# ENVIS CENTRE PUDUCHERRY



MAJOR ACHIEVEMENTS (2010-2015)

## INTRODUCTION

- Puducherry Pollution Control Committee is the host organization
- ❖ Allotted subject Environmental related issues
- Existing Man power One (Programme officer)One (IT Assistant)
- \* ENVIS centre has been established on 8th August, 2005.

## **Publications**

- ➤ News Letter Published 23 Nos
- ➤ Abstracts Published 3 (E-waste, Municipal Solid waste,
- Wet Land)
- ▶ Pamphlets on biomedical waste-1
- Poster on save water-1
- ► No. Of web hits- 43,309
- ►No. of Query received- 4533
- ➤No. of Query answered- 4533

# DEVELOPMENT OF ENVIS INDIA VISION DOCUMENT

- I. Enlarging the scope of ENVIS activity
- a. Digitilizing Ph.D thesis pertaining to Environmental Subject from Pondicherry University.
- b. Preparing GIS based Environmental Index
- c. Preparing Kids Environmental Awareness Programme package and supply to school on payment basis

## **ACTION PLAN 2016-2017**

- Data collection
- Database Development (on line)
- Publishing subject specific Newsletters
- Publishing subject specific abstracts
- Development of ISBEID database
- Responding to queries
- FAQ
- Procuring of journals on the subject-area
- Collection of Ph.D. thesis/Dissertations
- Knowledge Sharing

- ENVIS Library
- Press note
- Awareness programme (Workshop, Training and seminars)
- Material in Bilingual language
- Books and reports
- Development of subject related Glossary
- Related Links
- Collection NAPCC

## **ENVIS NEWSLETTER**

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Pondicherry



## **ENVIS** NEWSLETTER



Subject area: Environment related activities with special reference to

#### SOLID WASTE MANAGEMENT

Funded by Ministry of Environment and Forests, Government of India

VOL.1 NO.1

OCT-DEC 2005

PPCC/ENVIS/NL-1

#### CONTENTS

- WASTES OVERVIEW
- . SOURCES OF WASTE AND DIFFERENT RULES THAT GOVERN DIFFERENT WASTES
- HOW MUCH WASTE WE GENERATE?
- WHAT CAN BE THEREIN MUNICIPAL SOLID WASTE?
- HOW MUCH TIME IT TAKES FOR THE WASTES TO DECOMPOSE?
- MUNICIPAL SOLID WASTE FACTS AT A GLANCE
- E-WASTE GROWING PROBLEM
- SURYAPET A MODEL IN WASTE DISPOSAL
- WASTE TO WEALTH CMDA'S INITIATIVE
- TERMINOLOGY

#### PROFILE OF ENVIS CENTRE

The Environmental Information System (ENVIS) is a project funded by the Ministry of Environment and Forests, Government of India to facilitate collection, analysis and dissemination of information on various facets of environment. Around 90 ENVIS centres have been established all over India and each centre has been allotted specific subject area.

Our ENVIS centre located at the Pondicherry Pollution Control Committee (PPCC), Pondicherry focuses on the Environment related activities with special reference to Solid Wastes Management. Activities of our centre include collection, analysis, storage, retrieval and dissemination of information in the subject area allotted. The information is being disseminated through the quarterly newsletter and website. This is the first newsletter.

Visit us at: www.pon.nic.in/citizen/science/ENVIS

## ENVISS

Subject: "Environment related activities with special reference to solid waste management"

#### PONDICHERRY POLLUTION CONTROL COMMITTEE



#### Vol.2 No.1 JAN-MAR 2006 PPCC/ENVIS/NL-2

#### CONTENTS

- WASTE –TO- ENERGY
- ENERGY FROM LANDFILL GAS
- BIOMASS GASIFICATION
- REFUSE DERIVED FUEL
- CALORIFIC VALUE OF VARIOUS
   FUELS

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## ENVIS PONDICHERRY POLLUTION CONTROL COMMITTEE



VOL.2 NO.2

April-June 2006

PPCC/ENVIS/NL-3



## E-WASTE



#### CONTENTS

- o Electronic waste Introduction
- o Why e-waste needs management
- o E-waste Quantum
  - Global scenario
  - Indian scenario
- o E-waste disposal methods in India
- o Eco-friendly/Green technology for management of e-waste
- o Is there a way out from e-waste menace

## ENVIS

## PONDICHERRY POLLUTION CONTROL COMMITTEE

VOL.2 NO.3

July-September 2006

PPCC/ENVIS/NL-4





Cytotoxic

Biohazard

#### CONTENTS

- Biomedical Waste Management (BMW) Introduction
- · Why BMW needs management
  - National
  - · Regional (Puducherry)
- Rules Provisions
  - · Classification of BMW
  - · Collection of BMW
- · Successive waste disposal mechanism
  - National
  - · Regional (Puducherry)
- · Action plan needed
  - · By regulatory organization
  - · By generator
  - · By NGO/others
- · Role of NGOs in BMW management
- Recommendations

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Pondicherry





#### CONTENTS

- Introduction
- Briquetting from agricultural residues International
  - National
- Hand made paper from banana plant waste
- 'Biomas gasifier' a look forward to reduce air pollution
- Biomass plant 'enhance livelihood' of the locals besides reducing fossil fuel consumption
  - "Vermicomposting " a way towards greening the earth



## ENVIS newsletter on Solid Waste Management

Sponsored by Ministry of Environment and Forest, Government of India

VOL.3 NO.2 April – June 2007 PPCC/ENVIS/NL-7







#### CONTLINIS

Plastic – introduction

Plastic – disadvantages
Developments of Degradable Plastics - are
they Eco-Friendly!
Degradable plastics – disadvantages

Universal remedy for plastic

Renuce Rense

- Traditional usage of material an alternative in promoting naturally degradable material

- Plastic recycling - are they use friendly or environment friendly Respond

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Puducherry

## BNVIS

## Newsletter on Solid Waste Management

Sponsored by Ministry of Environment and Forests, Gort. Of India

**VOL.3 NO.1** 

January - March 2007

PPCC/ENVIS/NL-6

## PLASTICS



PLASTICS ... WHAT IT IS ACTUALLY

Plastics - disadvantages

Plastics - advantages

Plastic - changing scenario

Development of plastics

Advantages of foam cups

Plastic - facts at glance

Plastics - Classification and usage

Classification of Special

-purpose plastics

Plastics - disposal

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Puducherry

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Puducherry





## ENVIS

Newsletter on Solid waste management

VOL.3 NO.3

July - September 2007

PPCC/ENVIS/NL-8

Municipal Solid waste collection, treatment and disposal are a pressing environmental concern - one that is growing every year. The city generates about 410 tons of waste per day. What to do and how to "take care" of all this waste, garbage, trash, refuse is an issue to be considered in city planning. Wastes from houses, streets, shops, offices, industries and hospitals are usually the responsibility of municipal or other governmental authorities, and management of this waste is utmost necessary because of its infectious nature. MSW is regulated by MSW Rules (Municipal Solid Wastes (Management and Handling) Rules, 2000). The hierarchy includes source reduction (pre-recycling), recycling, combustion, or waste-to-energy processes, and landfilling.

#### Inside.....

- A glance at Municipal Solid Waste (MSW)
- MSW Management Puducherry scenario
- Municipal solid waste existing management techniques
- Prevailing Solid waste management models
- Managing solid waste what is the motive behind
- Reason for involvement of NGOs and other private parties in SWM
- Legislation
- Suggested waste management approaches

However, currently municipalities are present only in the stages of collection, transportation and production of fertilizer by simple composting technique, which does not generate much revenue. The declining number of landfills has caused communities to transport their wastes to greater distances for disposal and has increased disposal costs.

In this direction, several NGOs in Puducherry have taken innovative initiatives to provide awareness programme to the public and to educational institution both in the rural and urban areas and also introduced new methods to generate wealth from waste. This issue focuses on the complete scenario of MSW and its management, helps to understand the details about the ill effects of improper disposal and possible eco-friendly management methods that could be employed in this union territory. The ENVIS Centre Puducherry herby expressed its gradtitude and sincere thanks to Dr.S.P.Sharma, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Thiru. Annadurai, ENVIS Co-ordinator, (MoE&F), New Delhi, India for their support for continuation of this centre.

Quarterly News Letter of the ENVIS Centre, Pondicherry Pollution Control Committee, Puducherry





## ENOIS Newsletter on Solid Waste Management

Sponsored by Ministry of Environment and Forest, Government of India

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VOL.4 NO.4

October – December 2007

PPCC/ENVIS/NL-09

#### Editorial

The problem of Municipal Solid Waste (MSW) management has acquired alarming dimensions in country especially over the last decade, since then, waste management was hardly considered as an issue of concern that the waste could be easily be disposed off in an environmentally safe manner within the premises where it was generated. However, over the period of time changing lifestyles of people coupled with urbanization and industrialization, the management of waste based on characteristics has drawn various dimensions on scientific manner.

In Puducherry, a problem related to garbage management which has been dogging the civic administration and the people for many decades is likely to be solved in due course of time. The estimated generation of MSW in Puducherry is 4200 MT per annum and also likely to be increased in the coming years due to increase in population, industrialization and rapid urbanization. This situation attracts necessity for creation of dump yard to dispose the MSW. In order to dispose the huge quantity of MSW being generated in Puducherry, about 23 acres of land has been year marked by Local Administration Department (LAD), Puducherry at Kurumbapet.

In the present issue the ENVIS centre Pondicherry Pollution Control Committee (PPCC) bringing out the bibliography on MSW Management. The data were collected from various sources through internet which includes the data mainly from journals of national and inter national repute. The data were arranged year wise. The ENVIS Centre Puducherry herby expressed its gradititude and sincere thanks to Dr.S.P.Sharma, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Thiru. Annadurai, ENVIS Co-ordinator, (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion for strengthening this centre during the evaluation workshop (2007) in Hyderabad.



#### **ENVIS -PUDUCHERRY**

#### NEWSLETTER



SPONSORED BY MINISTRY OF ENVIRONMENT & FORESTS

#### CLEAN DEVELOPMENT MECHANISM

VOL - 4. No. 2

April - June 2008

ENVIS/PPCC/NL-11

Member Secretary's Desk....

The Clean Development Mechanism (CDM) is an arrangement under the Kyoto Protocol allowing industrialized countries with a greenhouse gas reduction commitment (called Annex 1 countries (industrialized countries)) to invest in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries.

Such projects can earn profitable certified emission reduction (CER) credits, each equivalent to one tonne of CO2, which can be counted towards meeting Kyoto targets. The goals of the CDM are to assist non-Annex I Parties in achieving sustainable development and in contributing to the ultimate objective of the convention and to assist Annex I Parties in meeting their targets.

A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy-efficient boilers. The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets.

#### CONTENTS

Clean Development Mechanism and Kyoto Protocol

Why CDM?

CDM project locations worldwide

CDM project process

CDM - India

GHG emission in India

India CDM Potential and Challenges

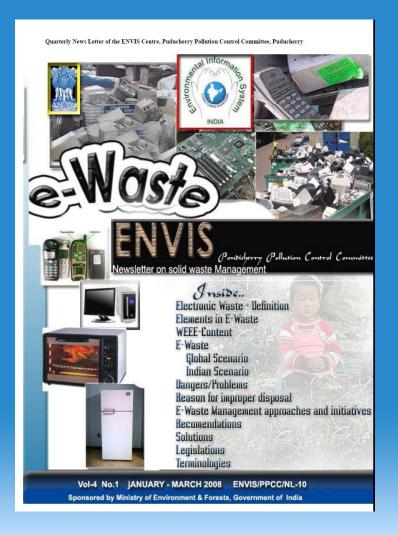
CDM - Current progress

Recommendations

Conclusions

Literature-based analysis and carbon emission reduction trade (CERT) models indicate that India is likely to capture 10 per cent of the global carbon market during the first commitment period of 2008–2012. However, data from the World Bank Study, indicating a range of 20–30 per cent, are more realistic since they are based on project data. Thus India's volume of CER (carbon dioxide emission reduction) exports in 2010 may range between 7.5 MTCO and 79 MTCO, bringing in revenue in the range of \$30–300 million per year. To meet a CER supply level of 15 MTCO by 2010, a few large and several medium-to-small size projects would have to be in operation soon.

The ENVIS Centre Puducherry hereby expressed its graditude and sincere thanks to Dr.S.P.Sharma, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI), (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion.



#### ENVIS - PUDUCHERRY NEWS LETTER

Sponsored by Ministry of Environment & Forests,
Government of India, New Delhi

#### SPECIAL WASTE

VOL - 4. No.

July - September 2008

ENVIS/PPCC/NL-12

Member Secretary's Desk....

Special wastes due to its hazardous nature require unique handling, treatment, and disposal. These waste while in direct contact can cause ill effects on health and the environment especially to rae/waste pickers.

Proper management of special wastes is quite difficult in most developing countries, particularly in those where regular MSW is not managed adequately. Most important issues pertinent are jurisdictions for special waste management are seldom clear, available resources to manage solid waste are scant and priorities have to be set and finally the technology needed to manage special wastes is seldom available.

The development of sound practices in the management of special wastes should follow the integrated waste management similar to waste minimization, resource recovery, recycling, treatment (including incineration), and final disposal. The proper application of this hierarchy depends on available technologies, as well as human and financial resources.

#### **Contents**

Special waste - introduction

Types of special waste

Medical waste

Hazardous waste

Used oils Tyres

Wet batteries

Construction and demolition

Sewage sludge, septage

Slaughterhouse waste Industrial waste

This newsletter reviews the topic of special wastes superficially. There are a number of special wastes that are generated in an urban area.

The ENVIS Centre Puducherry hereby expressed its graduitude and sincere thanks to Dr.S.P.Sharma, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI), (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion.









#### E/NVI3 - PUDUCHEKKY

NEWS LETTER

Sponsored by Ministry of Environment & Forests, Government of India, New Delhi

#### **ELECTRONIC WASTE - ABSTRACT**

VOL - 4. No. 4

October - December 2008

ENVIS/PPCC/NL-13

Member Secretary's Desk

Electronic waste, popularly known as 'e-waste' can be defined as electronic equipments / products connects with power plug, batteries which have become obsolete due to: advancement in technology changes in fashion, style and status nearing the end of their useful life. Computer waste is generated from the individual households; the government, public and private sectors; computer retailers; manufacturers; foreign embassies; secondary markets of old PCs. Of these, the biggest source of PC scrap are foreign countries that export huge computer waste in the form of reusable components.

Electronic waste or e-waste is one of the rapidly growing environmental problems of the world. In India, the electronic waste management assumes greater significance not only due to the generation of our own waste but also dumping ofe-waste particularly computer waste from the developed countries.

There is an estimate that the total obsolete computers originating from government offices, business houses, industries and household is of the order of 2 million nos. Manufactures and assemblers in a single calendar year, estimated to produce around

1200 tons of electronic scrap. It should be noted that obsolence rate of personal computers (PC) is one in every two years. The consumers finds it convenient to buy a new computer rather than upgrade the old one due to the changing configuration, technology and the attractive offers of the manufacturers. Due to the lack of governmental legislations on e-waste, standards for disposal, proper mechanism for handling these toxic hi-tech products, mostly end up in landfills or partly recycled in a unhygienic conditions and partly thrown into waste streams.

India as a developing country needs simpler, low cost technology keeping in view of maximum resource recovery in an environmental friendly methodologies. This issue brings into focus some of the abstracts on eco-friendly e-waste management process in recent times.

The ENVIS Centre Puducherry hereby expressed its graditude and sincere thanks to Dr.S.P.Sharma. Statistical Advisor. Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas. Joint Director (EI), (MoE&F). New Delhi, India for their support for continuation of this centre and for their valuable suggestion.

#### Incida

- Elevated Serum Polybrominated Diphenyl Ethers and Thyroid-Stimulating Hormone Associated with Lymphocytic Micronuclei in Chinese Workers from an E-Waste Dismantling Site
- Centralized versus Decentralized Decision-Making for Recycled Material Flows
- Green Electronics through Legislation and Lead Free Soldering
- Heavy Metals Concentrations of Surface Dust from e-Waste Recycling and Its Human Health Implications in Southeast China
- High levels of heavy metals in rice (Oryza sativa L.) from a typical E-waste recycling area in southeast China
  and its potential risk to human health
- · Life-cycle flow of mercury and recycling scenario of fluorescent lamps in Japan
- Material flows of mobile phones and accessories in Nigeria: Environmental implications and sound end-of-life management options
- Polybrominated diphenyl ethers in domestic indoor dust from Canada, New Zealand, United Kingdom and United States
- Producer responsibility for e-waste management: Key issues for consideration Learning from the Swiss experience
- Reducing life cycle impacts of housing and computers in relation with paper
- Toxic Tech: Not in our Backyard





## Department of Science, Technology & Environment Puducherry Pollution Control Committee



## **ENVIRONMENTAL INFORMATION SYSTEM(ENVIS)**

Sponsored Ministry of Environment, Forests & Climate Change, Govt. of India



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Centre on Special reference to the "Status of Environment Related Issues"

Face book f





Regional

National National



## **Publications**

Newsletters

Annual Report

Posters

Pamphlets

Environment News

Puducherry, Status of Environment and Related Issues								
Air Quality	♣ Agriculture	♣ Bio-diversity						
<b>?</b> Climate	💠 Demography	P Disaster						
Tecotourism	♣ Energy	Forest Resources						
Industries	<b>Infrastructure</b>	♣ Rivers						
🏞 Soil	♣ Solid Waste	Tourism heritage						
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#### SLAUGHTER HOUSE WASTE MANAGEMENT

## Contents

#### Introductio

Problem due to unauthorized slaughter house waste

Toxic waste in slaughter house Slaughtering of animals – prevailing process

Measures proposed to improve the slaughter house waste management

Curbing activities of illegal slaughtering of animals

Global eco-friendly case studies

Slaughter house waste in puducherry – prevailing scenario Standards and regulations governing slaughterhouses From the Member Secretary's Desk

Waste management is one of the essential obligatory functions of a country. This service is falling too short of the desired level of efficiency and satisfaction resulting in problems of health, sanitation and environmental degradation. Environmental problems, such as pollution provoked by slaughterhouse wastes, can be examined with an integral, multidimensional and systemic approach.

A slaughterhouse, also called an abattoir (from the French verb abattre, "to strike down"), or freezing works (New Zealand English), is a facility where animals are killed and processed into meat foods.

Slaughtering animals on a large scale poses significant logistical problems and public health concerns, with public aversion to meat packing in many cultures influencing the location of slaughterhouses. In addition, some religions stipulate certain conditions for the slaughter of animals so that practices within slaughterhouses vary.

A conceptual shift and perception change in Society-Nature relations are necessary as well as the participation of other sectors of the society.

The ENVIS Centre Puducherry hereby expresses its gradititude and sincere thanks to Shri Nilkanth Ghosh, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI), (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion.



## HAZARDOUS WASTE MANAGEMENT

#### CONTENT

#### Hazardous Waste (HW) – A glance HW – Indian scenario

- Categories of HW
- HW generating units in India
- HW dump sites in India
- Status on Common Hazardous Waste - TSD&F
- Status on HW dump sites

#### Hazardous waste - Puducherry scenario

- · HW- Types in U.T.Puducherry
- Hazardous waste quantity
- TSDF in U.T.Puducherry

#### Conclusion

#### From the Member secretary's desk

A hazardous waste is waste that poses substantial or potential threats to public health or the environment and generally exhibits one or more characteristics. Hazardous waste was formerly known as 'special' waste. Lack of treatment and disposal facilities causes hazardous wastes (HWs) to ravage municipal landfills and open spaces, raising serious environmental threats. Rapid industrialization over the last few decades has indiscriminately increased HW generation in India.

Adding to this woe are the substantial quantities of HWs being imported for recycling. Large quantities of HWs generated include used batteries, used and waste oil, broken fluorescent lamps, cleansing chemicals for wastes, pesticides past their expiration dates, and so forth. There are only few well-established treatment, storage, and disposal facilities (TSDF), which precludes effective enforcement of regulations for HW generated from the industrial or non-industrial sector. The guidelines issued by the Ministry of Environment and Forests (MoEF), Government of India, and the Central Pollution Control Board (CPCB) are available for selection of the best sites for TSDF and for establishing secured landfills (MoEF Guidelines, 1989, as amended in 2003).

This article focuses on the current status, problems and challenges, policy issues, and future strategies for improvement in HW management system in India.

The ENVIS Centre Puducherry hereby expresses its gradtitude and sincere thanks to Shri Nilkanth Ghosh, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI), (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion.



#### BIODIVERSITY IN WETLANDS

#### From the Member secretary's desk

Wetlands are one of the most productive ecosystems, comparable to Wetland types tropical evergreen forests in the biosphere and play a significant role in the ecological sustainability of a region. They are an essential part of human civilisation meeting many crucial needs for life on earth such as drinking water, protein production, water purification, energy, fodder, biodiversity, flood storage, transport, recreation, research-education, sinks and climate stabilizers. The values of wetlands though overlapping, like the cultural, economic and ecological factors, are inseparable. The geomorphological, climatic, hydrological and biotic diversity across continents has contributed to wetland diversity. This issue gives an outline on the wetlands and its biodiversity.

The ENVIS Centre Puducherry hereby expresses its gradtitude and sincere thanks to Shri Nilkanth Ghosh, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI). (MoE&F). New Delhi, India for their support for continuation of this centre and for their valuable suggestion.

#### CONTENTS

Wetland - At a glance

Swamp

Bog

Marsh

Water resources of wetlands

- · Distribution of world water resources
- · Distribution of fresh water resource by continents

Wetland products

Benefits

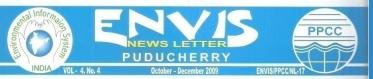
Climate prevailing in wetlands Functions of wetland Wetlands of India

- Classification
  - Distribution
    - o Mangroves

Wetlands in Puducherry

- Lakes
- Mangroves

Conclusion



### WETLAND - ABSTRACTS

#### From the Member secretary's desk

Wetlands are a special land resource and play a unique and valuable ecological role. Wetlands, the fragile ecosystems, are declining in most parts of the world. Wetlands are helpful in controlling floods, replenishing groundwater, protecting biodiversity and providing livelihoods to local population.

Wetlands are highly significant for a country like India which has a varied terrain and climate and which supports a rich diversity of inland and coastal wetland habitats. Wetland habitats in India have been destroyed by draining and land filling. Wetlands are also severely disturbed by over-exploitation of fish resources, pollution, choking by exotic weeds and other human pressures. It is reported that one third of Indian wetlands have already been wiped out or got severely degraded. One of the most important wetlands in India is the Keoladeo National Park in Bharatpur, Rajasthan, which is a manmade wetland. This park is visited by various migratory species of birds almost every winter. Another important wetland is Chilka, the largest (1100 sq km) brackish-water lake in India, situated in Puri and Ganjam districts of Orissa.

This issue brings into focus on the abstracts of various research articles pertaining to the conservation of wetlands in recent times.

The ENVIS Centre Puducherry hereby expresses its gradtitude and sincere thanks to Shri. Nilkanth Ghosh, Statistical Advisor, Ministry of Environment & Forest (MoE&F) and Smt. Madhumita Biswas, Joint Director (EI), (MoE&F), New Delhi, India for their support for continuation of this centre and for their valuable suggestion.

Title: Biorights as conservation partnership paradigm in peri-urban wetlands: a success story

Author: Dey, D; South Asian Forum for Environment, 801 Survey Park Kolkata 700075, INDIA: deydr@yahoo.co.in

East Kolkata Wetlands, a threatened Ramsar site in Eastern India, spread across 136 Sq. Km is renowned as model of multiple use wetland having natural resource recovery system developed and maintained by the local commune supporting 104 wetland species that includes endemic marsh mongoose and mud turtle. Water flows through wetlands' mosaic of fishponds, lakes, swamps and canals that cover 4000 ha and acts as solar reactors to treat 880 million liters sewerage each day. In an effort to restore the fast shrinking wetlands and prevent habitat loss, a conservation partnership has been successfully developed based on community-ecosystem approach. On one hand it undertakes habitat evaluation and restoration with the help of fishermen's community and on the other it aims to use Biorights of commons for transforming nature services to economic opportunities for poor



## **ENVIS NEWS LETTER**



(Sponsored by Ministry of Environment & Forests, Government of India)

## **Bio Diversity**

Volume - V - I

Jan - March 2014



## **ENVIS CENTRE**

Department of Science, Technology & Environment **Puducherry Pollution Control Committee** 

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URL: http://dste.puducherry.gov.in/envisnew/envis1.htm



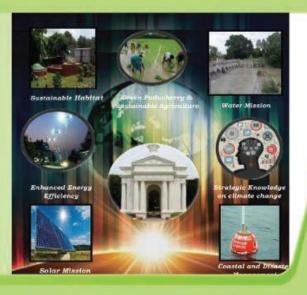
## ENVIS NEWS LETTER

( Sponsored by Ministry of Environment, Forests & Climate Change Government of India )

## **GREEN HOUSE GAS INVENTORY**

Volume - V - II

April - June 2014



## **ENVIS CENTRE**

Department of Science, Technology & Environment **Puducherry Pollution Control Committee** 

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URL: http://dste.puducherry.gov.in/envisnew/envis1.htm





(Sponsored by Ministry of Environment, Forests & Climate Change Covernment of India)

## **SACRED GROVES OF PUDUCHERRY**

Volume - V - III

July - Sep 2014



## **ENVIS CENTRE**

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URL: http://dste.puducherry.gov.in/envisnew/envis1.htm



## **ENVIS NEWS LETTER**



( Sponsored by Ministry of Environment, Forests & Climate Change Government of India )

# TREND ANALYSIS OF AMBIENT AIR QUALITY OF PUDUCHERRY (2009-2014) & BHOGI FESTIVAL (2012-16)

Volume - V - IV Oct - Dec - 2014



## **ENVIS CENTRE**

Department of Science, Technology & Environment Puducherry Pollution Control Committee 3rd Floor, PHB Building, Anna Nagar, Puducherry - 605 005.

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URL : http://dste.puducherry.gov.in/envisnew/envis1.htm



## **ENVIS NEWS LETTER**

( Sponsored by Ministry of Environment, Forests & Climate Change Government of India )

A Success Story - LED Replacement Program and its impa on GHG Emission in Union Territory of Puducherry

Volume - VI - I

Jan - Mar - 2015







## **ENVIS** centre puducherry sincerely thank

Dept. of Electricity Government of. Puducherry Bureau of Energy Efficiency and Energy Efficiency Services for sharing relevant information

**ENVIS CENTRE PUDUCHERRY** 





## Department of Science, Technology & Environment **Puducherry Pollution Control Committee ENVIRONMENTAL INFORMATION SYSTEM(ENVIS)**





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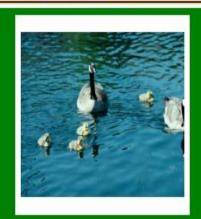
Centre on Special reference to the "Status of Environment Related Issues"

Face book f











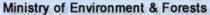




Best view in 1024x768

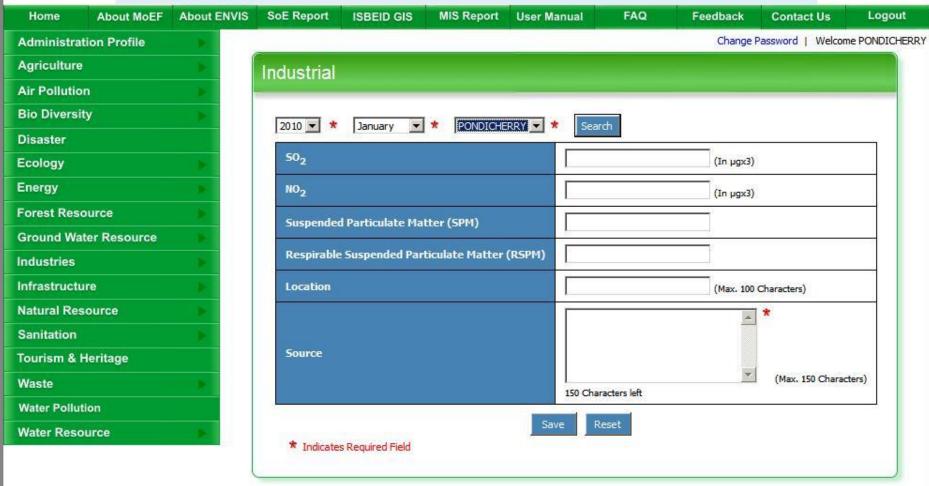


## **Environmental Information system**









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## Water Pollution Report for 2014 Year for PONDICHERRY State Source of Total Coli

Name

Location

Water

Year State

2014	PONDICHERRY	Wells	Puducherry	Mettupalayam - Borewell	7.34	NA	NA	20	1200	Mettupalayam - Borewell Puducherry Pollution Contro Committee
2014	PONDICHERRY	Wells	Puducherry	University-Borewell	7	NA	NA	NA	196	University-Borewell water Puducherry Pollution Contr Committee
2014	PONDICHERRY	Lakes	Puducherry	Bahour Lake	7.79	NA	6	61	316	Bahour Lake-warter Puducherry Pollution Control Committee
2014	PONDICHERRY	Wells	Puducherry	No.14 Krishna Nagar- Borewell	7	NA	NA	NA	361	Borewell water Puducherry Pollution Control Commit
2014	PONDICHERRY	Tanks	Puducherry	Mettupalayam	7.67	NA	NA	NA	1272	Puducherry Pollution Controll Committee PPCC
2014	PONDICHERRY	Tanks	Karaikal	T.R.Pattinam	7.5	NA	1	4	1728	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Rivers	Yanam	Coringa River	7.9	NA	NA	10	21600.0	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Wells	Puducherry	Maruthi School	7.36	NA	NA	8	1592	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Lakes	Ousteri Lake	Ousteri lake Puducherry	7.87	NA	4	77	422	Ousteri Lake -water Puducherry Pollution Control Committee
2014	PONDICHERRY	Wells	Puducherry	Mission St	7.26	NA	NA	NA	1592	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Wells	Puducherry	Kurumampet-Borewell	7.21	NA	NA	20	530	Kurumampet borewell water Puducherry Pollution Control Committee
2014	PONDICHERRY	Rivers	Puducherry	Chunambar	8	NA	1	4.1	1474	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Lakes	Puducherry	Ousteri	8.1	NA	NA	12.4	514	Puducherry Pollution Control Committee PPCC
2014	PONDICHERRY	Wells	Puducherry	Chetty Koil-OPEN WELL	7.12	NA	NA	8	2200	Chetty Koil-OPEN WELL water Puducherry Pollution Control Committee
2014	PONDICHERRY	Wells	Puducherry	Katterikuppam Borewell	7.19	NA	NA	NA	500	Borewell water-katterikuppam Puducherry Pollution Control Committee

COD

(mg/l)

**Conductivity Source** 

BOD

pH

Form

(mg/l)





## Indian State-level Basic Environmental Information Database (ISBEID)



Ministry of Environment, Fcrest And Climate Change

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## Types of Waste Report for 2015 Year for PONDICHERRY State

Year	State	Waste Type	Quantity Generated (t/a)	Quantity Treated (t/a)	Quantity Disposed (t/a)	Quantity Generated (mld)	Quantity Treated (mld)	Quantity Disposed (mld)	Source
2015	PONDICHERRY	E-Waste	5100	NA	5100	NA	NA	NA	Puducherry Pollution Control Committee
2015	PONDICHERRY	Hazardous Waste (HW)	34200	NA	34200	NA	NA	NA	Puducherry Pollution Control Committee
2015	PONDICHERRY	Plastic Waste	17000	NA	16500	NA	NA	NA	Puducherry Pollution Control Committee
2015	PONDICHERRY	Municipal Solid Waste (MSW)	179000	NA	178000	NA	NA	NA	Puducherry Pollution Control Committee
2015	PONDICHERRY	Biomedical Waste (BMW)	387000	386450	386450	NA	NA	NA	Puducherry Pollution Control Committee

