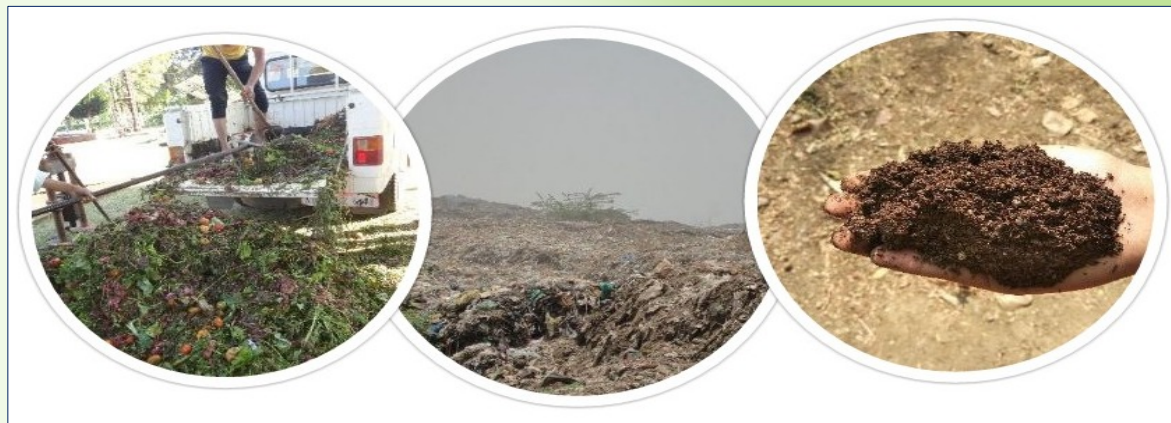


NATIONAL CONFERENCE

Organic Waste Management for Food and Environmental Security

08-10 February, 2018



Organized By



ICAR- Indian Institute of Soil Science

&

Indian Society of Soil Science (Bhopal Chapter)

Nabibagh, Berasia Road, Bhopal, 462038, MP

BACKGROUND

The world's population is expected to reach 9.7 billion by 2050, about 34 percent higher than today (7.5 billion). Most of this population increase will occur in developing countries. China and India are the two largest countries in the world with more than 1 billion populations, representing 19 and 18% of the world's population, respectively. By 2022, the population of India is expected to surpass that of China (Fig.1). Urbanization will continue at an accelerated pace, and about 70% of the world's population will be concentrated in urban region (compared to 49% today) by 2050. In order to feed

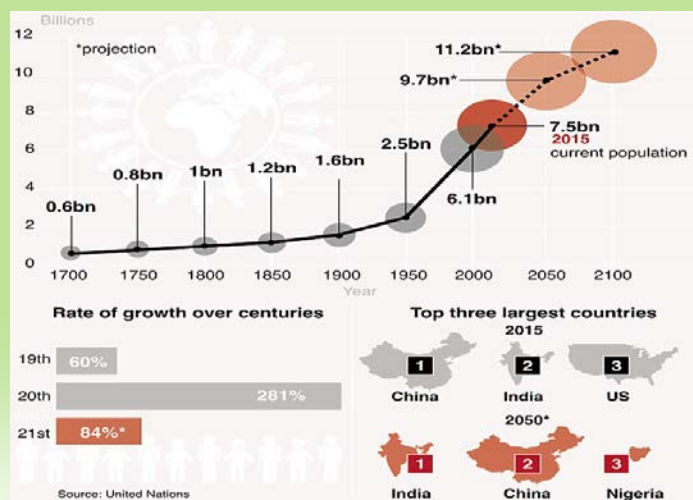


Fig.1. The projection of world population by 2050 (UN DESA report, 2015)

this larger urban population, food production must be increased by 70 percent. Annual cereal production will need to rise to about 3 billion tonnes from 2.1 billion today. In India, the estimated food grain production has already touched 270 million tonnes during 2016-17. However, the total food grain demand in India is estimated to be 291 Mt by 2025 and 377 Mt by 2050. With increased agricultural production, residue generation has also increased substantially. Large quantities of crop residues (679 million tonnes) primarily comprising of wheat, rice and pulse residues are produced annually in India, and are vastly underutilized. A larger portion (90-140 million tonnes) of residue is burnt on-farm primarily to clean field. These surplus residues can be recycled for sustaining soil health and enhancing crop productivity. Burning of crop residues leads to environmental pollution which further leads to production of greenhouse gases namely carbon dioxide and nitrous oxide causing global warming and loss of plant nutrients like N, P, K and S. It also lowers the biological activity and destroys the structure of soil. Low level of soil organic matter, multiple nutrient deficiencies and poor management of crop residues are some of the major reasons for declining productivity in India. If crop residues are managed properly by *in situ* or off-site composting, conservation agricultural practices, mulching, etc., they may increase production potential of soil by way of soil and water conservation, temperature moderation, substrate to soil microbes and thus SOC enhancement, soil structural improvement, and nutrient recycling to soil.

At the same time the burgeoning population, food grain production, urbanization and industrialization led to accelerated waste generation from household, municipal, and industrial effluent are largely polluting soil-water-environmental ecosystem. These wastes carry substantial amount of organics, heavy metals and nutrients like NPK which on one hand are useful for agriculture but when they are disposed off to water bodies untreated, they become potential sources of soil and water pollution and eutrophication of water bodies downstream and the underground water. Its ramifications are more overwhelming in developing countries particularly in India. Recycling of these organics in agriculture possesses after their treatment, segregation and composting has several benefits such as improving productivity, soil carbon content and sustaining soil health. Unscientific management of crop residues and organic wastes hold several disadvantages, such as losses of major plant nutrients, greenhouse gas emission, heavy metals contamination and developing sporadic animal and plant pathogens. Hence, there is an urgent need of recycling the available limited organic waste resources for smooth functioning of ecosystem services.

Thus, The ICAR-Indian Institute of Soil Science and Indian Society of Soil Science (Bhopal chapter) is jointly organizing a national conference on "**Organic Waste Management for Food and Environmental Security**" from 08-10 February, 2018, that will help to broaden the understanding of all aspects of management of crop residues and state of the art techniques in waste recycling. This national conference will provide better opportunity to understand, share, interact, collaborate with researchers, academicians, industrialists, NGOs, stake holders, students who will act as catalysts for future management efforts locally, nationally and world-wide. Further, this conference will be in-line with the GOI initiatives of "*Swachha Bharat Mission*" launched by our Hon'ble Prime Minister Sh. Narendra Modi Ji. The conference will focus on the following major themes:

Theme I: Crop residue management

Theme II: Municipal solid waste management

Theme III: Waste water management

Theme IV: Hazardous waste management

Theme V: Soil - source or sink of pollution

Theme VI: Waste to wealth: Innovation

CALL FOR PAPER:

Abstract of original research work not exceeding 300 words (MS Word, strictly in Times New Roman 12- font size) must reach by email to the Organizing Secretary not later than 15 December, 2017 along with a registration form and details of payment of registration fee. However, for lead and invited papers, the abstract should be within 700 words.

ORAL PRESENTATION:

A copy of the presentation is required to be submitted by the participants either through mail or onsite in a CD. The organizing committee reserves the right to decide the mode of presentation depending on the number of papers and merits of paper based on originality/novelty of research work on the themes of conference.

POSTER PRESENTATION:

The size of the poster shall be 75cm x 100cm briefly showing title, introduction, methodology, significant findings (along with not more than three tables/figures/photographs) and bulleted summary. It should be composed on a single sheet with appropriate colour scheme so that the content is readable from a distance of at least one meter. The poster display requires conforming to the above standards and pasting of several small pieces of black and white A4 papers should be avoided. A two-page handout (say 50 copies) on the poster may be brought for the desirous visitors. A soft copy of poster is to be submitted to the organizer for making it accessible to the participants either through mail or available onsite in a CD during the conference.

LANGUAGE: Official language of the conference will be ENGLISH.

REGISTRATION FEE:

Delegates	Registration Fees
Scientists	Rs. 3000/-
Students/Scholars	Rs. 1000/-
Others (NGOs, Private personals)	Rs. 6000/-

Dully filled registration form along with Cheque/bank draft (Drawn in favor of the “ISSS-Bhopal Chapter”, payable at state bank of India, CIAE Branch, Bhopal) of the registration fee may be submitted to the Organizing Secretary of the program, Division of Soil Biology, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal, 462038, MP on or before 15 December, 2017. On-spot registration is also available but such participants need to arrange their own accommodation. Kindly send a scanned copy of the registration form and DD to Email ID (madhabcm@yahoo.com). Electronic transfer of registration fee is also acceptable to the following accounts:

Account Name: Bhopal Chapter of Indian Society of Soil Science

Bank Account No: 10470972340

Bank Name: State Bank of India

Bank Branch: CIAE, Nabibagh, Berasia road

IFSC: SBIN0010144

ACCOMMODATION:

The accommodation for the participants will be available at IISS, CIAE guest house and nearby hotels. Generally, the hotel tariff rates start from INR 1000/- per person per day (Non-AC) to INR 4000/- for AC Room. The organizers may make the arrangement of accommodation for the registered participants provided advance information about date, time of arrival and payment is received before January 05, 2018.

AWARDS:

Best poster and oral presentation award will be given in the conference.

TOUR

Sightseeing tours (to be borne by the participants) will be arranged on advance request.

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National Conference
on
Organic Waste Management for Food and Environmental Security
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Affiliation :

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Title of Paper :

Authors :

Choice of theme :

Mode of presentation : Oral/Poster

No. of accompanying persons :

Status of payment of registration :

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