

ICAR-NATIONAL BUREAU OF SOIL SURVEY AND LAND USE PLANNING

Celebration of “World Soil Day” at ICAR-NBSS&LUP, Nagpur and its Regional Centres

Headquarters, Nagpur

The World Soil Day 2020 with the theme “**Keep Soil Alive, Protect Soil Biodiversity**” was celebrated on 5th December, 2020 at Nagpur. A function was organized at the Institute to commemorate the annual International event. Principal Scientist and in-charge Director, Dr. M.S.S. Nagaraju welcomed the audience and briefed about the need to celebrate “World Soil Day” and spread awareness on improving soil health through biodiversity protection. An invited talk was delivered by Dr. Jagdish Prasad, formerly Principal Scientist and Head, Division of Soil Resource Studies, Nagpur to commemorate the occasion. Dr. Prasad spoke at length on facts, status and ways to conserve soil biodiversity for posterity. He emphasized the historical role played by the Bureau in appraising the academicians, researchers and policy makers about the status of Indian soils, and cautioned that we need to be geared up to provide even faster and accurate information on spatio-temporal changes in soil conditions at large scales. He also suggested a road map for the Bureau scientists for aiding in achieving the targets of Land degradation neutrality.

Later in the day, *Krishi Samruddhi*, a local television channel interviewed the scientists. Dr. Jagdish Prasad and Dr. R.K. Naitam briefed the media in Hindi and Marathi on the importance of World Soil Day, role and frequency of soil testing in improving soil health and achieving higher crop yield.

A Drawing Completion on the theme “Soil is life”, and Essay Writing Competition on the topic “Healthy soil for healthy society” were organized for school children in order to spread awareness on the impact of soil health on human wellbeing. The competitions were facilitated in online mode as a precautionary measure for COVID-19. A positive response was received from school children and prizes were distributed to the winners.



Photos (clockwise from top left): (a) Different speakers highlighting the importance of World Soil Day theme, (b) a school student (Class-IV) delivering a speech on “Soil”, (c) Dr. R.K. Naitam interacting with media, and (d) collage of drawing submitted by school children on the occasion of World Soil Day

Regional Centre, Bengaluru

On the occasion of the World Soil Day 2020, all staff including scientists, technical and administrative staff of the Bengaluru Centre attended a meeting consisting of lectures by scientists and discussion among the staff on the theme of soil day, a virtual (Zoom) meeting with farmers of adapted Tribal Sub Plan (TSP) village, and sending messages (World Soil Day slogans) related to the event to different stakeholders (including 25 farmers) through whatsapp/SMS.

Dr. Rajendra Hegde, Principal Scientist & Head (I/c) participated in the Technical session of Karnataka Science & Technology Academy (KSTA), Bengaluru, chaired by Dr. S Ayyappan, Former DG-ICAR and present Chairman of KSTA and delivered a talk on “Land Resources Inventory for protecting soil health”. About 110 students, teachers and academicians participated in the event. Dr V Ramamurthy delivered an awareness talk on “Soil and soil biodiversity”

through Google meet. Field level workers and community organizers of Swami Vivekananda Youth Movement (SVYM) and around 60 farmers of H.D.Kote and Sargur taluk of Mysore participated in the virtual meeting. Dr. K.S. Anil Kumar, Principal scientist was invited as guest speaker on the occasion of world soil day celebrations of the Kerala Agricultural University. He delivered a virtual talk on topic “Natural resource management – Keep soil alive, protect soil biodiversity”.



Virtual celebration of World Soil Day 2020 at Regional Centre, Bengaluru

Regional Centre, Delhi

The Centre observed World Soil Day on 05th December, 2020 by creating awareness among the staff, and through them amongst the farmers and other stakeholders. On this occasion talks were organized on various topical issues relevant to this year World Soil Day Theme. Dr. Dharam Singh, Sr. Scientist delivered a talk on “Soils for food security” in which he emphasized on the adoption of Integrated Nutrient Management and best agricultural practices to enhance soil health and increase food production. Dr. R. K. Meena, Scientist delivered a talk on “Soils for sustainable development” in which he narrated the chronological events leading to the establishment of world soil day. He stressed on nutrient management for soil biodiversity conservation and other related aspects for sustaining soil health. Mrs. Prabha Susan Phillip, Scientist deliberated on “Soil biodiversity for environmental sustainability” by highlighting the importance of soil biota, and their role in biological nitrogen fixation for mitigating the climate related adverse effects on soil environment.

Mr. Ashok Kumar, spoke on “Soil sustainability-way forward to nation’s prosperity”. He emphasized upon integrative approaches of soil nutrient, soil and water conservation, ecological restoration and conservation as means to protect the biodiversity at all scales. Dr. Jaya N Surya, Pr. Scientist delivered a talk on “Keep soil alive through organic farming and protect soil biodiversity” in which she explained how bio-fertilizers and organic sources of nutrients are

important to enrich soil fertility and maintain soil health as well as soil biodiversity. Besides, she also advocated the use of *Jeevamrit*- an organic product for soil health improvement. She delivered a radio talk on “Importance of World Soil day for soil health management”, and an invited lecture in the webinar “Need of the nation: Systematic soil resource mapping for scientific land use planning” organized by College of Agriculture, Bhatinda, Punjab.



Celebration of World Soil Day 2020 at Regional Centre, Delhi

Regional Centre, Jorhat

The Centre celebrated the World Soil Day with full fervor and enthusiasm. The event was carried out in three different phases. In the first phase, Dr. S.K. Ray, Principal scientist & Head of the Centre, was invited to inaugurate and give a virtual talk on the occasion organized by ICAR-Central Plantation Crops Research Institute, Regional Station, Kayamkulam, Kerala. Dr Ray in his speech emphasized the tagline of this year's theme, “Keep **Soil** Alive, Protect **Soil** Biodiversity” by drawing analogy between inorganic component of soil and soil body, while referring to the organic component as the soul of the soil. Without the soul the soil would be without life and would cease to remain a soil. Nevertheless, a robust inorganic component would provide a healthy live soil. He also stressed to maintain ethnicity of soil ecosystem which would indicate the geographical indicator and benchmarking of soils along with their associated land use.

The second phase involved a webinar organized by Regional Centre, Jorhat to educate students, teachers and other staff on methods of soil sampling and soil analysis techniques. Students and teachers from various schools were invited to join the scheduled webinar. The event started with the ICAR song followed by the introductory presentation on the topic “World Soil Day”. A brief

online demonstration by Mr. Pradip Kotoky on soil profile digging, soil sample collection, sample preparation, processing and storage was provided. Different staff members, viz. Ms. Nayanika Borah, Mr. Nayan Jyoti Das, Mr. Amitabh Baruah, Mr. Pradyut Sarmah, Mrs. Kaberi Dutta and Mr. Uttam Kumar Neog explained the working of different scientific instruments required for soil sample analysis, principles and analysis of soil physico-chemical properties.



Explanation of soil profile and online demonstration of analytical methods by staff of Jorhat Centre



Staff of Regional Centre Jorhat interacting with farmers on World Soil Day programme.

The third phase consisted of introducing the importance of soil to farmers in one of the *Mera Gaon Mera Gaurav* villages. For this, a team visited the Owna Bar-ali village in Jorhat district for an awareness programme and explained about the soil conservation techniques, understanding the soil health card, importance of residue management in improving the quality and quantity of soil organic matter, soil sampling methodology, fertilizer application methods and time of application.

Regional Centre, Kolkata

The Centre organized Soil Health Card Distribution and Farmers' Awareness Programme on the occasion of World Soil Day on 5th December, 2020 in collaboration with Sasya Shyamala Krishi Vigyan Kendra (RKMVERI), Arapanch, South 24 Parganas, West Bengal, venued at Majherpara village, Canning II block, South 24 Parganas (WB) under SCSP programme. The programme was graced by Dr. A.K. Sahoo, Principal Scientist and Head, and other staff of the Centre, officials of Sasya Shyamala KrishiVigyan Kendra, and Sh. Paresh Pradhan, Social Worker and Founder Member, Amar Sangha, Majherpara village. Sh. Pintu Jana, Assistant Director of Agriculture, Canning II block, 24 Parganas district (S) was the Guest of Honour. A total of 63 farmers of participated in the programme conducted with the agenda of soil health card distribution and hands-on demonstration on vermi-composting.

At the outset, Dr. A.K. Sahoo briefly highlighted the aims and objectives of World Soil Day and also the importance of Soil Health Card Programme in the context of World Soil Day. He mentioned in brief the activities undertaken by the Centre in this regard. Dr. K. Das briefly mentioned the importance of soil health for future land use planning and also illustrated the importance of soil resilience and restoration. Sh. Pintu Jana highlighted various state level programmes in relation to soil health programme activities as well as different state sponsored schemes in this regard. Dr. N.C. Sahu illustrated the various activities to be taken up as joint ventures by NBSS&LUP and Sasya Shyamala KrishiVigyan Kendra in the near future under SCSP programme to maintain soil health for sustainable agricultural development. Dr. S. Bandyopadhyay delivered a brief demonstration on technical know-how on soil health card. Thirty eight soil health cards were distributed to the farmers. Dr. Swagat Ghosh briefly mentioned the importance of soil parameters in aquaculture. Dr. Monidipta Saha provided a hands-on demonstration on vermi-composting in the village.



Celebration of World Soil Day 2020 at Regional Centre, Kolkata

Regional Centre, Udaipur

The Centre organized a field day in Changededi village, Fatehnagear, Mawli *tehsil*, Udaipur district on 5th December, 2020 to celebrate the World Soil Day. The programme was chaired by Dr. S.S. Rao, Principal Scientist and Head of the Centre. While emphasizing the importance of the World Soil Day, he stressed on various soil conservation and management practices to improve soil health. He said that the cultivable land area is shrinking day by day, and any increase in crop yields would be possible only through effective soil health management. He sensitized the farmers on the recent advances in soil survey and mapping by using the tools of remote sensing, GIS and GPS. Dr. Mahavir Nogia, Scientist briefed the farmers on soil health improvement through application of organics. Sh. Roshan Lal Meena addressed the farmers by focusing on the various measures for soil health management latest machinery for agricultural land management. The district agricultural officers sensitized the farmers on the soil health Card programme and other such schemes in vogue by the State Government for the benefit of the farmers. There was a question-answer session where the farmers got their doubts cleared through the Dr. R.S. Meena, Nodal Officer of the programme informed the gathering about the SCSP. He advised the farmers on improving wheat yields through proper soil management.



Celebration of World Soil Day 2020 at Regional Centre, Udaipur