



A National Workshop on



*Water quality issues, opportunities
and socio-cultural concerns of
wastewater use in agriculture*

7 – 8 August 2013

Organized by

**DIRECTORATE OF WATER MANAGEMENT
(Indian Council of Agricultural Research)
Chandrasekharpur, Bhubaneswar - 751023,
Odisha**



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Out of the total available water sources, 85% accounts for agriculture, 6% each for domestic and industrial uses and 3% for energy sector. If the current pattern of demand continues, then only half of it will be met by 2030. Decline in water quality due to urbanization and industrialization including climate change further upset the balance and agriculture will be the victim of the situation because without the availability of good water to meet the increasing demand of food, feed, fodder, fibre and fuel of the country is difficult. To improve and sustain the production level, increasing use of wastewater in this sector is inevitable and technological intervention will help to promote its safe and sustainable use in the environment. These waters vary in characteristics depending upon the nature of source, wastewater treatment facilities provided, and local climate. Use of municipal sewage can meet nutrient requirement of crops, enrich soil with organic matter content and simultaneously increasing the risk of contamination if not properly treated at source. Wastewater generated in Class I and Class II cities is around 38,254 million litres per day (mld) and 11,787 mld, (31 per cent) of the total volume can get treated at present in India. The projected wastewater generation may cross 120,000 mld in this two urban centres by 2051 and 50,000 mld in rural India despite a volume of 30,729.2 million m³ wastewater generated per year from various industries. If wastewater management plan doesn't address the recycling and reuse of this huge resource, agriculture will suffer and increasing improper practice of wastewater use in this sector pollute the natural resources vis-à-vis the environment.

Themes of the proposed workshop are:

Theme I: Distribution of available wastewaters, appraisal and use in various sectors of farming

- ★ Water quality appraisal, management and issues in crop production
- ★ Current trend and status of industrial wastewaters available and options for its reuse
- ★ Prospects of wastewater utilization in different land use systems

Theme II: Recycling and reuse of wastewaters in agriculture

- ★ Technological information on wastewater use in agriculture
- ★ *In situ* treatment of wastewater and its feasibility of use for groundwater recharge
- ★ Application of bio – technology tools to improve wastewater use

- ★ Management of wastewater use through integrated application of irrigation system, land modifications and cropping

Theme III: Conjunctive use of multi-quality water sources for irrigation

- ★ Potential of conjunctive use of good and wastewater – technological gaps and social issues
- ★ Location specific techniques for conjunctive water use in different agro-ecosystems
- ★ Impacts of using multi-quality water sources on soil – water – plant – animal continuum

Theme IV: Increasing water productivity through improved cropping practices and multiple use of wastewater

- ★ Technological gaps and socio-economic constraints under multiple use of wastewater
- ★ Assess the environmental impact and promoting safe use of marginal water for multiple uses under different systems
- ★ Improving water productivity under multiple water use

Theme V: Environmental impact and socio-cultural issues of wastewater use

- ★ Assess the environmental impact of wastewater use at different scales and landforms
- ★ Socio-cultural issues of marginal water use in agriculture

Theme VI: Wastewater use – policies and guidelines

- ★ Methodology for periodical monitoring of environmental parameters during wastewater use
- ★ Framing regulation of wastewater use and its surveillance for safe use under different systems

Presentation

There will be two categories of presentations; eminent speakers will be invited to make their presentation on the sub-themes and a selected number of voluntary papers under each theme will be accepted for presentation in the workshop

Workshop Overview

The workshop will be of two days duration will be held at Directorate of Water Management, Chandrasekharapur, Bhubaneswar 751023, Odisha. Interested participants may fill up the 'Registration Form' exercising the option and submit it by 15 July 2013.

Guidelines for preparation of Extended Summary

Interested participants may submit their work including brief introduction, clearly focusing the objective of the work and salient findings. It will be typed in double spaced using official font. The length will not exceed two A4 size pages including illustrations. The last date for submission of extended summary is 15 July 2013.

Registration Fee

There will be no Registration fee for participating in the workshop

About the capital city

Bhubaneswar the capital city of Odisha is well connected by rail, bus and flight with all the major cities and places across India. The temple city is famous for Lingaraj temple, open air Nandakanan national park, Dhauli Hill and Khandagiri and Udaygiri cave. Jagannath temple at Puri is around 60 Km and the ancient Sun temple at Konark is 65 km from the city. Temperature during August varies between 32 – 39°C with high humidity and cloudy sky.

A National Workshop on ‘Water quality issues, opportunities and socio-cultural concerns of wastewater use in agriculture’ on 7 – 8 August 2013

REGISTRATION FORM

Name: Dr./ Mr./ Mrs. / Ms -----

Designation and Address : -----

Contact No. ----- Email:-----

Date

Signature

Place:

All correspondence will be made to:

Organizing Secretary: **Dr. M Das, Principal Scientist, Directorate of Water Management, Chandrasekharpur, Bhubaneswar 751023, Odisha, Email: mdas6@yahoo.com; mdas.dwm@icar.org.in**