

INDIAN SOCIETY OF SOIL SURVEY AND LAND USE PLANNING (ISSLUP)

NEWS LETTER

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Glimpses of ISSLUP National Seminar held on January 28-30, 2015



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2015, The International Year of Soils - A Wake up call

Soil is the Nature's gift to mankind and forms the basic medium for the sustenance of plants, animals and people. The journal entitled, "Plant and Soil" symbolizes the linkage between them and life on the Earth. Photosynthetic reaction in green plants and ion-exchange reaction in the soil solution are the nature's two fundamental reactions that keep life going on and on the Earth.



As soil is universally distributed it is taken for granted! That soil is the soul of infinite life must be inculcated in the minds of children and students at home and schools and must be inculcated by every citizen. Since soil science is the Mother of all Natural Sciences, "Know your region's soils Strength, Weakness, Opportunities and Threat," (SWOT) must form part of the school curriculum in Geography, Natural Science and Earth Science.

Farmers' knowledge on the nature and behavior of the local soils is a treasure, handed over from generation to generation. However, "Extension Soil Science" has to play a great role to transmit to the farming community (farmer's associations and tonnage clubs) until the last mile. The modern methods of protection of the precious and fertile top soil against erosion by water and wind; building up the physical, chemical and biological 'Quality' of the soil and show-casing them through TV and Information and Communication Technologies for adopting the best management practices suited to the local context and conditions arising out of soil and land use survey and translatory research-led scientific investigations need to be transmitted.

Our soils and Land have been misused and abused, both wittingly and unwittingly-as if it is an all absorbing sink. The publication from NAAS&ICAR (2010) indicates that 120.72 mha, out of 329 mha of geographical area of India, is afflicted to different degrees and kinds of land degradation. The initiative "Clean Bharat" of the present Govt. is a timely wake-up call to keep our land and soils unpolluted and un contaminated. The United Nations have designated 2015 as the 'International year of Soils'. I hope this will trigger unleashing of a "Soil Health Revolution" in the country by all stakeholders (farmers, scientists, teachers, students and the society at large), for whom without exception, Soil is the bottom-line, that needs handling with care and reverence, for Mother Earth never betrays.

As Franklin D. Roosevelt said: "The Nation that destroys its soils destroys itself", is a reminder for ever.

Dr. M.Velayutham

Ex- Director, ICAR-National Bureau of Soil Survey & Land Use Planning, Nagpur
Ex-President, Indian Society of Soil Survey & Land Use Planning (ISSLUP), Nagpur
Ex- President, Indian Society of Soil Science (ISSS), New Delhi
Ex-Executive Director, MS Swaminathan Research Foundation, Chennai

ISSLUP organized National Seminar

A three day National Seminar on "Sustainable Management of Land Resources for Livelihood Security" was organized by Indian Society of Soil Survey and Land Use Planning (ISSLUP) at NBSS&LUP Campus, Nagpur during January 28-30, 2015. The seminar was co-sponsored by ICAR and NABARD. Dr. S.K. Singh, Chairman Organizing Committee welcomed the dignitaries and the delegates. Dr. Arun Chaturvedi, President, ISSLUP and the Co-Chairman, Organizing Committee gave the background of the national seminar. The Chief Guest Dr. J.C. Katyal, Former Hon'ble Vice Chancellor, CCSHAU, Hisar, Guest of Honours Dr. A.K. Sikka, Hon'ble DDG (NRM), ICAR and Dr. R.G. Dani, Hon'ble Vice Chancellor, Dr. PDKV, Akola gave their remarks and set the tone for National Seminar. Dr. J.C. Katyal, in his lecture urged the scientists to work on the sustainability aspects like potentials and constraints of land distributed within a rainfall zone, what uses can be recommended on different types of land within a rainfall zone, what are the actual productivity levels, how far are these from best yields and how will the existing yield be boosted to fill the yield gaps.



Dr. S. V. Govindrajan Memorial Lecture was delivered by Dr. A.K. Sikka, DDG (NRM), ICAR and Dr. B.B. Roy memorial lecture was delivered by Dr. Amal Kar, former Head, Division of Natural Resource Management, CAZRI, Jodhpur. Dr. K.P.R. Vittal, former Director, NIASM, Baramati delivered Dr. J.L. Sehgal Memorial Lecture. Dr. A.K. Sikka highlighted various issues in natural resource management, which includes climate variability and climate change, declining land-base for agriculture, severe land degradation, declining per capita water availability, falling groundwater table and water quality, deteriorating soil health and low factor productivity, low input resource use efficiencies, resource poor small farmers, shortage of farm labor, increasing cost of inputs and declining profitability in agriculture. About 190 delegates participated in the National Seminar. Dr. G.P. Obi Reddy, Hony. Secretary,

ISSLUP conducted the proceedings and proposed formal vote of thanks in the inaugural session. The General Body (GB) Meeting of ISSLUP was held on 29th January, 2015 at NBSS&LUP Campus, Nagpur.

ISSLUP Chapter Activities

Jorhat Chapter Observed International Year of Soils-2015

Jorhat Chapter of ISSLUP observed International Year of Soils and organized a lecture on "Land Resource Inventory on 1:10K for Micro Level Land Use Planning and Geo database" delivered by Dr. S. K. Singh, Director of NBSS & LUP, Nagpur at AAU, Jorhat Campus on 28.02.2015. Majority of the Head of various departments from Assam Agriculture University, all the scientists from NBSS & LUP, Jorhat centre, faculty of the Soil Science Department, scientists from the other institutes like Tea Research Station, Toklai, Central Silk Research Board, Rain Forest Research Institute, and post graduate students of the department of Soil Science and Agronomy attended the programme.



The programme was presided by the President of Jorhat Chapter the Society, Dr. Utpal Baruah, former Head of the NBSS & LUP, Regional Center, Jorhat. The Director of Research (Agri), AAU, Jorhat Dr. G. N. Hazarika, Dean, Faculty of Agriculture and the Vice President of the Society Dr. D. K. Borah were also present as chief guest and guest of honor respectively. Dr S. K. Singh showed the present scenario of the land use situation in India and the latest technology to be adopted for geo-referencing, for optimal utilization of soil resource inventory in a detailed manner for precise land use planning. After the lecture, Dr. Singh was presented with a memento by the Jorhat Chapter as an expression of gratitude. The programme ended with the concluding remarks from the chair and vote of thanks from Dr. R. M. Karmakar, Professor and Head, Department of Soil Science, AAU, Jorhat.

Tirupati Chapter Observed International Year of Soils-2015 and organized Farmers Training programme

Tirupati Chapter of ISSLUP observed International Year of Soils-2015 and organized a training programme entitled "Soil Test Based Fertilizer Recommendation" for the farmers of Chittoor district at S. V. Agricultural College, Tirupati, Andhra



Pradesh. The training programme was conducted under the supervision of AELP Director Dr. Keerthi Venkaiah, Professor, Dept. of Soil Science and Agricultural Chemistry and Dr. M. V. S. Naidu, Associate Professor, Dept. of Soil Science and Agricultural Chemistry, S.V. Agricultural College, Tirupati. The programme was inaugurated by chief guest Dr. N. P. Eswara Reddy, Associate Dean, S.V. Agricultural College Tirupati. Speaking on the occasion, he narrated that the expenditure on the fertilizers could be reduced through effective soil testing. Addressing the farmers and students of AELP, he stressed that the fertilizers could be applied based on the soil testing report thereby the expenditure on fertilizers could be reduced and health of the soil would be protected and maximum yields could be obtained by adopting the effective management practices.

The training programme was attended by 26 farmers from Chittoor district, 17 students belonging to the Module of Soil Testing and Cluster bean production and 10 students from other modules. Addressing the gathering, Dr A. Ramakrishna Rao, Senior Scientist, RARS, Tirupati urged the farmers not to apply fertilizers indiscriminately without knowing the Soil test values and environment of the Soils. Dr. M. V. S. Naidu, Associate Professor, Dept. of Soil Science and Agricultural Chemistry stressed the need for application of the fertilizers based on the soil test values. Valedictory function was conducted in the evening and vote of thanks was proposed by Dr. M. V. S. Naidu.

PERSONALIA

Dr. Jagdish Prasad attended Asian Soil Partnership Consultation Workshop at Bangkok



On an invitation from FAO Regional Representative for Asia and the Pacific, Bangkok, Thailand, Dr. Jagdish Prasad, Principal Scientist and Head (acting), Division of Soil Resource Studies, ICAR-NBSS&LUP, Nagpur attended the "Asian Soil Partnership Consultation Workshop on Sustainable Management and Protection of Soil Resources" from 13-15 May 2015 at

Bangkok, Thailand. Dr. Prasad presented "An overview on soil resources of India and their management" and interacted with officials of FAO and representatives of different countries for better co-operation and coordination in soil resource studies.

Dr. Naidu honored with Meritorious Teacher Award-2011

Dr. M. V. S. Naidu, Associate Professor was honored with Meritorious Teacher Award-2011 by the Dr. A. Padama Raju, Hon'ble Vice-Chancellor, ANGRAU, Hyderabad during the 45th Annul Convocation held on 4th



April, 2015 in the august presence of Dr. Daniel Gustafson, Deputy Director General, FAO, Rome, Italy.

New Regional Heads of ICAR-NBSS & LUP



Dr Rajendra Hegde, member of ISSLUP and Principal Scientist at Regional Centre NBSS & LUP, Bengaluru was selected as Head of the Regional Centre (NBSS & LUP), Bengaluru. He joined as Head in June 2015. Dr Hegde has had distinguished career as a scientist with awards like ICAR Young Scientist Award, ICAR Hari Om Ashram Trust award for his works in spice crops. He has also headed pioneering

World Bank projects like "SUJALA" in collaboration with Karnataka Government. The society wishes him a fulfilling tenure at Bengaluru.

Another distinguished scientist and member of ISSS & LUP, Dr. D. C. Nayak was selected by ASRB to serve as Head, Regional Centre, Kolkata of NBSS & LUP. He joined as Head on 07th May, 2015. Dr Nayak has been an active soil surveyor throughout his professional career. He was actively involved in various Institute projects, collaborative and consultancy projects. He is also the recipient of the awards like "Fellow of West Bengal Academy of Science and Technology" (FAScT) in 2004, "Fellow of the Institution of Chemists (India)" (FIC) in 2006 and Fellow of the Clay Minerals Society of India (FCMSI) in 2015.



Dr. R.P. Yadav working as Principal Scientist at Chandigarh centre of IISWCR, Dehradun was selected by ASRB to serve as Head, Regional Centre of NBSS & LUP at New Delhi. He has been involved in formulation, implementation and evaluation of many watershed development projects in research, consultancy and contact research mode through external funding. His major technological outputs include soil erosion maps of Haryana, Himachal Pradesh and Delhi states, participatory watershed models for small agricultural and degraded watersheds, agroforestry systems for degraded lands, conservation agriculture, partial



polythene lining, etc.

An active member of ISSS & LUP and Principal Scientist, Division of Soil Resource Studies at NBSS & LUP, Nagpur, Dr. Sanjay Kumar Ray had a distinction of selection by ASRB to serve as Regional Head of Jorhat centre of NBSS & LUP. He has 3 patents to his credit besides his research contributions as pedologist. His research interests include soil survey, mapping, genesis and classification, soil mineralogy, soil chemistry, land evaluation and land use planning. His contributions have been recognised by bestowing ICAR Team Award for Interdisciplinary Research. The society wishes him a bright tenure.



President's Message



Dr. Arun Chaturvedi

that take away good agriculture lands for urban and other irrevocable land uses.

The Maharashtra government has amended land laws to unlock agricultural land for industry as well as public educational and medical institutes, to promote the ease of business under its Make in Maharashtra policy. Under the changed rules, industrial units will be allowed to exploit up to nine times the existing building rights on agricultural land. Medical and educational institutes run by the state or public charitable trusts will be able to build up to four times the existing building rights on these lands. There is no mention or concern for the quality or productivity of lands under any of these provisions.

The issue of conversion of good agriculture land and its ramifications for Indian agriculture has been discussed and debated for a long time now. According to Dr. M.S. Swaminathan, eminent agriculture scientist, conservation of prime farm land for agriculture, soil healthcare and enhancement and rain water harvesting are some of the key areas needing attention for Achieving Food Security in Times of Crisis. The need for conserving our fertile and finite soil resources became a major issue in the political war over the Special Economic Zone in the last 2-3 years.

The DRAFT NATIONAL LAND ACQUISITION AND REHABILITATION & RESETTLEMENT BILL, 2011, available at the website of Ministry of Rural Development is the first document which has mentioned that **"no irrigated multi-crop land will be proposed for acquisition under any circumstances"**. While it necessary to applaud this caveat as an attempt to protect our

precious prime agriculture land, there is a need to further strengthen this clause.

The problem is that the definition of land as given in the document perceives the land only as an anchorage space. According to the draft bill, "Land" includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth". Then again the protection for this land is being provided through a "land use type", the "irrigated multi crop land" (which can be easily manipulated) and not from the perspective of land quality for agriculture.

Our concern is that this will further take away some of the good agriculture production in the vicinity of urban areas and/or wherever large projects where land acquisition is required. Urban encroachment on agriculture land is a natural phenomenon as our population increases. It has been studied that as the city boundary expands, the ownership of the land changes. It has been observed that even when ownership does not change, the farming gets intensified, specially for vegetables and other cash crops.

In the light of the proposed Land Acquisition Act, these lands will not be cultivated to ensure their safe acquisition or conversion of land use. Whatever the farmers may say, they are always ready to sell their land because of economic reasons. In such a scenario, this clause will be manipulated through non-cultivation and leaving it barren. Perhaps "very good quality soil" could have been a better term as even if such soils are not irrigated at present, introduction of irrigation can make it grow triple crops. Alternatively, a time limit, say 5 years in retrospect, could be added as a rider to save these lands.

Another approach to this issue could be that instead of saying irrigated land, land in canal commands, tank commands and tubewell commands could be excluded, otherwise there is a possibility that the farmers will stop irrigating their lands to facilitate sale/acquisition. The most important attribute deciding the use of the land is its location.

(Dr. Arun Chaturvedi)
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