm


Registration Link:
<http://www.rajawade.com/mumbai/SDG-Mahotsav-2021-28961501.html>

S. P. Mandali's
Ramnarain Ruia Autonomous College
Department of Botany

Celebrates

'Van Mahotsav 2020'
Our forests. Their existence and contributions

70th year of celebration



**Van Sampada
Van Shakti
Van Mahotsav!**



Speaker:
Dr. Shashirekha Sureshkumar
Retd Associate professor, former Head, Botany Department, Mumbai College.

- 35 years of teaching experience in the subject.
- General secretary, Mycological Society of India (MSI) Mumbai chapter.
- Life member of The National Society for the Friends of Trees (NFT) Flower show Committee Member, Nature trails and Nature walks.
- Life member of Indian Botanical Society (IBS)
- She has a tremendous work experience in the field of environment Conservation and has been working as an expert in the area.

Date: 17 July 2021
Time: 4:00 PM

S. P. Mandali's
Ramnarain Ruia Autonomous College
DEPARTMENT OF BIOTECHNOLOGY
Under the aegis of Star college Scheme
presents
A Lecture
on
**FUNDAMENTALS AND SCOPE OF
SUSTAINABLE BIOENERGY RESEARCH**
by



Dr. Aditya Sarnaik
Post-Doctoral Research Scholar at School for Engineering of Matter, Transport and Energy
Arizona State University, AZ, USA.

Day: Saturday
Date: 30.01.2021
Time: 10:00 a.m. – 11:00 a.m.
For registration, [click here](#)
Hurry! Limited seats!

SDG Goal – 5



Gender Issues in Covid-19

DATE: 20th July, 2020
TIME: 11:00 a.m. to 1:00 p.m.
PLATFORM: MS Teams

Gender Issues- Various Dimensions
Dr. Geetali V.M.

Issues of Sex Workers & Transgenders
Meena Seshu

S.P.Mandali's
Ramnarain Ruia Autonomous College
Matunga, Mumbai

DEPARTMENT OF COMMERCE

Presents 'SYNERGY' an Interactive Webinar with Alumni of Commerce subject III SYBA/TVBA

ON 27TH OCTOBER 2020 FROM 9.30 A.M. TO 10.30 A.M. ON 'IMPACTS OF BATHING SPACE ON THE LIVES OF THE RURAL WOMEN IN INDIA' UNDER SUSTAINABLE DEVELOPMENT GOALS – GOAL No.3 'GOOD HEALTH AND WELL BEING' AND GOAL No.5 'GENDER EQUALITY'

Speaker
Ms. Vaishali Pawar

- Researcher at Vikas Anvesh Foundation, India (Tate Trusts)
- Research areas: Agriculture/Gender/Livelihoods/WASH

Qualification:
• B.A. Economics (2016), Ramnarain Ruia Autonomous College
• Master in Sciences, Agricultural Economics, Gujarat Institute of Politics and Economics, Pune, India

ALL STUDENTS AND FACULTY ARE WELCOME TO JOIN US!

Report:
Dr. Geetali Mehta, Head, Department of Commerce
Dr. Anandesh Dattaraj, Principal

Contact mail ID: webinars@ruia.ac.in

SDG Goal – 3, 6, 7, 11, 12



DIGITAL DETOX – AN AID TO WELL BEING OF AN INDIVIDUAL
Market Research Company – 29th September 2020
Abstract No. PR 1411

INTRODUCTION
The digital detox is a trend where people take a break from their mobile phones and other digital devices for a certain period of time. This helps them to reduce their dependence on technology and to spend more time on their loved ones and hobbies.

AIMS AND OBJECTIVES
The main aim of the digital detox is to help people to reduce their dependence on technology and to spend more time on their loved ones and hobbies. The objectives of the digital detox are to help people to reduce their dependence on technology, to spend more time on their loved ones and hobbies, and to improve their mental health.

RESULTS
The results of the digital detox are that people who have taken a digital detox have reported a decrease in their dependence on technology, an increase in their time spent on their loved ones and hobbies, and an improvement in their mental health.



Eco-bricks prepared from single-use plastic wastes

Production of edible water balls





Dr Kanchan Chitnis

Dr Kanchan Chitnis,

Convener Ruia SDG Committee, and

Assistant Professor, Dept of Life Science.