VPM's B. N. Bandodkar College of Science, Thane

Department of Botany

Report of

"Multidisciplinary International Conference on Green Earth: A Panoramic View"

12th to 13th January 2018

Since time immemorial, our planet Earth has surprised us by its astounding powers to nurture all living forms. Our green planet has unique support system of atmosphere, gravitational force, magnetic field, water, soil etc. Probably mankind is the most advanced creation of Mother Nature that exists on Earth but today there are alarming signals to save green Earth from human greed. With respect to this context, **Department of Botany of Vidya Prasarak Mandal's B. N. Bandodkar College of Science, Thane** had organized "Multidisciplinary International Conference on Green Earth: A Panoramic View" on 12th to 13th January 2018 in collaboration with Birbal Sahni Institute of Palaeosciences, Lucknow (BSIP) and Bombay Natural History Society, Mumbai (BNHS) and supported by Council of Scientific and Industrial Research, New Delhi (CSIR).

Prior to International Conference, Dept. of Botany organized Logo Competition and two Preconference Workshops on 10th July 2017 and 11th December 2017. Generally a logo serves as the central element which is essential to aid and promote instant public recognition. In order to fulfill this purpose, a **Logo Competition** was conducted in month of June. Total 118 students participated in this competition. The creative logos were judged by an external Judge Dr. Manoj Kumavat. He is M.D. in Alternative Medicines and a member of Bombay Art Society. He selected the best logo on the basis of different parameters such as, originality, colour scheme and overall presentation. The logo of **Ms. Monal Chitnis (7th Std, Shreerang Vidyalaya, Thane)** selected as Winner logo and used for brochures, proceeding and certificates of the preconference workshop and International Conference.

The two days conference was attended by 550 participants from academics, Industries, Research Institutes from various states of India (Maharashtra, Gujarat, West Bengal & Goa). Eminent Speakers form India, Mauritius, Malaysia and Nepal mesmerized all audience by their research work and contribution towards science and in turn to the society.

Inauguration of the Conference began with offering garland to statue of our beloved Late Dr. V. N. Bedekar; Founder of VPM. Chief Guest Hon'ble Dr. Vijay Bedekar (Chief Patron & Chairman of Vidya Prasarak Mandal), Dr. Sunil Bajpai (Director of BSIP), Padma Shri Jadav Peyang (Forest Man of India, Jorhat, Aasam), Dr. (Mrs.) M. K. Pejaver (Convener and Principal), Prof. Venkatraman (Vice-Principal) and Dr. Moitreyee Saha (Organizing Secretary) had grace Inauguration Function. In the beginning Dr. (Mrs.) M. K. Pejaver welcomed all the delegates and narrated about the conceptualization of conference. Later Dr. Moitreyee Saha briefed about the various Themes of Conference. The proceeding of International Conference was inaugurated by Chief Guest Dr. Vijay Bedekar, Dr. Sunil Bajpai

and Padma Shri Jadav Peyang. It was inclusive of 10 invited talks and the imperative research in form of 65 research papers received from different parts of India.

Chief Guest Dr. Vijay Bedekar's address focused on living a better life by following nature friendly ways such as minimizing use of plastic, pesticides, antibiotics, cosmetics, etc. He emphasized on avoiding the overall GDP game plane which may tarnish Mother Earth's valuable resources. Vote of thanks was proposed by Dr. Vinod Jamdhade.

The two day conference was conducted in eight technical sessions.

On 12th of January, 2018 the technical session I included two invited talks. This session was chaired by **Dr. S. N. Malode** (Associate Professor and Head, PG Dept. of Botany, Govt. Vidharbha Institute of Science and Humanities, Amravati, Maharashtra).

The 1st invited talk was delivered by **Dr. Sunil Bajpai** (Director, Birbal Sahni Institute of Palaeosciences, Lucknow) on topic of "Birbal Sahni Institute of Palaeosciences, Lucknow: A **Window Into Past Life, Ecosystems And Climates".** He Introduced "OUT OF INDIA" hypothesis that present is key to past, and past holds key to the future. He highlighted Indian geological history with the help of fossils and their applications. The audience appreciated his presentation which depicted the various photographs of rare fossils.

Padma Shri Jadav Peyang's delivered 2nd invited talk on "Forest and Climate Change" where he mentioned about his tribe "Mishing community" and his journey. He stated how at a very young age he was moved by the plight of the barren land and dyeing animals and in turned started working towards declining forest areas and wetlands near his home. At first he decided to approach his village men, but that fell on deaf ears. Finally he started single handed on the project. He shared his experience and hardship faced while building the forest by planting few saplings every day for three decades, now called as "Molai Forest". This forest covers about 1360 acres of land which gave shelter to diverse flora and fauna. He ended his talk by stressing on role of government agencies towards education policies to motivate young minds towards tree plantation on a larger scale. He appealed students that if they truly adore him as their idol then they should follow his example to work together towards building a better greener nation.

The technical session II included two invited talks. This session was chaired by **Dr. Bindu Gopalkrishnan** (Assistant Professor Dept. of Botany, Mithibai College, Mumbai, Maharashtra).

In this session, **Dr. SVC Kameswara Rao** (General Manager, RRSC-CENTRAL, NRSC/ISRO, Nagpur) narrated topic of "Indian Space Programme & Geo-Spatial Technologies Applications for a Greener Earth with Special Reference to Soil Resources" He elaborated on applications of Indian Space Program and information generated through remote sensing satellites that helps to generate important data in agriculture and in monitoring and management environmental changes. He showed the actual images of vegetation which helps in prediction of total yield of crop plants. He declared the news of successful launching of satellite by ISRO which took place on same day. This news received a big round of applause and appreciation for Indian space scientists from audience.

The second speaker, **Dr. Rajesh Mehrotra** (Associate Professor, BITS Pilani, Rajasthan) discussed "Genomic Analysis of Cis Regulatory Elements And Its Experimental Validation In Model Plant Arabidopsis Thaliana Reveals Spacer Distance Between ACGT Cis Regulatory Elements Governs Differential Gene Expression In Response To Salicylic and Abscisic Acids". He gave an overview of abscisic acid dependant and independent abiotic stress pathways along with molecular mechanisms of the same. He mentioned the application of the study in designing stress tolerant plants. The main highlight of the talk was *in silico* analysis of distribution pattern of ACGT elements, cloning of PP2C promoter and its detection. He also mentioned the negative effect of AAEA motif on GE of PP2C.

The technical session III was of Mini-oral presentations. This session was chaired by **Dr. Hj. Wan Mohtar Wan Yusoff** (Professor, School of Bioscience and Biotectnology, Faculty of Science and Technology, The National University of Malaysia, Malaysia) and the rapporteur was **Dr. Sashikumar Menon** (Asst. Director & Associate Professor, Pharma Analytical Sciences, KAUSHAL Kendra, Mumbai, Maharashtra). There were total 9 Mini-oral presentations delivered by research scholars which were on the topic of Agricultural sciences, Bio-sciences, Biophysics and Enviro-Management. The session ended with valuable suggestions and comments gave by Dr. Wan Yusoff and Dr. Sashikumar Menon. They mentioned about the quality of research, use of visual aids, literature survey, body language and overall presentation. The oral presentations were judged by two eminent scientists, *viz.*, **Dr. Gaurav Sharma** (Scientist-D, Zoological Survey of India) and **Dr. Gita Shrestha Rajbhandari** (Associate Professor, Department of Botany, Amrit Campus Thamel, Kathmandi, Nepal)

The last session of the day was chaired by **Dr. Sharda Vaidya** (Associate Professor & recognized Research Guide, Dept. of Botany, CHM College, Mumbai, Maharashtra)

Ms. Reshma Pitale (Research Students, Bombay Natural History Society) represented on behalf of Dr. Deepak Apte (Director, BNHS, Mumbai). She delivered talk on "Costal Ecosystem: New Chapter on Marine Conservation" She explained exclusive activities undertaken by BNHS. She focused her talk on coastal life of Maharashtra which is a very diverse, complex Ecosystem that has scope to get explored more. She also threw light on conservation and management strategies which are getting hampered due to uncontrollable human activities.

The first day of conference ended with cultural programme in which various Indian forms of music and dance were beautifully expressed by talented students. The programme began by offering 'Ganesh Vandana' in form of classical dance. Dr. Ashwini Tilak presented melodious song which was followed by 'Jugal Bandi' of Harmonium and Tabala with a spark of Beat boxing. It ended with the documentary video depicting 'Colourful Indian Festivals' along with their religious and scientific background.

On 13th of January, 2018 the first technical session started with poster presentation. Total 55 posters were presented under different category of undergraduate, postgraduate, PhD and teacher's category. Papers were presented under the themes of Agricultural sciences, Biosciences, Biophysics, Green Chemistry and Enviro-Management. There were 10 prize wining posters under different category.

The second session of the day was chaired by **Ms. Rucha Khadake** (Assistant Professor, Dept. of Biochemistry, VPM's B. N. Bandodkar College of Thane, Maharashtra). It included only one invited talk

Dr. S. S. Hameed (SCIENTIST- 'C', AJC Bose Indian Botanic Garden, Botanical Survey of India (BSI), Howrah.) gave talk on "The Role of Botanic Gardens In Plant Conservation: A Special Reference To A JC Bose Indian Botanic Garden, Howrah" He initiated the talk by giving insights of objectives and areas of BSI functions. He elaborated on *In-situ* Conservation strategies and potential of BSI in protecting medicinal, commercially important, endangered plant varieties.

The third session of the day was chaired by **Dr. Anita Goswami-Giri** (Associate Professor and Head, Dept. of Biochemistry, VPM's B. N. Bandodkar College of Thane, Maharashtra). It included two invited talks.

Dr. Hj. Wan Mohtar Wan Yusoff (Professor, School of Bioscience and Biotectnology, Faculty of Science and Technology, The National University of Malaysia, Malaysia) elaborated on topic of "The integration of mind and hearts of human interactions in a cosmological construct for Green Earth." He stressed on the role of man in cosmological construct explaining 'soul' as 'spiritual heart'. He mentioned that we should be exploring science for 'The truth' and not only for commercialization. He spoke about 'elements in managing the soul' that constitute the 'study of ethics'. He threw light on the summative outcome of mans efforts to maintain and sustain the perceived balances and in-balance of the interactions of all domains and components of outside as well as inside earth.

Dr. Gaurav Sharma (Scientist-D, Zoological Survey of India, High Altitude Regional Centre, Ministry of Environment, Himachal Pradesh) shared excellent piece of information on "**Studies on the Faunal diversity with** *s.r. t.* **Mammalian Diversity and their conservation in India**" He highlighted on the key role of ZSI in biodiversity conservation as India is recognized as one of the 17 mega diversity countries of the world with three biodiversity hot-spots.

The fourth session of the day was chaired by Dr. Minakshi Gurav. (Assistant Prof. from Dept. of Botany, Ruparel College, Matunga). It included two invited talks.

Dr. Gita Shrestha Rajbhandari (Associate Professor, Department of Botany, Amrit Campus Thamel, Kathmandi, Nepal) enlightened on "**Impact of Climate Change in Forest Diseases of Nepal.**" She gave an overview of rich biodiversity in Nepal and the alarming situation of forest depletion due to various reasons including fires and human intervention. She spoke on effect of changing physical factors and their relation with micro-environment that invite new diseases of conifer forest and affect vegetation adversely.

Dr. Rajen Suntoo (Senior Lecturer in Sociology, University of Mauritius, Mauritius) spoke on "Conservation and Consolidation of Green Earth: A Crucial Pillar for Livelihoods." He highlighted the social aspect to achieve green earth. He made the audience aware of the need for environmental impact assessment as well as 'social impact assessment' to make people realize the adverse effects of damage to the environment. He made all audience to introspect about their social responsibilities and sustainable environment. He stressed on implementation of plans

rather than mere discussions on the problem. Giving examples of small measures like use of public transport and ban on plastic. He explained the important role of socialization to conserve environment

The conference concluded with valedictory and award ceremony. It was graced by Chief Guest Hon'ble Dr. Vijay Bedekar (Chief Patron & Chairman of Vidya Prasarak Mandal), Dr. (Mrs.) M. K. Pejaver (Convener and Principal), Prof. Venkatraman (Vice-Principal) and Dr. Moitreyee Saha (Organizing Secretary). The summery of Two days conference was presented by Dr. Kalpita Muley (Co-ordinator, Dept. of Microbiology). Later representative delegates shared their excellent views and experiences about conference. In award ceremony, best oral presenters and poster presenters were felicitated by the hands of Chief Guest Hon'ble Dr. Vijay Bedekar. Hon'ble Dr. Vijay Bedekar addressed audience and gave his valuable concluding remarks. He appealed to each and every audience to introspect and bring changes in oneself without blaming the society. Such rational thinkers and responsible citizens can help in building a strong nation. The vote of thanks was proposed by Dr. Moitreyee Saha. When she mentioned about Forest Man of India, all the audience gave standing ovation to True Son of Mother Nature.

Through this International summit, the organizer presented a real life example of **Forest Man of India.** Each and every speaker of conference gave a novel insight to tackle challenging issues to make Earth a better home for us. The interactive discussions took place during the conference might have inspired many budding researcher. Some of them may follow footsteps of Forest Man of India to make greener India. Conference received positive feedback from all the aspects like quality research work, punctuality, hospitality and for such a splendid arrangement.







Inauguration of Conference and Proceeding









Inaugural address by Chief Guest & Invited talk by Guest Speakers







Offering garland to statue of Late Dr. V. N. Bedekar & Evaluation of Research Papers









Invited talk by Guest Speakers, Winner of Logo Competition (Ms. Monal Chitnis) & Welcome address by Organizing Secretary

Glimpses of "Multidisciplinary International Conference on Green Earth: A Panoramic View" (2018)