

**National-level Workshop on
Appropriate Toilet Technology, type,
designs and options – May 9th -11th , 2012
Trichy**

**ECOSAN UDDT
By
M.Subburaman, SCOPE**

Society for Community Organisation and Peoples Education
P/17, Ahmed Colony 6th Cross, Ramalinga Nagar, Woraiyur, Trichy, Tamilnadu, India.
Mobile : 9443167190, 0431-2774144
E-mail : scopeagency1986@rediffmail.com
scopeagency1986@gmail.com



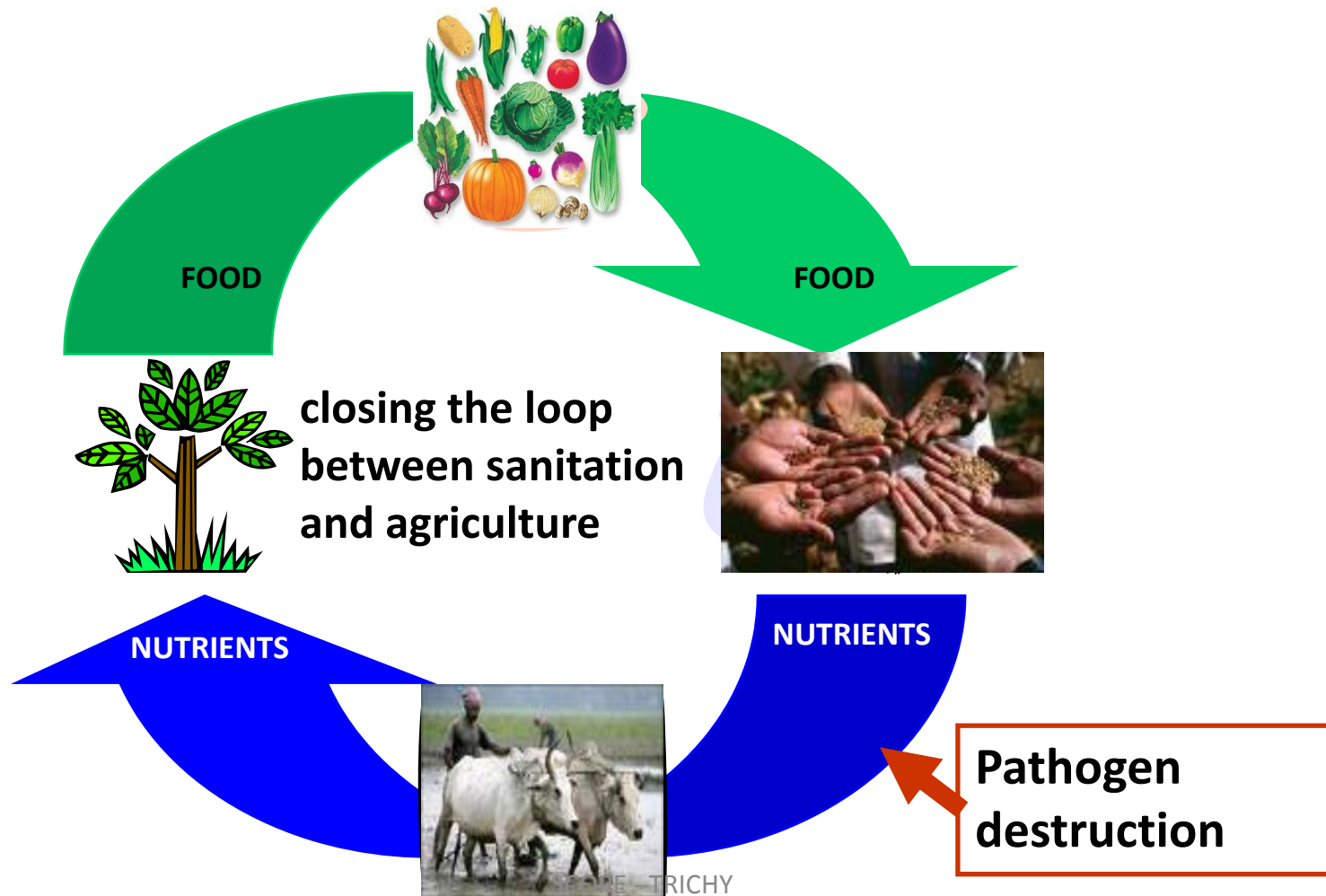
Cat film



What is ECOSAN?

- Appropriate technology means developing a technology suitable to the changing conditions to suit local conditions.
- From open defecation days through pit latrine, twin pit latrine, septic tank and underground drainage system we have reached the decentralized environmentally friendly Ecological sanitation model.
- Ecological Sanitation is an integrated and holistic approach to the management of human excreta, utilization of the rich nutrients in both human urine and faeces,.
- It promotes sustainable agriculture.
- Does not contaminate surface and groundwater sources.
- Conserves and preserves the most critical input for human life namely water.

The basic principle of ecological sanitation is to close the loop between sanitation and agriculture without compromising health



SANITARY LATRINE

SANITARY

CONSTRUCTION OF Eco-san TOILETS



SCOPE's experience in ECOSAN

First Ecosan Model – at Thanneerpandal - 2002

- SCOPE initiated ECOSAN model in Thanneerpandal – Training centre of SCOPE to meet the problems faced by high water table areas.
- Two-in-one model Designed by Mr.S.Paramasivan & Mr.Kalimuthu of Water Aid .
- Size of the chamber made big since it was the first pilot model with two vent pipes .



SCOPE - TRICHY



**Professor Johan Olof of Sweden with Ms. Gangully, UNICEF
New Delhi Mrs.P. Amudha, UNICEF Chennai opening the first
ECOSAN toilet in Thanneer pandhal on Nov.18th , 2004
(World Toilet Day)**



Kaliyapalayam – 2 in 1 model, 2002



3 in 1 model, 2005



Drop hole in the middle, urine hole with proper slope in the front wash water bowl in the rear

**Mrs. Shantha Sheela Nair, I.A.S., Secretary RD
Dept., Harvesting the banana in Kaliyapalayam -
2003**



**A very pleasant job - cutting the
banana bunch grown with
Compost Toilet water**

SCOPE, Trichy

Pipe above squatting slab - 2010



Plastering outside - 2010

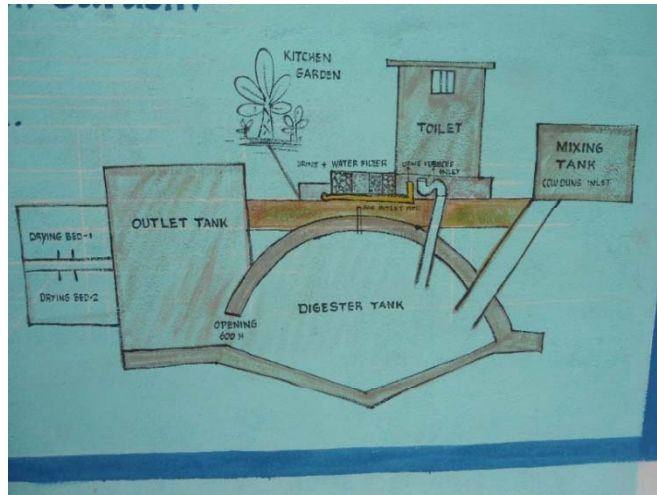


ECOSAN with Incinerator

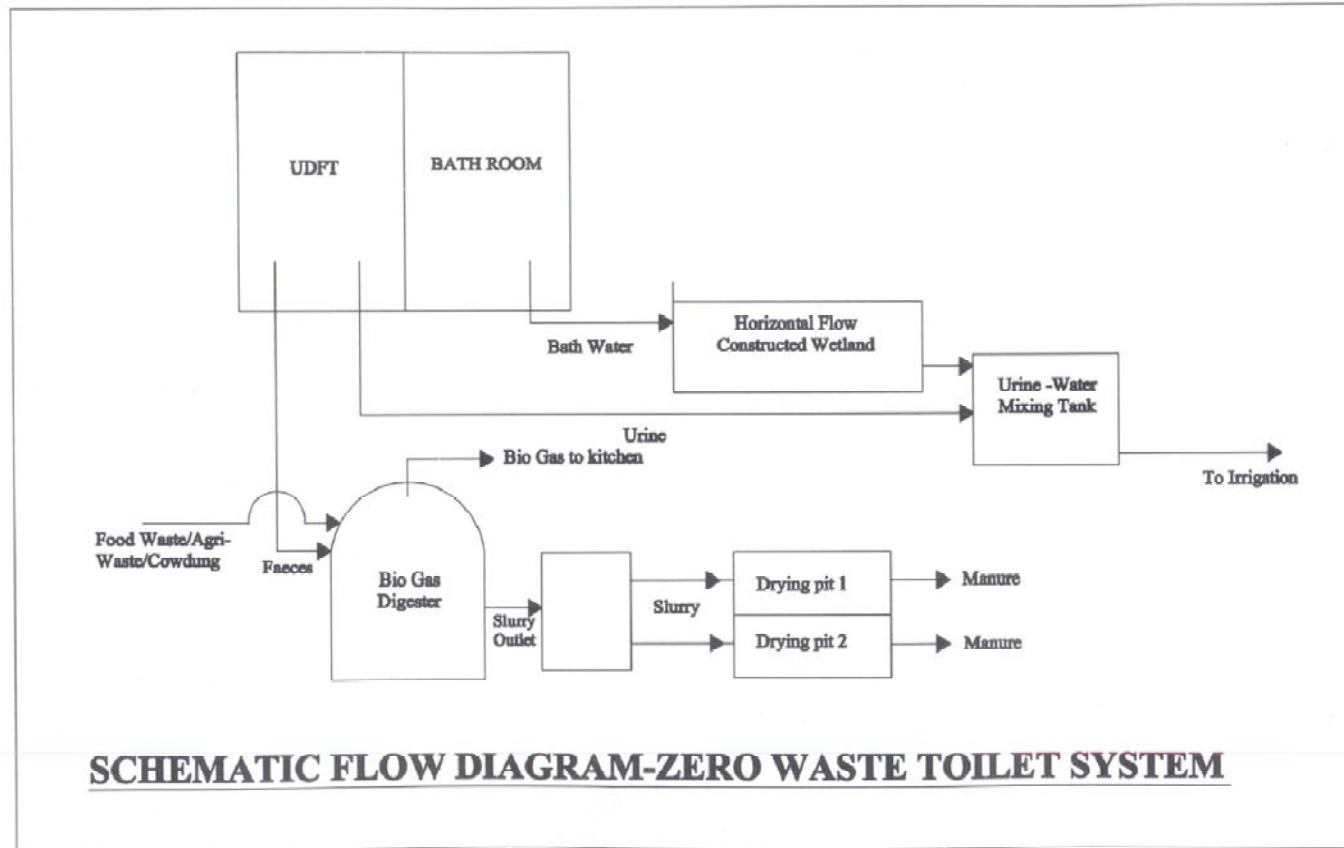
Thimmapuram - 2011



Urine Diversion Flush Toilet with Biogas (Kodunthurai) - 2011



Zero Waste Toilet System (ZWTS)-2012



To be opened this evening

ECOSAN Chamber opening Mr. Arun Dobhal, WES Specialist – UNICEF, 2011



RESEARCH

Urine as a Fertilizer in the research paddy field

- Taking advantage of the availability of urine in the Musiri ECCT, TNAU is now studying the “potential of source separated human urine as liquid fertilizer”, in 0.25 acre plot in 2007.
- The second phase research done in 2008
- The site divided into 30 plots where the crop raised under different dosages of urine.
- The crop condition monitored closely, and various parameters recorded.



Two paddy crops harvested, research result is encouraging.



5/16/2012

SCOPE

Horticulture and Short term crops by using urine and compost from Ecosan Toilets supported by DDWS, Government of India



5/16/2012

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**Struvite (nutrient in urine in powder form)
Extracted by IIT, New Delhi Research Scientist at
Musiri reactor under UNICEF programme**





Cash awards for the Beauty Contest

	<u>1st Prize</u>	<u>2nd Prize</u>	<u>3rd Prize</u>
“Best Garden”	Rs. 5,000/-	Rs. 2,500/-	Rs. 1,000/-
“Best Outside Decoration”	Rs. 5,000/-	Rs. 2,500/-	Rs. 1,000/-
“Best Inside Decoration ”	Rs. 5,000/-	Rs. 2,500/-	Rs. 1,000/-

First time in the world people get money for using the toilet – Musiri



- ✿ Based on the challenges, problems and difficulties SCOPE had improved its model several times from 2001 – 2012
- ✿ We are again learning and trying to improve ECOSAN UDDT
- ✿ Appropriate technology is a continuing process depending on the changing situation
- ✿ Let us join hands to further to serve our environment



*Thanks to
all*