## Report

Pillai College of Education and Research, New Panvel, organized an ICSSR sponsored two day National Level Seminar on 'Environmental Re-engineering Series 5: Family Farming" on 8<sup>th</sup> and 9<sup>th</sup> December, 2014.

The seminar started at 10.00 am. Dignitaries of various institutions of MES, academicians and intellectuals from different colleges had graced the inaugural session. Dr. Viswanath Narayan from Bangalore was a part of the session by being online. Mrs. Bindu Tambe welcomed the guests and the participants and took everyone on a wonderful journey of MES. It was followed by a prayer and lighting of the lamp to evoke the blessings of lord. Mrs. Bhavna Dave, the organizing secretary of the seminar, in her welcome address, elaborated the concept and rationale behind the topic of the seminar.

The chief guest for the seminar was Shri. A. L. Tripathi, Deputy CEO, MES- Khanda colony campus. In his inaugural address he brought forth to us that we exemplify Adam and Eve, just like they disobeyed God by eating the forbidden fruit even we are destroying the beautiful creation of God. We need to understand the importance of nature and go back to our roots. One needs to look deep into nature and then will understand its true value. He concluded with a quote by William Wordsworth- "Come forth into the light of things, let nature be your teacher".

Keeping with the trend of having Video conferencing session, the key note address was delivered through Skype by our esteemed guest, Dr. Viswanth Narayan, Consultant for Research and Developmental activities in the field of Agro-Based Machinery / Agri-Horti Projects/ Organic Farming. He enlightened us with the actual meaning of family farming and its significance for today's human. He expressed his concern over a number of issues related to our farm products and pollution. He stressed on rain water harvesting and organic waste composting to bring the naturally available recourses to good use. He emphasized on the vast agricultural knowledge we Indians have and the need to tap these resources. By sharing his expertise on all the aspects of Urban Farming, sir has shown us the path to become self reliant urban farmers.

The first session of the seminar was on the sub theme "Environmental Sustainability: Household farming". The session was divided in two halves with the first half taken over by Mr. Linesh Pillai, Urban Farmer, Terra Farms Mumbai. He introduced the participants to an upcoming concept 'Micro Greens'. The crux of his session was: 'Create nutrition for your own family'. He induced an urban style of thinking within the participants, growing and consuming baby legumes which are scientifically proven to be 4 to 40 times more nutritious than our leafy greens. The samples of micro greens which he displayed were made using a soil less media, recycled food grade plastic containers and the grains from the kitchen cabinet. He also showed us the trick to make our children love and eat micro greens.

The second half of the first session was continued by Mr. Shekhar Sawant, Consultant, Shrusti Landscape, Mumbai. He had a remarkable knowledge on plants and its protection. He shed light on the simple methods of taking care of indoor plants. He gave the names of the natural insecticides, chemical fungicides and the proportion they have to be used thus giving the participants a way to deal with insect and fungi menace. Vertical gardening can be done using a vertical arrangement of planters called bio-walls. Bio-wall is a fast catching concept among the green enthusiasts. They are economical and easy to maintain. He also gave

a list of beneficial plants to be used indoor and plants that cause harm, which have to be avoided.

This session was followed by a sumptuous meal and the seminar resumed again by 2.30 p.m. with a session on the second subtheme Social Sustainability. Awareness through Curriculum. The guest speaker Mr. Julius Rego, Founder, Green Souls Community, Navi Mumbai took a very interactive and lively session. He said, nature is very complex in itself, to understand it is like collecting honey using a butterfly net. Integrating the knowledge of environment with curriculum is the need of the hour. An entire living world was shown using Terraniums; a type of miniature ecosystem of plants. He said such ecosystems can be used to teach water cycle, expansion of air, atmospheric pressure etc. His presentation focused on school kitchen garden its need, planning, management and its integration to curriculum. He enthralled the participants with hands on trail at making a pot using compost manure and dry mulch showing us the technique to actively involve pupils. The activity done was in line with the quote by Masanubo Fukuoka "The ultimate goal of farming is not the growing of crops but the cultivation and perfection of human being".

The second session was followed by excellent paper presentations by 8 participants. Dr. Moses Kolet chaired the session and expressed his pleasure at the varied topics taken up by the paper presenters. The paper presentation ranged from making of vertical garden to bringing water hyacinth into good use. Illustrations to integrate curriculum with environmental activities, role of social media in inspiring kitchen gardens, a case study of school kitchen garden, composting temple waste, plants which are beneficial to grow indoors and which are harmful to be avoided.

The first day of the seminar got a little stretched and concluded with the national anthem by 6.00 pm.

## Day 2

The second day of the seminar started with some more presentations. The presentations were an array of varied topics viz. procedure to make compost manure, health benefits of growing plants like turmeric, ginger, tulsi, curry leaves and its useful components, micro agriculture and the role of woman in the farming community.

The third session of the seminar was on the sub theme Bio- Waste Management – an Educational Approach by Mr. Jayant Joshi, Microbiologist & Domestic Garbage Digester Developer. His session was very interesting and interactive. He very effectively sensitized the crowd on the issues related to dumping of solid waste in the city and exposed the pity condition of Mumbai with the help of images. He demonstrated a simple way of the composting organic waste from the kitchen thus reducing the actual total waste which needs to be disposed. The specially designed baskets will enable each household to create 3kg/month of compost manure from the wet waste produced every day. He quoted that "when the egg breaks by an external force, a life ends. When the egg breaks by an internal power, a life begins. Great changes always begin with internal power." He laid emphasis on educating people to bring about change within themselves first and then the society.

The last session of the seminar was on the sub-theme Ethics in Bonsai-A Debate. The session was interactively power packed with a flow of knowledge from Ms. Sneh Prasar, a Bonsai expert, Professional Landscape artist and a Trainer Navi Mumbai. The session focused on the concept of Bonsai, requirements to

make and maintain them too. Mr. Shrikrishna Gadgil, secretary, Indian Bonsai Society, oriented us on the procedure to plant bonsai, types of roots and bonsai. He acquainted us the technique of telling the age of bonsai just by observing its roots. She informed us about the two aspects of Bonsai: Horticulture and Art. The beginners can start with the basic training in horticulture while to design a bonsai, one needs to have the skill and will. It was through her we got to know that Bonsai has been a part of our culture from generations. The benefits of bonsai is that it provides us with more oxygen, makes one feel at home, keeps us away from depression and loneliness. The session was highly educative.

After a short lunch break paper presentations followed, the participants filled the environment with their views and ideas on various topics like knowledge of herbs, importance of money plant, bonsai and its uses, an argument against the use of bonsai, using constructivist based approach and integrated curriculum to nurture naturalistic intelligence of pupils, biowall and its effect on air quality.

We had received a total of 29 papers for presentation of which 18 papers were presented while the remaining paper presenters could not make it to the seminar due to certain unavoidable circumstances.

Overall the seminar provided an enormous amount of knowledge to all its participants. The sessions were overwhelming with a large flow of information and filled with enthusiasm, desire to go home and try out what we have learned.