

# **Wetlands Conservation & Sustainable Management in the Nilgiris – a beginning**



# OBJECTIVES & METHODOLOGY

- Survey and mapping of crucial wetland habitats – ecological aspects, socio-economic situation of stakeholders, to have dialogue and advocacy with the Government for declaring wetlands as important conservation areas & to develop local management plans.
- Selection based on previous field visits, knowledge & hill water project & questionnaire prepared for physical parameters, biological parameters, threats, anthropogenic activities and management issues through 4 teams.

# LIST OF WETLANDS SURVEYED

- Ooty: 13 wetlands
- Gudalur: 5 Wetlands
- Kotagiri: 15Wetlands
- Coonoor:5 Wetlands

Out of these 5 wetlands have been selected for making LMP after taking into considering all the parameters involved. The names of the Wetlands are Taranadmund, Konavakarai, Padanthurai, Nedugula & Raliah.

# Wetlands in the Nilgiris.....

- In Urban Areas– converted to residential plots, Dumping ground of garbage and sewage.
- In Rural areas- encroached for community halls, schools, public toilets and source tapped for supplying drinking water to towns.
- In Rural areas- large areas converted to agricultural land, used for pumping out water for agricultural purpose, free flow of pesticide into the wetland, eucalyptus units set-up adjacent.
- In forested areas and privately owned Tea Estates- Some protected, others used as picnic spots and for fishing activities, presence of invasive species











# Action taken from April to June 2006....

- Nursery – Vettiver(432 No.), Acorus Calamus (214 Nos)& Syzigium(50 Nos), Salix(90 Nos), Macaranga indica(50 Nos), Canarium(30 Nos.) & Strobilanthus (54 cuttings) raised to be planted in the wetlands. ( Totally - 920 saplings). One woman has been recruited to take care of the nursery & latter of the campus.
- Briefing about the importance of wetlands & why wetlands should be conserved.
- Planted about 50 saplings of wetland spp on the wetland by the local people & KS staff.
- Wetland Walk undertaken on (6<sup>th</sup> June 2006) from Mission compound to Kambai Kadai through Happy Valley
- T-shirts on wetlands conservation were released on the same day.
- Information brochures on wetlands distributed to local people both in English & Tamil.
- School children from CSI & St. Mary's school participated in the walk learning & spreading the message.



# Wetland Walk & Planting at Mission Compound





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So far two field visits has been made to make a local management plan interacting with the local people, namely the Taranad Mund & Konavakarai wetlands.

Wetland (aquatic) plant inventory has been completed for all the wetlands.

All biological, physical parameters has been recorded. The anthropogenic pressures (threat status) to the wetlands also recorded.

Water quality tests were conducted for 14 wetlands out of all wetlands surveyed.

All Wetland data has been consolidated & put into GIS for taking better decision & selecting wetlands for better management.

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All wetlands surveyed using GPS & perimeters has been generated to make maps & know their size pattern in terms of areas



# Work ahead.....

- Preparation of local Management Plan for the selected wetlands is underway.
- Workshop with Stakeholders and decision Makers to be held on September 15, 2006.
- Wetland prototype in campus – yet to develop?
- **Posters are being prepared & will be distributed to local people, Schools, NGOs, Private organizations & Government after the workshop.**



# Water test for Wetlands

Permissible limits	pH	Temp( <sup>o</sup> C)	Rchl(mg/l)	Turb	Chloride	Fluor	Phosp	Iron	Hard	Ammoni	Colif	Remark
Drinking water	6.5-8.5	10	0.2	5-10	250-1000	1		0.3	00-60	1.5	Nil	
Irrigation water	4.5-9.0											
Fresh water (aquatic)	6.5-9.0		0.01					1		0.02		
Marine water (aquatic)	6.5-8.5		0.01					1				
Raliah	7.3	15	0.2	10	212.7	0.6	0.1	1	40	1	Yes	soft water, low fluoride content
Bergani (spring 2)	5	18	<0.2	10		0.6	0.1	1	80	1	Yes	medium water, low fluoride content
Bergani (individual well)	6.2	20	<0.2	10		0.6	0.1	3	80	1	Nil	medium water, low fluoride content
Nedugula	6.4	21	<0.2	10		0.6	0.1	3	40	1	Yes	soft water, low fluoride content
Thalaikunda Well 1	5.8	20	<0.2	25	no color	0.6	0.1-0.5	1	40	1	Yes	soft water, low fluoride content
Thalaikunda Well 2	5.9	20	<0.2	10	no color	0.6	0.1	3	400	1	Yes	very hard water, low fluoride content
Denad temple well	6.3	20	<0.2	25	886.25	<0.6	1	3	40	1	Yes	soft water, low fluoride content, high iron
Denad drinking water	6.5	18	<0.2	10	886.25	0.6	<1.0	1	40	<1.0	Yes	soft water, low fluoride content
Denad naduhatty	6.5	17	<0.2	10	886.25	0.6	<1.0	0.3	40	1	Yes	soft water, low fluoride content
Cliffy	6.9	17	0.2	25	354.5	0.6	<0.1	1	40	0.1	Yes	soft water, low fluoride content
Lovedale	6	20	0.2	25	886.25	0.6	0.1	3	40	<0.1		soft water, low fluoride content
Longwood shola	6.2	18.5	<0.2	25	531.75	0.6	0.1	3	40	1		soft water, low fluoride content
Halakarai	6.1	19	<0.2	10	886.25	0.6	0.1	1	40	no colour	char	soft water, low fluoride content
Manvyal	8	24	0.2	10	67.355	1.5	0.2	0.3	120	1		



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# Inventory of Wetland Vegetation

Hyperlink....

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# A Glance at the budget

- Budget allocation & expenses for three months starting April – June 2006.
  - Allocation – 610,000
  - Expenses – 493416.50
  - Balance - 116,583.50
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