

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

### **NEWS LETTER**

December, 2014

Vol. 3 No. 2

Indian Society of Soil Survey and Land Use Planning (ISSLUP) will hold

**NATIONAL SEMINAR** 

ON

SUSTAINABLE
MANAGEMENT OF LAND
RESOURCES FOR
LIVELIHOOD SECURITY

With Special Session on Land Use Policy

January 28-30, 2015

at



ICAR-National Bureau of Soil Survey and Land Use Planning (ICAR), Campus, Amravati Road, Nagpur-440 033

#### *In this issue*

- World Soil Day
- ISSLUP Celebrates World Population Day
- ISSLUP Celebrates World Soil Day
- ISSLUP Kolkata Chapter Organizes a public Lecture
- ISSLUP Opens New Local Chapters
- Personalia
- President's Message

#### **World Soil Day**

World Soil Day (WSD) celebrates the importance of soil as a critical component of the natural system and as a vital contributor to the human commonwealth through its



contribution to food, water and energy security and as a mitigator of biodiversity loss and climate change. It is celebrated particularly by the global community of 60,000 soil scientists charged with responsibility of generating and communicating soil knowledge for the common good. Many events focus on increasing the public awareness of soil and its contribution to humanity and the environment. It is held on December

5<sup>th</sup> because it corresponds with the official birthday of H.M. King Bhumibol Adulyadej, The King of Thailand, who has officially sanctioned the event.

More than 500 years ago the famous artist and scientist Leonardo Da Vinci pointed out that "we know more about celestial bodies than about soils underfoot". As is indicated by the celebrations of the WSD today soils should receive the importance which they rightfully deserve. They should be placed at the forefront of the scientific agenda, on the roster of policy makers, and in the awareness of the general public. Soils, as we know, are the most complex biomaterials on the planet and are a self - regulating biological factory. Thus, it is absolutely essential that soil degradation, as the most insidious and under estimated challenge of the 21st century, must be defeated. At present, the vulnerability of soils because of global change and under anthropogenic impacts is unprecedented. Severe degradation, including widespread contamination, accelerated erosion, severe depletion of carbon and nutrients, rapid urbanization, and frequent hazards are threatening sustainable food production, adequate water supply, global ecosystem services, and the quality of human life. Soil carbon sequestration, soil restoration, the conservation of bio-diversity and other important soil functions are important for the sustainable land and soil use.

Dr. S. K. Singh Director NBSS & LUP

## ISSLUP



## ISSLUP Celebrates World Population Day on July 11, 2014



ISSLUP Celebrated World Population Day on July 11, 2014 and organized a public lecture delivered by Dr. K.R. Kranthi, Director, Central Institute of Cotton Research (CICR), Nagpur on "Feeding the billion with the declining land resources" at S.P. Roychaudhury Auditorium, NBSS&LUP, Nagpur. In his lecture he mentioned that the agricultural Scientists should think seriously about the declining land for agricultural use in the country. Elaborating on the issues with statistical figures, Dr. Kranthi said the country's ranking in productivity of different agricultural products is declining. In Maize production India is on 8th position, in wheat its rank is 27th, in rice its place at 29th position, in cotton production it is 33<sup>rd</sup> and in Sorghum production it is placed 31<sup>st</sup> as compared to the other countries. He mentioned that the fertile land is very less and land is losing its fertility due to climate change, indiscriminate use of chemicals, pesticides, insecticides and chemical fertilizers. Dr. Arun Chaturvedi, President, ISSLUP in his remarks mentioned about various conflicting land uses liker food, clothing and industry, housing and commercial benefits overriding the need for food security. Dr. G.P. Obi Reddy, Hony. Secretary, ISSLUP conducted the proceedings and Dr. K. Karthikeyan, Joint Secretary, ISSLUP proposed formal vote of thanks.

## ISSLUP Celebrates World Soil Day on December 5, 2014

ISSLUP Celebrated World Soils Day on December 5, 2014 and organized a public lecture by Dr. S.K. Singh Director, NBSS&LUP, Nagpur on "Land Resource Inventory on 1:10K for Micro Level Agricultural Land Use Planning" at S.P. Roychaudhury Auditorium, NBSS&LUP, Nagpur. The Nagpur Chapter of Indian Society of Soil Science, co-hosted the event. Dr. M.S. Ladaniya, Director, National Research Centre for Citrus (NRCC), Nagpur was the Guest of Honour and Dr. Arun Chaturvedi, President ISSLUP presided over the function.

Dr. Shnigh highlighted the importance of soil information to enhance the crop productivity, meeting the demand of foodgrains and ensure food security in the country. He also highlighted the importance of application of remote sensing and GIS technologies in land resource management particularly in land resource inventory at

1:10K for generation of reliable database on soil resources.

In his remarks, Dr. Ladaniya emphasized the importance of large scale soil information to enhance the crop productivity as well as to maintain ecological balance of a region to avoid the natural disasters. Dr. Chaturvedi in his remarks highlighted the importance of the World Soil Day and also mentioned that in the International Year of Soil to be observed in the year 2015, ISSLUP will organize soil awareness programmes among the farmers and students. Dr. G.P. Obi Reddy, Pr. Scientist & Hony. Secretary, ISSLUP conducted the proceedings. Dr. M.S.S. Nagaraju, Pr. Scientist proposed formal vote of thanks.

## ISSLUP Kolkata Chapter Organized a public Lecture on 12<sup>th</sup> September, 2014

The Indian Society of Soil Survey and Land Use Planning (ISSLUP), Kolkata Chapter in collaboration with the Indian Society of Soil Science, Kolkata Chapter jointly organized a public lecture on the topic "New Technologies in Field Soil Survey" by Dr. David C. Weindorf, Associate Professor and B.L. Allen Endowed, Chair of Pedology, Department of Plant and Soil Science, Texas Tech. University on 12th September, 2014 at NBSS&LUP, Regional Centre, Kolkata.



Dr. Weindorf has focused his research efforts on the development of applications for new technologies in the field soil survey, land use management/ planning, remote sensing, environmental quality assessment, compost science, and international translational soil taxonomy. In his lecture Dr Weindorf observed that for years, Pedology has been constrained by qualitative methods such as hand texturing, structural assessment, and color analysis. Contemporarily, quantitative Pedology has utilized new methods for discrete data generation in support of pedological parameters. Applied to soils, two new proximal sensing systems (portable x-ray fluorescence [PXRF] and visible near infrared diffuse reflectance spectroscopy [VisNIR DRS]) offer many benefits over traditional methods.

The lecture was applauded by about 75 members who attended it. Dr. A. K. Sahoo, Secretary, ISSLUP, Kolkata Chapter presented the vote of thanks.

## I S S L U P



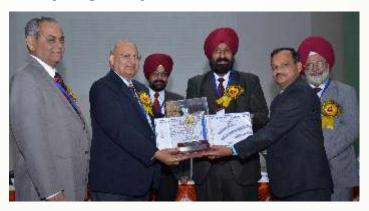
#### **PERSONALIA**

#### Dr. Jagdish Prasad elected as President of Indian Society of Soil Science, New Delhi



The society is pleased to inform that its life member Dr. Jagdish Prasad, Principal Scientist working at National Bureau of Soil Survey and Land Use Planning, Nagpur got elected as President (2015-16) of Indian Society of Soil Science, New Delhi.

Dr. G. Ravindra Chary is elected 'Fellow of Indian Society of Agronomy'



The society congratulates its life member Dr. G. Ravindra Chary, Principal Scientist (Agronomy), PC Unit, AICRPDA, CRIDA, who was recently elected as 'Fellow of Indian Society of Agronomy' for outstanding contributions in the field of agronomy presented on 18th November 2014 during National Symposium on Agricultural Diversification for Sustainable Livelihood and Environmental Security organized by Indian Society of Agronomy at PAU Ludhina. He is currently the Vice-President of ISSLUP.

### Dr V Ramamurthy is elected 'Fellow of Indian Society of Agronomy'



The society congratulates its life member Dr V Ramamurthy, Principal Scientist at Regional Centre of NBSS and LUP who was recently elected as 'Fellow of Indian Society of Agronomy'. He served in different capacities at CRIDA, Hyderabad and IGFRI, Jhansi before joining NBSS&LUP at Nagpur in 2000.

Dr. M.V. Venugopalan is elected 'Fellow of Indian Society of Agronomy - 2014'



Dr. M.V. Venugopalan, Principal Scientist (Agronomy) was elected as the Fellow of the Indian Society of Agronomy (ISA), New Delhi for the year 2012. The award was conferred in recognition of his pioneering research in the kinetics of polypho sphate fertilizers in Indian soils, carbon sequestration in rainfed land use systems, InfoCrop - cotton simulation modelling and its application in forecasting regional cotton production, and the development of High Density Cotton Production Systems for enhancing productivity on marginal soils under rainfed conditions.

Dr. G. P. Obi Reddy receives the 'National Geospatial Award for Excellence - 2013'



The society congratulates its life member Dr. G. P. Obi Reddy, Principal Scientist at Division of Remote Sensing Applications, NBSS&LUP, Nagpur and Hony. Secretary, ISSLUP who was conferred the National Geospatial Award for Excellence for the year-2013 by the Indian Society of Remote Sensing, Dehradun.

Dr. M. V. S. Naidu receives RYTHUBANDHU Award - 2014



SSLUP





The society congratulates its life member Dr. M. V. S. Naidu Councilor of ISSLUP (Southern Zone), who received 'RYTHUBANDHU-2014' award in teaching and research (Agriculture) section on 27-11-2014, which is given by Rythu Bandhu monthly and NEST Foundation at Hyderabad.

#### **ISSLUP Opens New Local Chapters**

The society is pleased to welcome new local chapters in its fold namely Bangalore, Srinagar, Tirupati and Udaipur. This is an addition to the existing local chapters at Delhi, Kolkata and Jorhat.

#### **President's Message**

In a bid to boost development in Maharashtra, the State Government has simplified the process to convert agricultural land in cities and towns into nonagricultural land". Government in Maharashtra has



decided to unlock more agricultural land for industrial use as the state government pulls all stops to attract more investment and maintain the status of a preferred business destination. Besides this, the government has launched the process of doing away with the provisions of the Bombay Tenancy and Agriculture Lands Act, 1948, which impose restrictions on the

use of agricultural land for industrial use.

Such news has started disturbing the Scientific Community which always thought that land uses which are irrevocable in nature should be converted after due process of deliberations. More unfortunate is the conceptual framework which advocates development as a prerogative as well as a result of urban development. Agriculture, development and urban bias have been a matter of academic deliberations at various platforms for long and there is a consensus that over the last three decades, the domestic and international policy environments have continued to discriminate against agricultural development in the poorest countries, a trend which is now increasingly being seen in developing countries.

Stuart Corbridge and Gareth A. Jones of London School of Economics and Political Science. London have analysed this debate and while agreeing with the World Bank (1991), that levels of urbanisation and GDP per capita are closely associated, have warned that this development has been at the expense of the countryside. Ironically the developed nations have initiated measures to prevent this irrevocable change of land use by integrating agriculture in the urban development syndrome.

India is perhaps one of the few developing countries in the world, where urban Agriculture is not documented. The FAO's Final Report on Urban and Peri-urban Agriculture on the Policy Agenda as a part of FAO/ETC joint Electronic Conference (August 21 -September 30, 2000), does not have even a single mention of India as a country where Urban Agriculture is practised. Perhaps it is the large size of the country where there seems to be enough land to produce or the urban planning has been so indifferent to this important aspect that urban planners tend to exclude agriculture from their sights. The fact is that in many cities of the world, agricultural use of land has been accepted and formalized, more so in the Asian and Latin American countries, even though agriculture is 'by definition' not practiced in cities, it is often seen as 'economically unimportant' or a temporary phenomenon.

There is an urgent need to save our precious productive agriculture land especially in the light of our desire to be one of the super powers in the geo-politics of the world. Self sufficiency in agriculture cannot be compromised. The country is destined to combat with increasing agricultural productivity without any addition to its land resources. Net area sown per person has decreased from 0.329 ha in 1950-51 to 0.12 ha in 2007-08 showing a decline of 62 per cent during the span of 57 years. Similarly, gross cropped area per person also declined from 0.365 ha in 1950-51 to 0.17 ha in 2007-08 indicating a decrease of 52 per cent. The problem is compounded by the fact that sizeable land is not in a healthy state. Land degradation is a cause of concern because despite differences about aerial extent, different reports are unanimous that large chunk of the land is being lost due to degradation.

The steady growth of human as well as livestock population; the widespread incidence of poverty; and the current phase of economic and trade liberalisation, are exerting heavy pressures on India's limited land resources for competing uses in forestry, agriculture, pastures, human settlements and industries. These multifunctional uses of land demands a more focused attention to develop agricultural/ non agricultural uses for sustaining the increasing population

Dr. Arun Chaturvedi,

President, ISSLUP

Published by:

Dr. Arun Chaturvedi

President, Indian Society of Soil Survey & Land Use Planning, NBSS & LUP Compus, Amravati Road, Nagpur - 440 033 Compiled and Edited by : Dr. N. G. Patil, Chief Editor, ISS & LUP.

Printed at: Beecon enterprises, Sitabuldi, Nagpur -440 012, PH.: 9822736808