

Eco Innovation Field Programme

An Eco Innovation Field Programme was organised by Department of Communication, Madurai Kamaraj University and NCSTC, DST, Govt. of India Under the project Eco Rise Challenge and S&T Communication for Young Change Makers.

In the Programme local community with knowledge of making Palmyra Products give first hand exposure to innovate new products with expert artisans.

As an outcome, A Palmyra leaf Automobile Seat Cover and a Leak Proof Vessel were developed.



Making of Palmyra Leak Proof Vessel in the field



Eco Innovation Programme with local community on making Palmyra alternatives

Palmyra Seed Planting Programme at Sellur Tank

The Dept. of Communication organized Palmyra Seed Planting Programme at Sellur Tank jointly with Neer Nilaigal on 27.08.2018. The key events of the programme are Palmyra Palm Seed Plantation and Presentation by Nature Experts including Dr. Badri Narayanan, Dr. Baburaj. The local community of Sellur participated in the programme.



Presentation on Palmyra and Sangam Literature



Plantation of Palmyra Seed



Palmyra Seed Planting Programme at Muniyandi Temple Tank

Palmyra Seed Planting Programme organised by Dept. of Communication, Madurai Kamaraj University was held at Muniyandi Temple Tank, Vadakkampatti, Thirumangalam on 1.09.2018 with the support of local community. Presentation on Palmyra, Youth and Communication for Protecting Local Water bodies was delivered.



Palmyra Seed Plantation Programme at Vadakanpatti Tank, Tirumangalam



Field Immersion with Youth and Local Community

பிளாஸ்டிக்கிற்கு மாற்றாக பனை பொருட்களை பயன்படுத்தலாம்

பனைப்பழங்கள் நடவு தீவிரப்பயிற்சி துவங்கலாம்

திருவங்கலம், செப். 1: பிளாஸ்டிக்கிற்கு மாற்றாக பனை பொருட்களை அறிவிக்கப்பட்டுள்ளதால் திருவங்கலம் கட்டிடப்பட்டுள்ள, மதுரை அருகே வடக்கம்பட்டி கி. தா. பனை யின் தரும் தீவிரப்பயிற்சி தொடங்கியது.

மதுரை மாநகரம் உள்ளிட்ட அருகே உள்ள வடக்கம்பட்டி குளத்தைச் சுற்றி நேற்று அத்தகைய ஊர்கள் பனை யின் தரும் பனை தாது பனை சூழலில் ஆர்வம் கள், இளைஞர் குழு மற்றும் கிராம மக்கள் ார் ியில் நடந்த இயல்பில் துவக்கி வைத்து, மதுரை காமராசர் பல்கலை, பேராசிரியர் தாதுதீவிரம் பேரவையே, "பனை மரம் தமிழகத்தில் வாழவில்லை" எனும் தீவிரப்பயிற்சி துவக்கி வைத்து, பனை மரங்களை உள்வாங்கி வைக்க வேண்டும் என்று கேட்டுக் கொண்டது. அனைத்து பனை மரங்களை உள்வாங்கி வைக்க வேண்டும் என்று கேட்டுக் கொண்டது. அனைத்து பனை மரங்களை உள்வாங்கி வைக்க வேண்டும் என்று கேட்டுக் கொண்டது. அனைத்து பனை மரங்களை உள்வாங்கி வைக்க வேண்டும் என்று கேட்டுக் கொண்டது.

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Palmyra Seed Planting Programme at Karisalkulam Tank

Palmyra Seed Planting Programme at Karisalkulam Tank was organized by Panai-Olai on 02.09.2018. Palmyra and Communication of Alternatives to One-Time Use of Plastics was presented. Volunteers from Madurai city participated in the programme.



Presentation on Palmyra and Communication of Alternatives to Plastics



*Palmyra Seed Planting Programme at Karisalkulam Tank
Palmyra Seed Planting Programme at Karisalkulam Tank*

Palmyra Seed Planting Programme at Thodaneri

Palmyra Seed Planting Programme at Thodaneri jointly organized by Dept. of Communication, Madurai Kamaraj University and Suzhiam, on 02.09.2018. Palmyra and Life of Tamils was presented and how can Palmyra be an alternative to plastics was explained. The local youth of Samayanallur and the Students of Dept. of Communication participated in the programme.



Presentation on Palmyra and Life of Tamils



Palmyra Seed Plantation

Palmyra Seed Planting Programme at Arittapatti Sengundra Ayyanar Tank

Palmyra Seed Planting Programme at Arittapatti Sengundra Ayyanar Tank jointly organized with Nature Secure Foundation on 08.09.2018. The event focused on Palmyra Palm Seed Plantation and Presentation on Palmyra and Ecological Heritage. The Local Community and the Dept. of Communication, Madurai Kamaraj University participated in this Palmyra Seed Planting Programme.



Palmyra Enthusiasts with Palm Seeds



Palmyra Seed Planting Programme at Arittapatti

Palmyra Seed Planting Programme at Madakkulam Tank

Palmyra Seed Planting Programme at Madakkulam Tank jointly organized by Madakulam Tank Protection Group, Thirunagar Pakkam, Several other organisations and Department of Communication on 09.09.2018. The Highlights of the event are Palmyra Palm Seed Plantation and Presentation on Role of Media and Community in Protecting Palmyra and Water bodies.



Presentation on Role of Media and Community in Protecting Palmyra and Water Bodies



Palmyra Seed Plantation by local community, students and activist groups.

Palmyra Seed Planting Programme at Thimmanatham Tank

Palmyra Palm Seed Plantation and Presentation on Palmyra and Landscapes of Tanks organized by Mr.Chinnapandi, Panaimara Iyakkam, Usilampatti and Dept. of Communication, Madurai Kamaraj University on 30.09.2018. The Local youth and the Students of Communication participated in the programme.



Planting of Palmyra Seeds at Thimmanathbham Tank



Presentation on Palmyra and Landscapes of Tanks

Photo Walk- Nilaiyur Canal

Photo walk to Nilaiyur Canal, Madurai organized by Dept. of Communication, held on 9 Sept. 2018. The students of Department of Communication, Madurai Kamaraj University and Mr. Selvam Ramasamy, Nature Photographer, Madurai Participated in the event.



*A talk on Nilaiyur Canal and its Livelihood for People by
Dr.S.Nagarathinam, Professor & Head, Dept. of
Communication, MKU.*

Palmyra Seed Planting Programme at Pattinapakkam Coastal Area - Chennai

Planting of Palmyra Palm Seeds organized by local Community people of Chennai at Pattinampakam Beach on 16.10.2018.



Palmyra Seed Plantation by the Local Community at Pattinampakam Beach



Palmyra Seed Planting

Field Immersion Programme -Kirudhumal

Field Immersion Programme at Kirudhumal River organized by Dept. of Communication, Madurai Kamaraj University on 16 April 2019. Water sharing issues within state were sensitized among the youth. Prof. Rajamanickam, Tamil Nadu Science Forum and Mr. Jayachandran participated in the event.



.Field Immersion Programme at Mottakazhundu-The Origin of Kirudhumal in Madurai.



Water sharing issues within state is explained among youth.

20th Madurai International Documentary and Short-film Festival-2018

20th Madurai International Documentary and Short-film Festival-2018 organized by Marupakkam, Madurai and Co-organized by Department of Communication, at Madurai Kamaraj University on 10th December, 2018 in CIC Seminar Hall. "Waves from the Deep" directed by Prof. Swarnavel Eswaran was Screened to the Students. More than 40 Students Participated in the Event.



Discussion with Prof. Swarnavel Eswaran, Michigan State University, USA.



Screening of the Documentary 'Waves from the Deep'

Photo walk to Keelakuyilkudi Eco-Jain Spot, Madurai

Department of Communication, Madurai Kamaraj University organized the 21st Photo walk to Keelakuyilkudi Eco-Jain Spot, Madurai on 5 April, 2019. The Students were educated regarding the ancient water body of Keelakuyilkudi Lotus Pond and the historical aspects of the Jain Cave and Sculpture. The famous golden scenario of the Madurai.



*Talk on Photographic Techniques by Mr.R.Selvam,
Nature Photographer, Madurai*



*Students of Dept. of Communication, Madurai
Kamaraj University.*



Photo Walk at Keelakuyilkudi Jain-Spot.

Small Millet Food Festival at Arittapatti, Melur Taluk

A Small Millet Food Festival was organized by NCSTC, DST, Govt. of India and Dept. of Communication, Madurai Kamaraj University on 3rd June 2018 as a Part of field study tour of Eco-NEXT Media Lab Programme in Arittapatti, Melur Taluk. Small Millet Food Festival was arranged with different types of food recipes. The objective of the festival was to disseminate the S&T information behind the Small Millets. Small Millets are resistant to drought and pests. So they are eco-friendly organic product of Mother Nature.



Small Millet Lunch arranged at Arittapatti for Experts and Participants.



Small Millet Festival at Arittapatti

Keezhadi and its Eco-Heritage for Water Conservation- Field Study

A Field Study to Keezhadi and its Eco-Heritage for Water Conservation was organized by NCSTC, DST, GoI and Dept. of Communication, Madurai Kamaraj University on 3rd June 2018 as a part of field study tour Eco-NEXT Media Lab Programme. The Field study to Keezhadi was to explore the Eco-Heritage for Water Conservation and its Construction.



Exploring the Ecological Heritage of Keezhadi



Exploring the Water Conservation structure of Keezhadi.

19th Madurai International Documentary and Short-film Festival-2017

19th Madurai International Documentary and Short-film Festival-2017 organized by Marupakkam, Madurai and Co-organized by Department of Communication, at Madurai Kamaraj University on 8th Decembar, 2017 in CIC Seminar Hall, Madurai Kamaraj University. More than 50 Students Participated in the Event.



Inaugural function of the Session of 19th International Documentary and Short Film Festival, Madurai.



Interaction with Film Maker Mr.R.P.Amudhan



Speech by Ms. Sameera Jain Documentary 'Reterospective'

NILAYUR CANAL

Eco-Media Site
Nagamalai-Pudukottai
18 Oct. 2016

Nilaiyur canal that runs through Nagamalai Pudukottai in Madurai district acts as the source of livelihood for thousands of farmers and recharges ground water to the towns and villages. The state of this canal in the urban area is becoming worse day by day. This canal has become a habitat for dengue mosquitoes.

Dumping of broken glasses and rotten goods in this canal primarily used for agriculture becomes the reason for sanitation issues to people living along the canal. Toxic waste is being dumped into this canal. Dumping of polythene, plastic, animal wastes and carcasses is the prime reason for the health issues that the people around this canal face.

On 18 Oct. 2016, grown shrubs and garbage hidden inside them were removed. Along with that well grown *prosoisjuliflora* trees have also been removed. Nagamalai Pudukottai Panchayat President Mr. K.C.B. Jeyakumar participated in this event. Impacts: Sensitization of Local Public with Scientific Information to Protect from Dengue and other health hazards.

Report of Field Study/Work
Project Under Mission ECO-NEXT, NCSTC,
Department of Science Technology
Government of India



National Council for Science &
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Department of Science and Technology,
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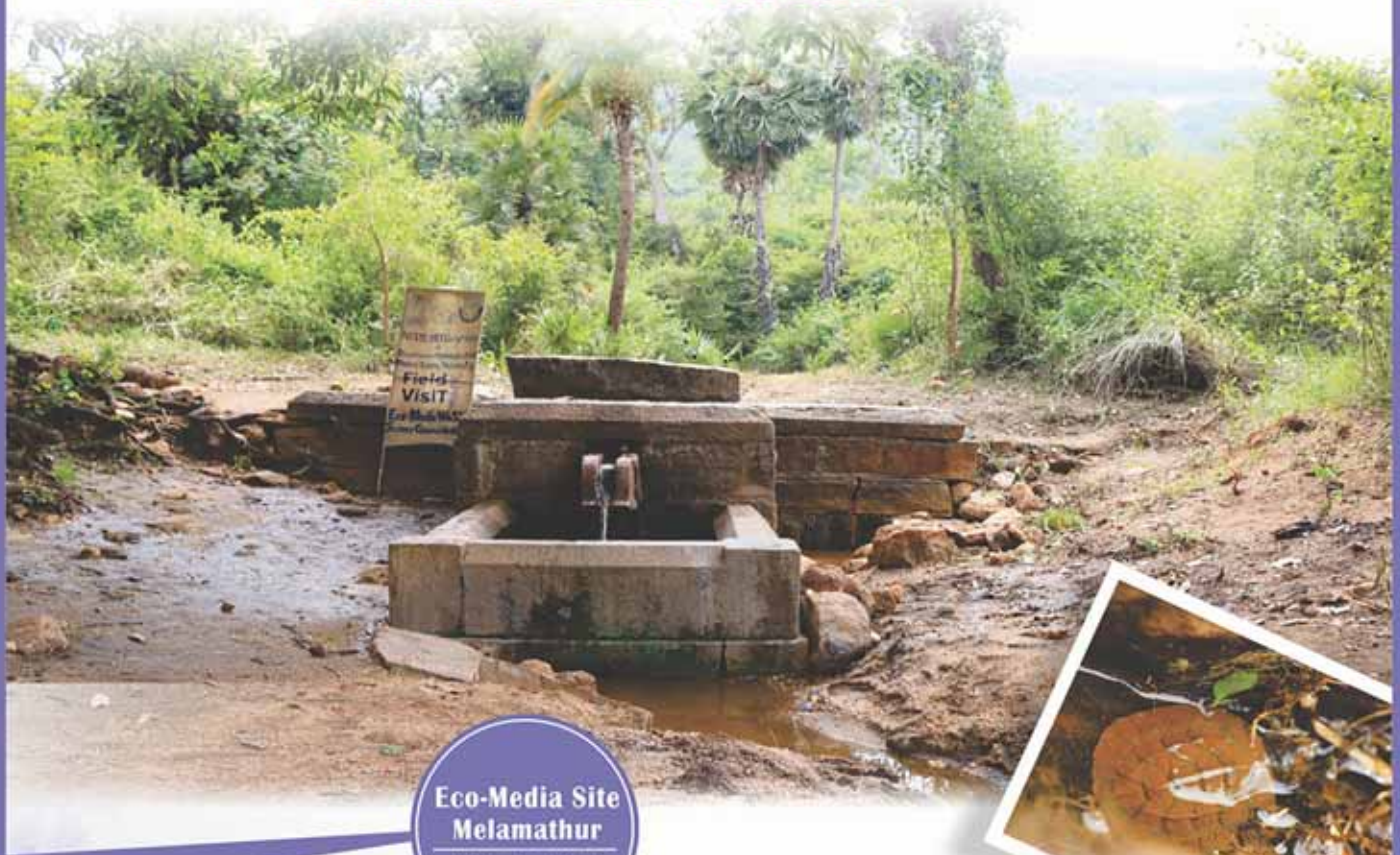


Department of Communication
Madurai Kamaraj University



PULLOOTHU – Natural Water Stream

Mission Eco-NEXT



Eco-Media Site
Melamathur
19 Oct. 2016

Pulloothu, a clean water stream with natural beauty is located in Melamathur panchayat in Madurai district. It has become an open space liquor bar and has lost its glory. Since this is a herbal spring this had been a place where women, children and families were visiting often.

Since, this place is infested by alcoholics and anti-social elements, general public refrain from visiting this place as often as they once used to. On 19 Oct. 2016, shrubs had grown densely blocking the path of the water flow were removed. Now, birds, turtles animals and monkeys that live near this place can easily access the drinking water.

Plastic bottles, liquor bottles, polythene bags, other wastes thrown here were also removed. Melamathur Panchayat President Mr. Karupaiah participated in this event. Impacts: Involvement of Local Public. Support from Panchayat for public place for everyone's entry - not a place for open-bar.



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KIRUDHUMAL River

**Eco-Media Site
Achampathu**

20 Oct.2016

Kiruthumal River had once overflowed with water like flash floods in Madurai. Today's young generation will never know that such a river exists. This river has become the sewage of Madurai City. The river faced the issues of blockage, discharge of sewage, plastic, polythene and toxic wastes. Due to indiscriminate dumping, encroachments and poor rainfall, the river has stagnated in multiple places. These wastes have made this river to die. The state of this river has affected 15 thousand acres of agricultural irrigation area about 150 villages.

TMDL - Total Maximum Daily Load of the river has been drastically increased inside the city. On 20 Oct. 2016, during the eco-media work, liquor bottles, plastic and polythene were removed along with the shrubs from the river bed in Achampathu village. This will prevent further dumping in the river bed.

Erkudi-Achampathu Panchayat President Mr. Sadasivam and Dr.P.Vijayan, Registrar i/c, Madurai Kamaraj University participated in this event. Impacts: involvement of Local Public. Support from Panchayat for reviving the river - which was mentioned in Tamil literature.



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Madurai Kamaraj University

GUNDAR RIVER

Mission Eco-NEXT



**Eco-Media Site
Thirumangalam**

22 Oct. 2016

Gundar River originates from small streams from the catchment area of Western Ghats in Aundipatti, Theni district. Issues including insufficient rainfall, encroachments, Prosopis Juliflora trees, sand mining have stopped the river's flow.

Farmers have been requesting to get water from Vaigai and to implement the inter-linking project of Cauvery, Vaigai and Gundar. On 22 Oct. 2016, Prosopis juliflora trees grown under the new bridge near the Aarukan Bridge in Thirumangalam were removed. Students from Kalasalingam University also joined hands with local youth.

Prosopis juliflora trees big and small were uprooted and removed from the river bed. Municipality Health Officer Mr. Rajarathinam and Health Inspector Mr. Sikkanthar participated in this event. Impacts: Increase of media sensitivity on the river. Good support from media.



Report of Field Study/Work
Project Under Mission ECO-NEXT, NCSTC,
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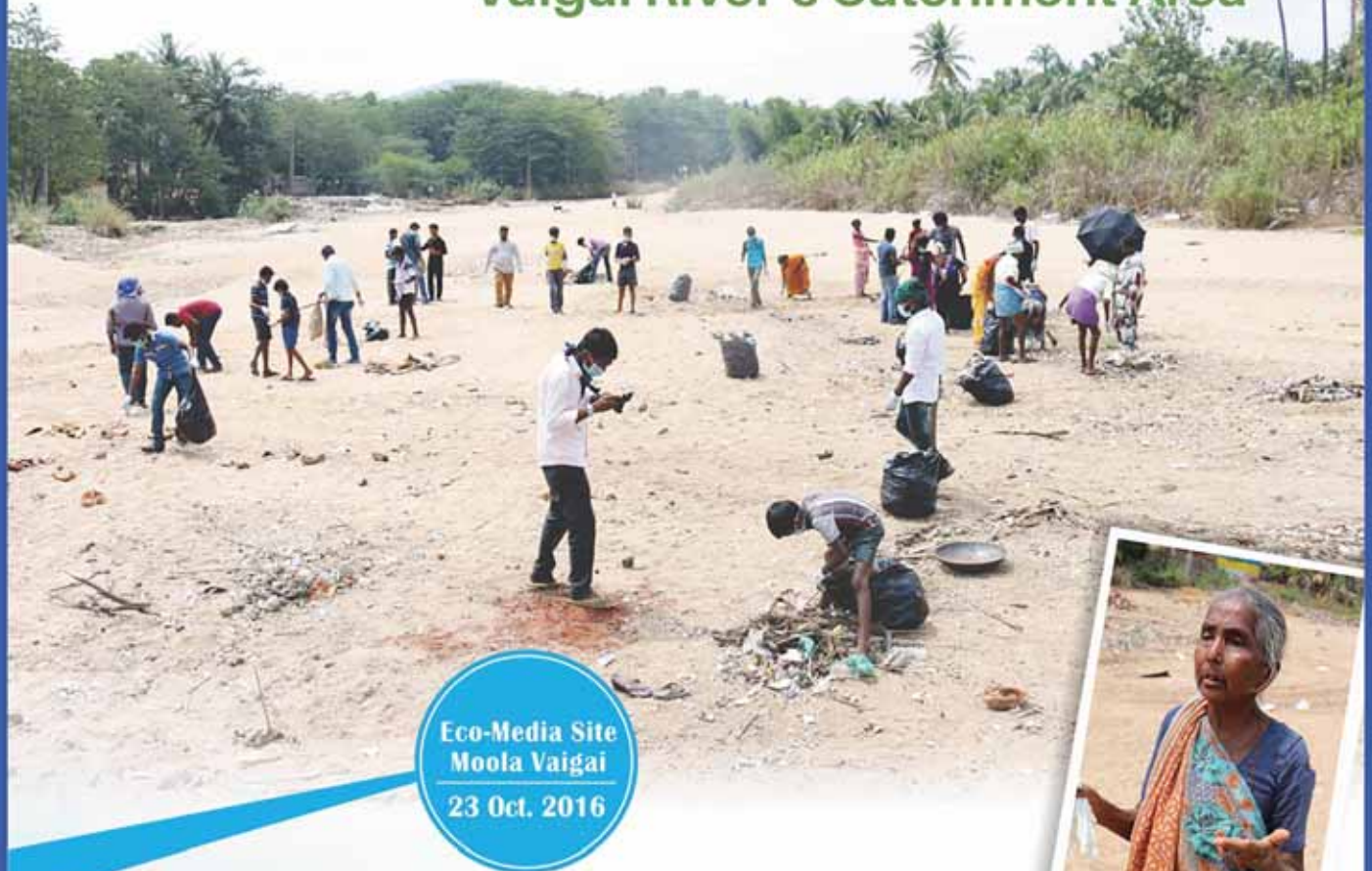


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VARUSHANAADU Vaigai River's Catchment Area



Eco-Media Site
Moola Vaigai
23 Oct. 2016



Varushanadu Vaigai River Catchment Area of Theni district is a place of natural beauty. Tamil Nadu's important river Vaigai originates here. Due to the scanty monsoon, Moola Vaigai (Place of origin) is now seen without water.

Varushanadu river bed's sand which has to shine like a glass in the sun rays is now making our heads hang in shame by the presence plastic, polythene and broken glasses of liquor bottles on the sands. The water from Moola Vaigai River goes to Vaigai dam, along with the plastic, polythene and sewage.

On 23 Oct. 2016, Eco-Media operation was initiated to restore the natural beauty of the Moola Vaigai catchment sand. Garbage, needles, medicines and polythene items embedded in the sand were removed. Students from local school, youth and local public participated in this event. Impacts: Local Public and Media Supported. Sensitization with scientific information was delivered to the people who abuse the catchment area.



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Madurai Kamaraj University

TEPPAKULAM— Tamil Nadu's Largest Temple Tank

Mission Eco-NEXT



Eco-Media Site
Madurai City
25 Oct. 2016

Vandiyur Mariamman Teppakulam in Madurai is the biggest temple tank in Tamil Nadu. Teppakulam was the place where sand was dug to construct the Thirumalai Nayakar Mahal in 1645. The tank that looks magnificent when it brims with water, is now littered with garbage and human waste.

The length and width of the tank is 304.5 meters. The surrounding wall of the tank is of 15 feet high. There are underground pipes to bring in water into the pond from nearby Vaigai River. This tank acts as the underground water source for the people living around this area.

Burning plastic, Styrofoam wastes that accumulate from nearby shops and eateries leave carcinogens in the air. This threatens the residents with several health hazards including cancer. People use this dried tank as a place of open defecation. On 25 Oct. 2016, during eco-media drive, garbage was cleaned and the activities were documented in Teppakulam Tank.

Nearby general public, Thiagarajar College students, lecturers, social activists also participated in this eco-work. North eastern part of the tank was cleaned of all wastes dumpings. Impacts: Shopkeepers were sensitized not to burn Styrofoam, plastics inside the tank and insisted them to use dustbins. And Public were sensitized for stopping open defecation. Newspaper reports on the event alarmed the authorities with realities of the Tank - which is culturally important to the people.



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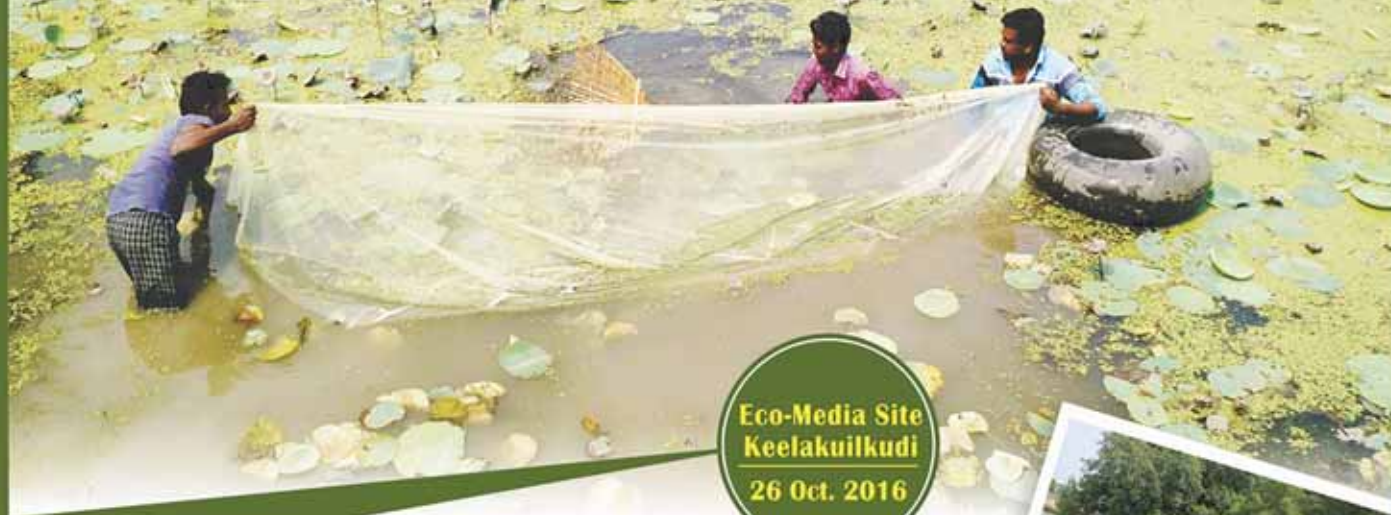


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Madurai Kamaraj University

KEELAKUYILKUDI LOTUS POND Eco-Water Jain Heritage Site



Eco-Media Site
Keelakuilkudi
26 Oct. 2016

The lotus pond located in Keelakuyilkudi of Madurai district adds additional beauty to the village. Chettipudavuand Pechippallam Jain schools of B.C. 2nd century were once functioned near this lotus pond. Ancient Jain sculptures, beds and Tamil Brahmi inscriptions can be seen in Keelakuyilkudieven today.

In the Jain hillock area, there is a place where Pechippallam Jain School was once running along with natural water resources. In this lotus pond, there was an over growth of duckweed which spreads fast. These weeds were occupying the places of lotus and were changing the appearance of the pond. Such weeds posed danger to aquatic ecosystem in the pond since these weeds depleted the pond of its nutrients and prevented evaporation.

On 26 Oct. 2016, the polythene and plastics thrown in this pond kept floating here and there on the surface were removed along with weeds. With the help of youth, students and Keelakuyilkudi villagers, were restored the part of the pond's beauty. Laboratory results show that bacteria count in this pond is more as water is stagnant in this pond was a longer period. Impact: Local youth are interested to take charge of Pond for maintaining its nature.



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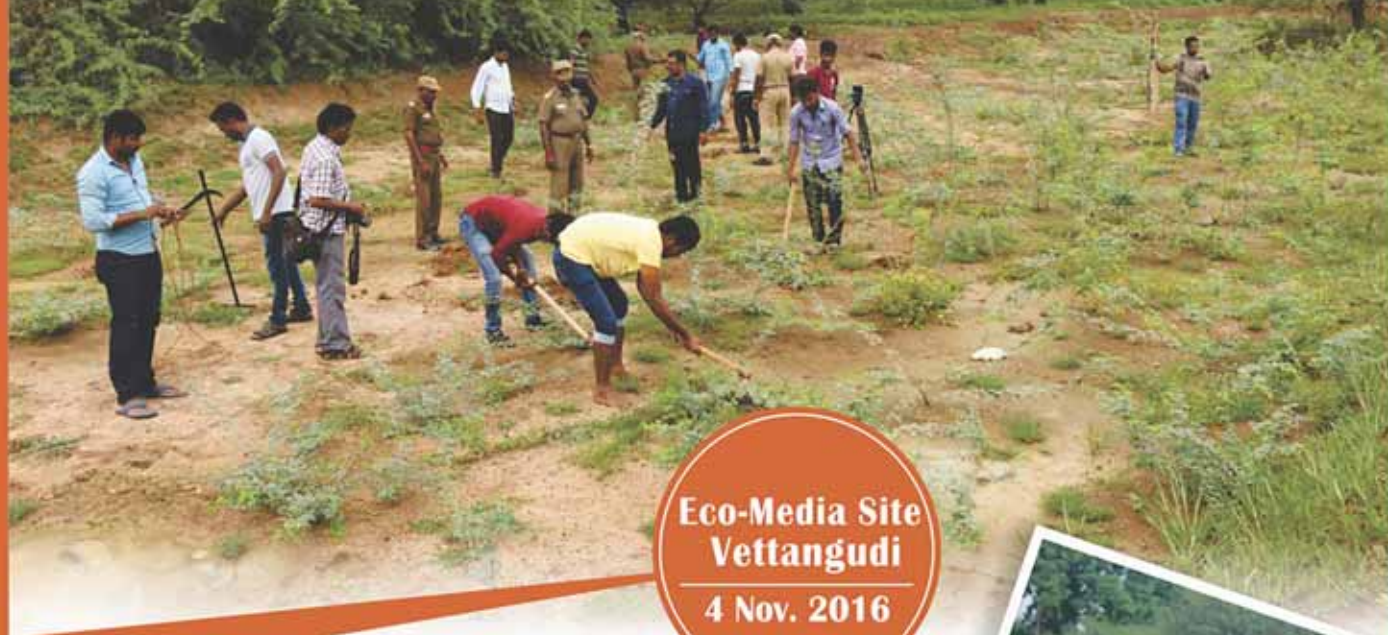


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VETTANGUDI BIRDS SANCTUARY



**Eco-Media Site
Vettangudi
4 Nov. 2016**

Vettangudi - Keelakollukudippatti Birds' Sanctuary is located near Tirupattur, Sivagangai district. Vettangudi includes the irrigation tanks of Periyakollukudippatti and Chinnakollukudippatti villages.

This water body attracts 217 bird species from Europe, Russian countries, and from North Asian regions. They come down here for laying and hatching eggs. It covers an area of 38.4 acres. It was declared as a sanctuary during the year 1977. *Prosopis juliflora* is a biggest threat to this natural tank. Overgrowth of *prosopis juliflora* has restricted the growth of *Acacia nilotica* (babul) trees on which the birds actually prefer to nest and breed.

On 4 Nov. 2016, *prosopis juliflora* saplings that have grown inside the tank were removed. Birds prefer to stay in *Acacia nilotica* trees. *Prosopis juliflora* is a threat to the sustainability of the water source here. The village people do not burst the crackers even on Diwali days. Impact: Media and youth were sensitized through active scientific information.

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WESTERN GHATS – SATHURAGIRI-GRIZZLED SQUIRREL SANCTUARY

Mission Eco-NEXT

Eco-Media Site
Horse Spring
7 Nov. 2016

Sathuragiri Sundara Magalingam Temple is located in Western Ghats near Srivilliputhur and Watrap in Viruthunagar district.

This Grizzled Squirrel Sanctuary area is spread across 485 Sq. Km from Srivilliputhur, Virudhunagar District and its northern side extends up to Aundipatti, Theni District, with the mid portion lies in Madurai District and the south side extends up to Tirunelveli District. We could find hills, forests, valleys and tourist spots in this area.

Plastic and polythenes thrown here are becoming threat to the wild animals living in the Western Ghats. Grizzled Squirrels also suffered by hunting and forest fire. On 7 Nov. 2016, Polythene, plastic and throw-away found on the way from the foothills up to KudhiraiOotru (Horse Spring) were removed. Impact: Eco-dialogue driven activism- Members from Social Organizations participated - Kalasalingam University students also participated.

Report of Field Study/Work
Project Under Mission ECO-NEXT, NCSTC,
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National Council for Science &
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Department of Science and Technology,
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VEDASANDUR KINATHUPATTI Watersheds

Eco-Media Site
Kinaththupatti

26 Nov. 2016

Micro Watersheds have been constructed where drainage of streams comes to place at the foothill of mountains. This helps the area to improve the ground water level. Indian Space Research Organization (ISRO) releases satellite information to identify locations where District Watershed Development Agencies (DWDA) have been setting up the micro watersheds for the benefit of the drought prone areas.

Vedasandur Taluk, Dindigul dt., has been known for best practices of having micro watersheds in the areas of Vadamadurai Block. Kinaththupatti located near Vadamadurai was chosen for documenting the best practices. Even though this area is located near a hill, the level of underground water has gone below a thousand feet. This has created issues for irrigation needs, water needs for general public and animals.

On behalf of District Watershed Development Agency, Dindigul district, small check dam setups in this area with the participation of general public have helped to harvest the rain water in this area. Hence the ground water level in this area has increased. On 26 Nov.2016, during the documenting work, plastic, polythene, shrubs found in the check dams were removed and cleanliness of the check dams was ensured. Impacts: Students, local public and media were sensitized. Newspapers further disseminated the scientific information.

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VAIGAI RIVER

Mission Eco-NEXT



Unlike any other rivers in Tamilnadu, Vaigai River has been praised in the Sangam literature about 2000 years ago. When Poet Mangudikilar mentioned about the resource of the land of Pandiyas in Madurai Kanchi, he said rain filled up Vaigai and in turn the river filled up the tanks and irrigated agriculture lands with water. Now in Madurai underground bore well pipes have reached to 350 feet in average in many places.

Vaigai which used to run with water throughout the year is now in the state of carrying water only for few days in a year. Vaigai, which is normal near Sholavandan, gets polluted by human activity as soon as it enters Madurai city. The riverbed has become a dumping ground for the city's waste.

On 15 December 2016, on behalf of the project, #SaveVaigai Campaign was in action, in the presence of Dr. P. Vijayan Registrar i/c of Madurai Kamaraj University, Dr. DavamaniChristober, Principal of The American College, Madurai inaugurated the clean drive. The plastic and polythene wastes were removed from a stretch in the river. Many of the youth have stepped into Vaigai River for their first time. They participated in this cleaning activity. Impact: Youth, Local Community Sensitized.

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BEAR SHOLA FALLS IN KODAIKANAL – PALANI HILLS

Mission Eco-NEXT



Eco-Media Site
Kodaikanal
21 Dec. 2016

Bear Shola falls is located in Kodaikanal, the crown of Palani hills. It is a place of nature's bounty in the laps of skyline trees. As South-West and North-East Monsoons failed fewer amounts of water flow very slowly in this falls. Chill climate along with the Sun's mild temperature makes a beautiful experience of the Bear Shola falls. Since Kodaikanal hills tourism has got importance, it is facing ecological challenges. The falls had been littered with plastics and polythene.

Assistant Conservator of Forests Mr. Balakrishnan, presided the cleaning activity. Mr. Abbas, Kodai Smile Association, Mr. Bakiyasamy, Nature Enthusiast and Mr. Bala secretary, Palani Hills Conservation Council (PHCC) participated and presented speech.

During the cleaning process plastic, polythene and the garbage thrown by tourists that were hiding in the plants were removed. Along with that, shrubs were also removed. Plants with lengthy thorns, buried plastics and wastes have also been removed.



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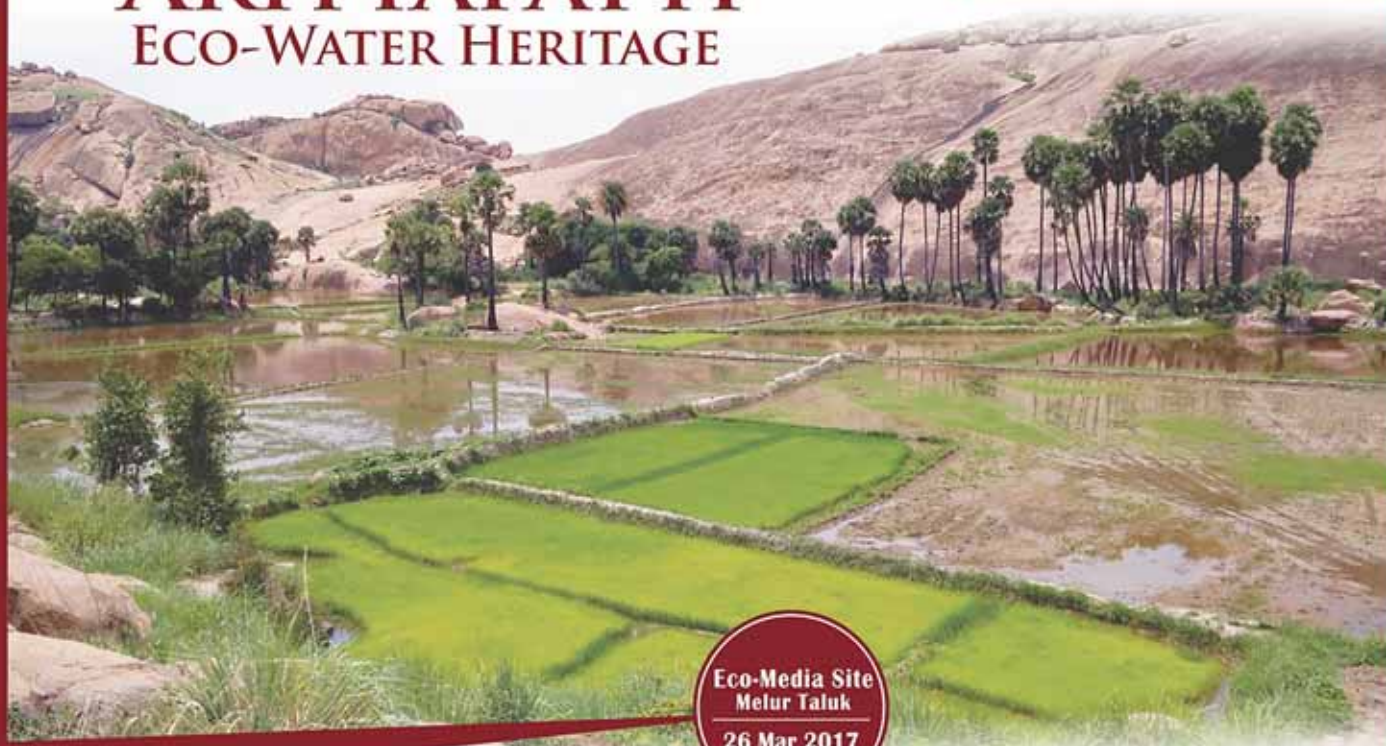
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ARITTAPATTI ECO-WATER HERITAGE

Mission Eco-NEXT



Arittappatti, the eco-friendly village, is located in Melur Taluk in Madurai District. The mountain range fencing the western side of the village is called as Kizhinjamalai or Arittappatti hills. In the stone inscriptions it is also referred as Thirupilayan hill. On the northern slope of the hills, below the elevated rock structure, there is a natural cave formation. Inside the cave formation, a stone bed used by Jains is still there. Above the cave, the rock is carved like an eyebrow to prevent rain water from entering the cave. There are two Brahmi stone inscriptions from BC200 on the outer wall of the cave. Outside, on northern side of the cave, there is a sculpture of Tirthankara meditation under triple umbrella. Below that there is an abugida stone inscription dated back to BC 1000. During ancient period and after that Arittappatti hills was renowned for Jainism.

Jains highly respected the water resources and they lived near those water bodies. Agriculture remains as the major source of income for majority of people living in Arittappatti. Agriculture is highly reliant on rain water. Arittappatti hills function as nature's gift for people to save the valuable rainwater.

National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India and Dept. of Communication, Madurai Kamaraj University jointly organized a field study in this area on March 26, 2017. In continuation of that a fieldwork was conducted on May 14, 2017.

The main reason for Arittappatti being a heritage village is its water bodies. There are 52 specific water bodies. Like rivers, tanks, small waterfalls and streams on the hill. There are three water tanks. One is Aanaimelkondaan tank, second one is Periyakulam tank and the third one is Kaamankulam tank. Among these three tanks, for Aanaimelkondaan tank, Periyar river is one of the water sources. But the main water source is from the tank above the hills and Puthukulam tank. Water from both the sides join together to form major water source that fills this tank.

In case of Periyakulam tank it depends on only 20% of the Periyar water. Because the water comes from a small canal located six kilometres away. So, they are not relying on Periyar water. Water storage above this hill is called Melappam tank. This was constructed during British period. If we get heavy rain for one day, for 30 days, we would get continuous flow of water from the hills. This is how the hill stores water and route it to the tank. Within 20-50 feet, the bore well water is available anywhere in Arittappatti village in Metur Taluk, Madurai.

Similarly, the underground water is readily available well within 150 feet. This village is that much eco-friendly. The third tank Kaamankulam tank, mainly relies on rain water. Water stored on the hills pours down once in a week. It is called Aayakettu (Irrigation Capacity). Kaamankulam tank is capable of supplying water to approximately 170 acres of farmland.

Similarly, a valley is located above the tank. There are about 50 acres of agricultural land. For all the agricultural needs, water stored on the hills is mainly used. The tank supplies water to almost 220-230 acres. On both sides of the tank, there are over 500 old big trees. Those high grown trees make this tank unique. During the Mullai Periyar water project planning, from each dam canals were constructed. Government authorities asked people of Arittappatti for constructing canal for enabling Periyar water to fill the Kaamankulam tank. But they told them that rainwater itself is enough for them. We don't need the Mullai Periyar water. They didn't construct canal for that tank. Kaamankulam tank is that much special. One of the auspicious water body in Arittappatti is called Darmam. Darmam water storage is only for drinking purpose. Even during harsh summer, this water won't dry up. People use this water for cooking purposes. Towards southern side of this hill there are two ponds Kollankulam 1 and Kollankulam 2. Those were also constructed during British period.

This eco-water heritage site hosts many birds because of the presence of water on hills. This village is in fact a pioneering village in Madurai. Let us preserve the ecosystem and natural beauty of Arittappatti. Let us get the benefits of water resources. On 2nd June 2018 during Regional ECO-NEXT Media Lab programme, Arittappatti was developed as Eco-Water Heritage site.



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MUTHUPATTI PERUMALMALAI

Jain Eco-Heritage

Eco-Media Site
Nagamalai-Pudukottai
30 Mar. 2017

Muthupatti Perumalmalai located in Nagamalai-Pudukottai in Madurai district is a historical Jain location. Jain's nurtured the eco-water resources. This place is a reflection of natural heritage of more than 2000 years old.

In the last two years, this area was affected by drought and it poses threat to the biodiversity of this place. Highly-elevated rocks of this place is the haven for multiple-species.

Honeybees, great horned owls, hoopoes and rock lizards (geckos) can be seen here. At the top of the rocks where big honeycombs were there have vanished because of hunting and drought. The absence of honeybees is directly connected to agricultural production. The number of great horned owls are reducing because of lack of cultivation and use of pesticides. The geckos found on these hills are found nowhere else in this region.

National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India and Dept. of Communication, Madurai Kamaraj University jointly organized a field work on eco-media on March 30, 2017.

Let us protect Jain Heritage site. Let us protect the ecological resources.

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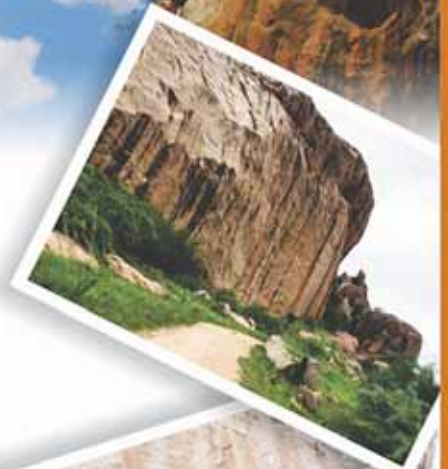
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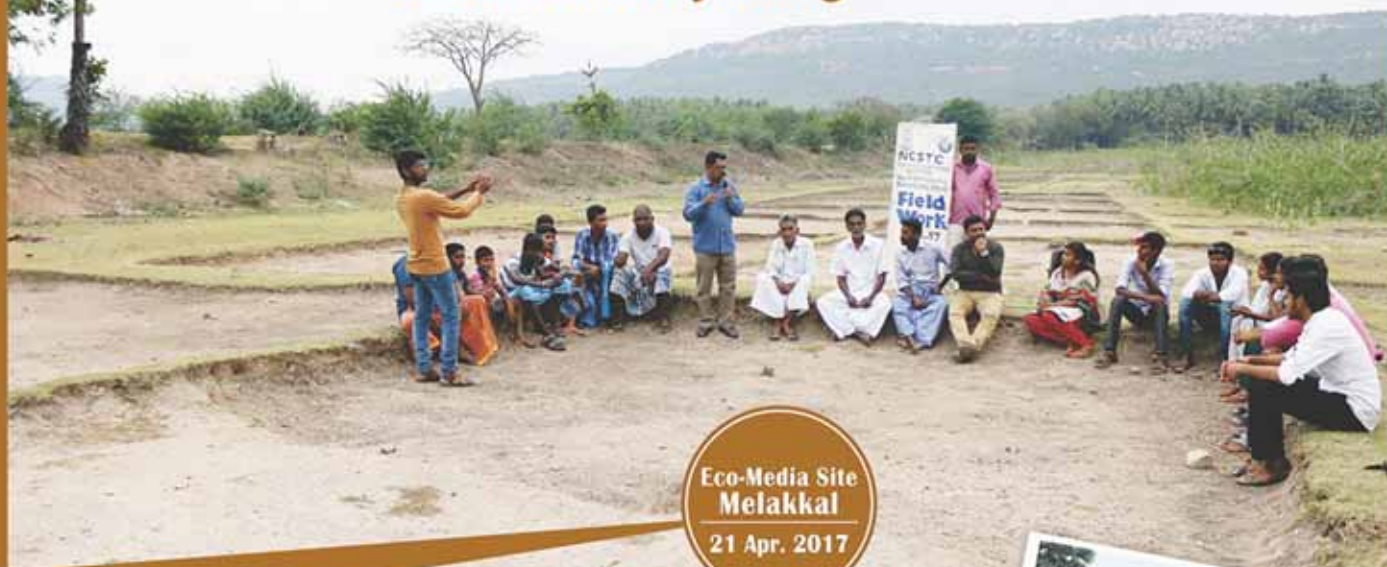


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KACHCHIRAYIRUPPU TANK

Session of Storytelling



Eco-Media Site
Melakkal
21 Apr. 2017

Kachchirayiruppu Village is located in the lush green and bounty of Nature, which is close to Melakkal-Vikkiramangalam road, Madurai Dt.,. This village attracted "PattikaadaPattanama" film makers. In 1972, then popular actors Sivaji and Jayalalitha were acted for a scene in Kachchirayiruppu near Melakkal Tank.

The scene is entirely different now. Students, local public were sitting on the bed of totally dried Melakkal Tank near Kachchirayiruppu for a Nature Visit on the eve of Earth Day programme jointly organized by National Council for Science and Technology Communication (NCSTC), Department of Science and Technology, Govt. of India and Department of Communication Madurai Kamaraj University, on 21 April, 2017.

Mr. Machakaalai local resident of Kachchirayiruppu told the story of the glorious past of the Tank: Melakkal Tank receives water from Vaigai through Nilayur Canal link. More than thousand buffaloes graze here. In a half an hour, one family can catch at least one kg. of fish for their food. This tank supported livelihood of people of 10 villages.

Those times were golden to the locals as lease system of tanks was not introduced. Now silt prevents the storage capacity and more than 400 hectares of Agriculture land became dry lands. Farmers and workers face severe problems here. Vaigai dried and streams from Nagamalai hills also need maintenance. Prosopis Juliflora has occupied in many places of the Tank. Mr. Subramanian local leader of Kachchirayiruppu, students of Madurai Kamaraj University and local youth were present during the storytelling session.



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KADAMBA TREE

Mission Eco-NEXT

ENDEMIC AND ENDANGERED TREE SPECIES



Eco-Media
Site
Vellimalai
26 March 2017
Sokkalingapuram
23 Apr. 2017

The soil of Madurai and Kadamba tree have a great connection. With the botanical name, *Neolamarckia Cadamba*, this tree is widely present in South and South East Asia regions. When the city was surrounded by Kadamba trees, the place was called as Kadambavanam. Kadamba trees are mentioned in ancient Tamil literature.

Kadamba tree is the auspicious tree of Madurai Meenakshi Amman Temple. The main reason for its extinction is the lack of seed setting. Impact of the ecosystem is another reason. The condition of the soil and drought are also responsible. Cross-pollination is very important, but the growth and pollination of Kadamba trees are very slow. When Vaigal River was filled with water, there were lush green forest.

As part of the 10-day workshop jointly organized by the National Council Science and Technology Communication and Department of Communication, Madurai Kamaraj University, visited Vellimalai temple grove to document Kadamba tree, the team shocked that the tree was chopped off and smuggled out. Earlier the tree was used in Calico printing. It can be used to make sculptures. Kadamba tree is very apt for sculptures with intricate design.

Another full-grown Kadamba tree in Sokkalingapuram near Vadipatti, Madurai Dt., was identified for documentation. The village was earlier called as KadambanSolai. The documentation work held on Apr 23, 2017. Mr. Baburaj, Former Botany Professor, and Azhagu Raja, Samayanallur President of Oyaatha Alai led the event. Let us increase the number of Kadamba trees. Let us preserve the natural beauty of Madurai.



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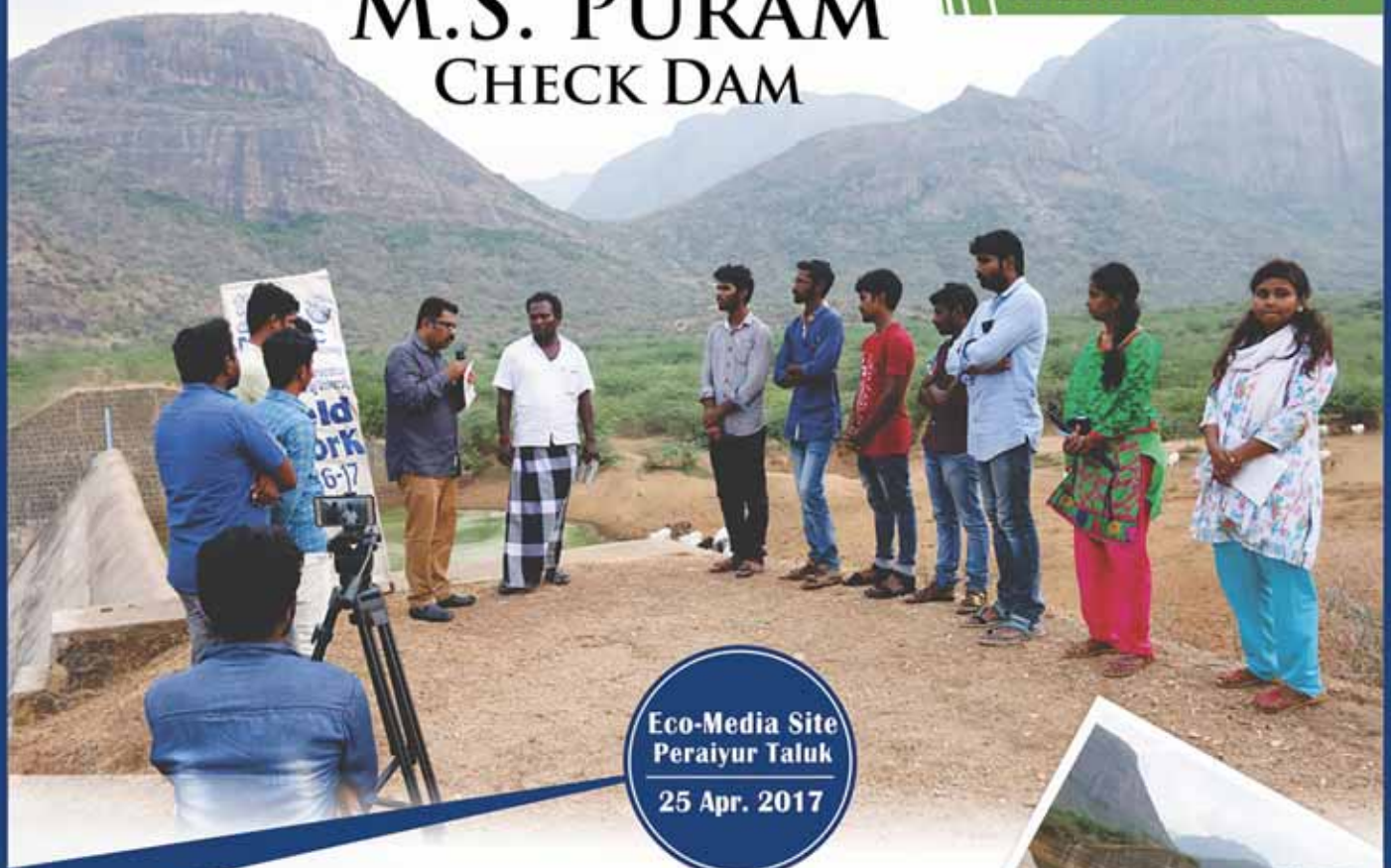
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M.S. PURAM CHECK DAM

Mission Eco-NEXT



Eco-Media Site
Peraiyur Taluk
25 Apr. 2017

In Madurai district, the ground water level is very low in Sedapatti Taluk. M S Puram Check Dam located in Peraiyur Taluk is an attempt to overcome drought in the area. As the water flowing from the hills are blocked by the check dam, the ground water level is increasing. Wild animals and cattle living in that area are benefitted. As this water is helping agriculture, the livelihood of the villagers is also improving.

After the construction of the check dam, there is a huge difference in the ground water level. In the areas where the ground water level is below 1000 feet, the construction of check dams have helped in increasing the water levels. A Big check dam was constructed in the Sedapatti region. Check dams were constructed in many other places in Tamil Nadu. Check dams can be constructed using ISRO data. People can take lead for constructing check dams and micro watersheds.

This check dam provides water to over 1000 cattle, wild animals, and birds in this region. National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India and Dept. of Communication, Madurai Kamaraj University jointly organized an interactive session at M S Puram Check Dam on Apr 25, 2017. Former Panjayat President, Kesari, village youngsters and students participated in this event. Let us increase the number of check dams. Let us increase the water resources.

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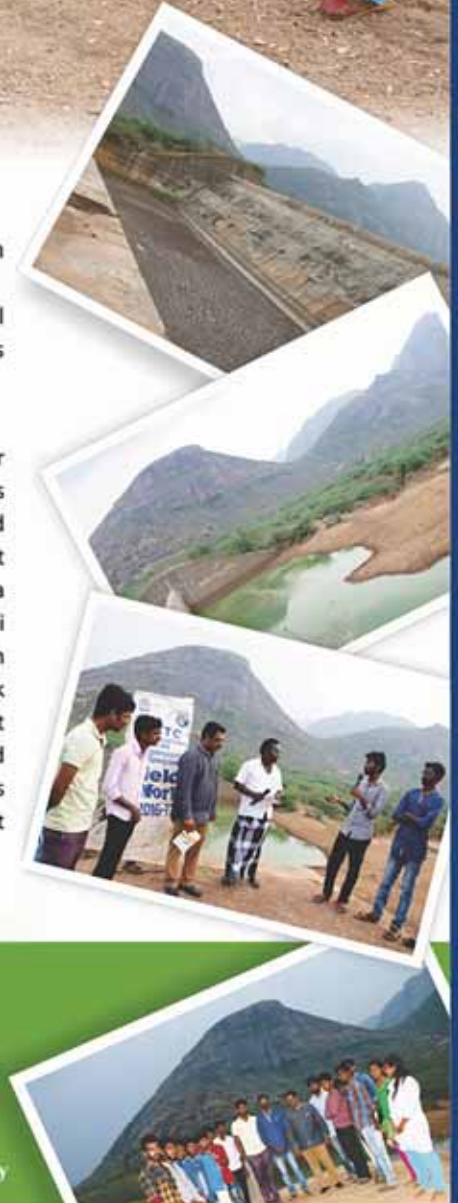
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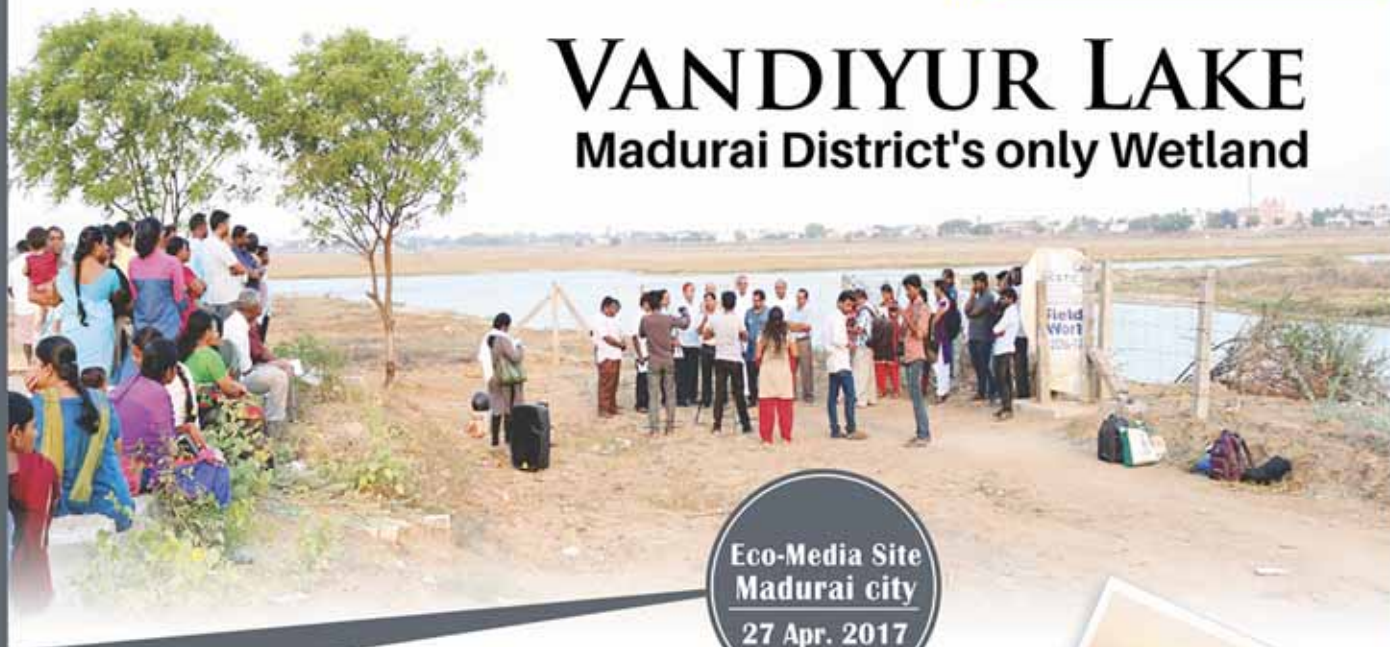


Department of Communication
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VANDIYUR LAKE

Madurai District's only Wetland



Eco-Media Site
Madurai city
27 Apr. 2017

Madurai Vandiyur Lake is only wetland in Madurai Dt. It is a main water source for the city. Vandiyur Lake is in north block surrounded by areas in Madurai city including, Vandiyur, Managiri, Uthangudi and Tallakulam. Now, Vandiyur Lake is spread across 572 acres. When it is full of water, it looks like a sea. As the Vandiyur Lake is covered with water hyacinth filled with silt, the water storage level has decreased. The blockage in water passage and delayed rainfall are leading to decrease in underground water level.

We believe that developing a strong bond between the public and water resources is vital for protecting the water bodies. A canal from the new bridge in Sellur passing through the underground passage covering American College and Managiri Bypass brought Vaigairiver's water. Even before Periyar water, which started 100 years ago, lake had Vaigai water source. We have constructed roads and in the name of urbanization, we have spoiled the canals and water sources of the lake.

The Walkers Club actively met the Collector multiple times to protect this water source. Supply channels help us to know the water source of Vandiyur Lake. Approximately lake gets 300 Cusec of water from Vaigai. During flood in Vaigai, this lake would fill in 40 mins. Another important source is, Sathiyar Dam, which enters as streams via Maattuthaavani. The capacity of that water is 400 Cusec. Another source is, Periyar Main Canal. From 30th sluice, we get 3 Cusec every day. There is one other source -- Periyar Main Canal 5, which is routed via Iyer Bungalow towards Maattuthaavani flower market. If public were well aware during those days, we would have guided them not to close the water passage. From 2012 to 2015, there was surplus water.

A Storytelling event was organized as part of the National Council Science and Technology Communication, Department of Science and Technology, Govt. of India. Students from Dept. of Communication, Madurai Kamaraj University, youth and local volunteers met at Vandiyur Lake and participated in this event on Apr 27, 2017. Federation of Vandiyur Tank, Coordinator MrRagavan; Secretary MrPandi, Founder of Nature Secure Foundation Mr. Selvam Ramasamy, Prof. Baburaj and PWD Asst. engineers Mr.Subramani and Mr. Mohan Kumar participated in this event. Let us protect Vandiyur Lake. Let us save Madurai's ground water resources.



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KIDARAM - Water Harvesting Vessel

Mission Eco-NEXT

Eco-Media Site
Chettinad
21 May 2017

Located in South Eastern side of Tamil Nadu, Chettinad encompasses 56 towns in Sivagangai district and 20 towns from Pudukkottai district. The people living here are called Nagarathaar. The architectural beauty of Chettinad houses are well-renowned globally. The houses where Chettinad Nagarathaar live are bigger in size. Each and every house here beautifully reflect the traditional Chettinad construction style. In Chettinad houses there is a big open courtyard, which brings wind and light into the house.

National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India and Dept. of Communication, Madurai Kamaraj University jointly organized a field study on Chettinad Kidaram Water Storage vessel on May 21, 2017. Chettinad is a dry and hot area. In the past, bore wells to fetch water are rare. Rain water was the main source of drinking water.

Chettinad Nagarathaar have long been constructing houses in such a way to collect rain water for their needs. During rainy season, the water from these sliding roofs get directed towards four edges and falls on the courtyard. The water collected from the sliding roofs were saved in the metal vessel kept in the corners of the courtyard. Kidaram is the biggest among the vessels used in Chettinad houses. Bigger-sized Kidaram adds beauty to the courtyards of Chettinad house.

Kidaram is used for rain water harvesting. Since 18th century, this has been widely used in houses in Chettinad. The specialty of this vessel is its capability in preserving rain water for one year. This vessel is made up of Copper and Brass. It is 3 feet tall. During functions and marriages, this vessel was used to store rain water or for collecting water from ponds or other sources. Nowadays, it is rarely used. Even the vessel making has reduced. Only those vessels that are in Chettinad houses are still in use. Overall, it is rarely used. Let us cherish our tradition. Let us save rain water.

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RAMANATHAPURAM

Mission Eco-NEXT

Aatrangarai - Vaigai River Emptying Site at Bay of Bengal



Eco-Media Site
Aatrangarai

26 May 2017

Vaigai River originates from Moola Vaigai in Varushanadu, Theni district, passes through Theni, Dindugal, Madurai, Sivagangai and Vaigai empties in Bay of Bengal at Aatrangarai village in Ramanathapuram.

National Council for Science and Technology Communication, Department of Science and Technology, Govt. of India and Dept. of Communication, Madurai Kamaraj University jointly organized an Information Sharing Session at Aatrangarai Village on 26th May, 2017.

Only when Periyar dam is filled with 182-feet-level water, we can get 10.5 TMC of water in Vaigai River. Only then Ramanathapuram can request for one or 1.5 TMC of water. But, the situation today is, water level is not raised beyond 136-142 feet. Even the Supreme Court has passed the judgement to increase the water level.

Only after fulfilling the water requirement of 15,000-acre of farm lands in Cumbum valley, the remaining water should reach Periyar dam. Other than that, water sourced from 8,000 sq.km area including Moola Vaigai, Mayiladumpaarai and Vellimalai should be considered as Vaigai water source. Vaigai dam is the only dam in India with two different water sources. Vaigai is not a big dam. It only has 6,800 TMC water. Out of which, 4 TMC is from Periyar and 2,800 TMC from Vaigai. There is 21 feet silt. Right from Nilayur canal to Ramanathapuram, 13,600 acre of farm land require Vaigai water. Most importantly, 67,833 acre of farm land is from Ramanathapuram third ridge region.

This region has many tanks. In Ramanathapuram, there are 1,670 tanks. There are many tanks in Sivagangai and Ramanathapuram. The erstwhile integrated Ramanathapuram district had 10,000 tanks. There were over 10,000 Jamin tanks. In total, there are 1,670 system tanks. Out of which, 502 tanks are PWD tanks, which are bigger ones. RS Mangalam tank, which extends to 19.5 kms, is the second largest in Tamil Nadu and supplies water to 12,000-acre of farm land and supplies water to 72 other tanks. Next one is Ramnad Big Tank which was constructed during Kizhavan Sethupathi period. He combined eight tanks to construct Periya Tank which extends to 10.5 kms. Next one is Kalari tank, which extends to 8 kms and supplies water directly to 2,000 acres of farm land and indirectly to another 1,000 acres. Next one is Singarakottai tank. So, Ramanathapuram is known for its biggest tanks. Erstwhile kings have connected the tanks one after another in a seamless way. Because of decreasing level of river water, check dams were constructed. There should not be any sand mining in Ramanathapuram and Sivagangai districts.



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