# Natural Resources Development Project Kanyakumari - 629 702

Annual Report 2022 -23















# 1. Eco Friendly construction:

Organic Architecture is rooted in a passion for life, nature and natural forms and is full of the vitality of the natural world with its biological forms and processes emphasizing beauty and harmony. Its free — flowing curves and expressive forms are sympathetic to the human body, mind and spirit. In a well designed organic building we feel better and freer.

Using the strength to shape principal, curved forms such as Arches, Vaults, Domes and Spheres are stronger, more efficient and more economical than the equivalent rectilinear structures.

This vertical covers the following sustainable development Goals (SDG's)



## 1. Eco Friendly construction Technology

Training on "Green Construction technologies - 2 nos. – 56 attended participants learnt ........

- Embodied energy, operational energy and Life cycle assessment of different type of Eco-friendly construction technologies.
- Production of compressed earth Block, selection of soil and make it suitable for available soil at the site
- Different type of moulds and usages and method of construction.



- Method of construction of Rat-trap bond wall with different joints.
  - Construction of Different type of Arches, vault and Domes .and making moulds during the construction

- Manufacturing of Ferro cement doors -Platform making, Mesh laying, casting, curing, Handling, fittings etc
- Ferro Cement Roofing channels -Different type of Moulds, casting, Transport, fittings etc.,
- Ferro Cement Water Tanks -Different Sizes
- Ferro Cement Toilet & Bio gas Plants
- Precautions, Do 's & Don'ts & Repairing and Maintenance etc.,



- Participants visited...... Gramodaya Darshan park and different type of Green building technologies.
- Building design based on six Different climatic conditions in India.
- How Green building technologies helps in betterment of Sustainable development Goals



# 2. Water Management

There were about 40000 irrigation tanks dotting the landscape of Tamil Nadu. The tanks not only sustained agricultural development but were also useful to meet the water requirements of the community for a multiplicity of purpose. They were community-owned, operated and managed under a formal or informal institutional arrangement.

With the advent of British rule, the management of tank irrigation system was taken over from community and vested with the government agencies. In the process the tanks fell into a state of total disrepair affecting not only the farming but even drinking water became a problem. Keeping this in mind, VK-Nardep decided to work in the field of Water Management.

This vertical covers the following sustainable development Goals (SDG's)











## 2. Water Management

## 7 Training programmes - 700 participants attended

Participants learnt....

Harvesting Roof top water for drinking purpose.

- 1. How to make filter bed for drinking purpose.
- 2. Method sof Pipeline connections for harvesting rainwater
- 3. Different type of Storage tank methods

Surface water harvesting based on different type of soil in different regions.

- 1. Recharge tube well.
- 2.Check dams
- 3.Linking ponds and Lakes
- 4. Temple tanks
- 5. Contour bunds
- 6. Terrace Field Trenches etc.,









Greywater treatment ......

- Recycling of waste water from Bathroom, kitchen and washing utensils
- Grey water can be treated by the combination of mechanical, physical, chemical and biological methods.
- cost-effective grey water treatment structures
- Phyto remediation Biological agents like plants that remove heavy metals and other nutrients

- Participants learnt songs on Water and Environment
- Documentaries on Water showed to the participants, Games and Field experience stories onwatermanagement.
- How stake holders committee to be formed for further maintenance of water body

#### Participants learnt ...

- Practical Challenges for Water in Agriculture .Water is a critical input for agricultural production and plays an important role in food security.
- Importance of Millet cultivation.
- Visited Gramodaya park for leaning water management based on live models

#### 1.Veera Teertham

# Mythology and Spiritual Importance.....

According to Sethu Vasana Kaviyam, there are four Teerthams in the names of the ministers who came with Vibishana after their complete Sharanagati (surrender) at the lotus feet of lord Rama. One such is the Veera Teertham.

Anybody who takes a dip in this Teertham will be relieved of his sins and they will receive all forms of wealth.

#### **Etymology**

The Teertham was named after Veera, a character in the epic, Ramayana. Veera was one of the four aides of Vibhishana who deserted Ravana, because of differences over kidnapping Sita, and joined the army of Rama. Later, when Vibhishana was crowned as the king of Lanka, Veera became a minister.

#### Location....

The Veera Teertham is a stepped tank, located on the outskirts of Sambai area of Rameswaram Municipality. It has been buried in sand dunes and got located by the Green Rameswaram team. The Teertham was named after Veera, a minister of Vibhishana as mentioned in the epic Ramayana. The Veera Teertham is approximately 2.7 km from the west tower of Sri Ramanathasamy temple in the North West direction. It is in the vicinity of other Teerthams such as Sahadeva, Nakula and Arjuna.













#### **Process of Renovation**

The Veera Teertham renovation work started on 9<sup>th</sup> March 2022 after performing the traditional Bhumi pooja. A few local stakeholders from the village were present.

Before starting the actual work, a pathway was cleared of thorny trees and unwanted debris. The area was leveled and covered with sand for easy movement of men and materials. Subsequently the following work was carried out.

1. Finalizing the location of the Teertham, as it was totally buried under the sand

- 2.Cleaning the entire area, which was full of unwanted materials and palm leaves
- 3. Excavating the land using JCB
- 4.Constructing the side walls and parapet walls
- 5. Providing an entrance with steps to enter the Teertham
- 6. Provision of a gate
- 7.Installation of Naga Idols
- 8. Painting with traditional colours

Type: Stepped Tank Location: outskirts of Sambai area of Rameswaram

Coordinates: Lat- 9.30499, Long-79.31108

Key Measurements: L10.36 m B

6.40m D 1.22 m

Capacity: 80,900 litres

Water availability: Available

throughout the year

Literary mention: Skanda Puranam Affiliated to: Ramanathaswamy

Temple; HR&CE Deity: Lord Rama Survey no: 240/2

Ritual cleansing: Cures Sins and

Diseases

**Year of renovation: 2022** 

Renovation work sponsored by: Vivekananda Kendra



## 2. Naraneeya Teertham

## Mythology and Spiritual Importance

According to Sethuvasana Kaviyam, there are four Teerthams in the names of the ministers who came with Vibishana. They performed Saranagati (surrender) at the lotus feet of lord Rama. One is the Naraniya Teertham. It is huge.

Anybody who takes a dip in this Teertham will be relieved of his sins.

#### **Etymology**

The Teertham was named after Naraniya, a character in the epic, Ramayana. . His mother, Kaikesi, advised him to go and serve Shri Rama, who was at that time gathering an army to conquer Ravana and to recover Sita. Vibhishana left Lanka and joined Rama's camp. when Vibhishana was crowned as the King of Lanka, Naraniya was appointed as a minister by Vibishana.

#### Location

Naraniya Teertham is a tank, located on the outskirts of Olaikuda village. The waterbody had been buried under sand dunes before it was identified by the renovation team. The Naraniya Teertham is approximately 4.6 KM from the west tower of Sri Ramanathasamy temple in the North West direction. It is in the vicinity of other Teerthams such as Gaja and Narena.













#### **Architecture**

The original Teertham area was very huge and was more than an acre. However, we have renovated only a small portion of it. It's a T shaped water body, meant mainly for the forest animals and cattle. So, there is a ramp up to the water enabling an easy access for the animals. However, the other three sides are having parapet walls to avoid sand and silt entering the water body. It has a water holding capacity of 498000 litres. During the construction we found a lot of floating stones from the land and the entire area was full of lime stones

## Wild animals damaging the equipment

Since Naraniya Teertham is close to the forest, wild animals frequently visit the waterbody to quench their thirst. During the renovation period, the team received soft water from Rameswaram Municipality and stored the same in containers at the work site. To their surprise, one day, some unknown wild animals damaged the containers during the night and as a result water stored in the containers had completely drained off. The next day, the animals damaged the pipelines of the rainwater harvesting structure. To avoid this problem, the renovation team covered the water containers and pipelines with

Type: Stepped tank Location:

Outskirts of Olaikuda Village Coordinates:

Lat- 9.31534,Long-79.32719 Measurements: L11.46 m B 8.83m

D 2.43m = 245

L 9.75 B 6.09 De 4.26 = 253

Capacity: 498000 litres

Water availability: June-February

Literary mention:

Sri Skanda Puranam

Affiliated to:

Ramanathaswamy Temple; HR&CE

Deity: Lord Naraniya Survey no: 273

Ritual cleansing:

Cures Sins and Diseases

Year of renovation: 2022

## 3. Jatayu Teertham

# Mythology and Spiritual Importance:

As per Sethu purana vasana Kaviyam there is a Teertham in the name of Jatayu — Bird which communicated the abduction of Sita to Lord Rama. Anybody who has a dip in this Teertham will have the sins cleared and acquired punya and they will have the different forms of wealth.

#### **Architecture**

The entire construction of this water body is to suit cattle and wild animals. Thus, there is no gate so that the cattle can reach the water source without any difficulty. Moreover the steps are wide and almost like a ramp, so that the animals will not find any difficulty in reaching the pond. However it is raised by a parapet wall on three sides to prevent sand sliding.

#### Location:

Jatayu Teertham is a tank located in the forest area of Rameswaram Municipality, on the way to Dhanushkodi. Other water bodies namely Jatamakuta, Sarvaroga nivarana, Vibhishana and Sarabha Teerthams are in the vicinity. Tharavai wetlands are approximately 3kms away from Jatayu Teertham. Location (Lat-9.25655, Long-79.31602) Jatayu Teertham is located 6.4 KM from the west tower of Sri Ramanathasamy temple towards the South West direction.













#### **Process of Renovation**

Shri.Pakshi Sivarajan, literature scholar from Rameswaram who is also a volunteer of Green Rameswaram from its inception, informed us the existence of Jatayu Teertham. When the renovation team visited the location dilapidated Teertham structures were visible and the area was covered with thorny bushes. Water was stagnated in the area and wild animals use to quench their thirst in theTeertham. Initially renovation team considered the Jata Makuta Teertham, which is 1.5 km away from this spot, as Jatayu Teertham. A careful literature review and consultation with field experts cleared the ambiguity.

# Following renovation activities were carried out:

- I. Clearing thorny bushes
- ii. De-silting
- iii. Bund Strengthening
- iv. Side Wall repaired on all sides
- v. Cement Plastering
- vi. Parapet walls raising
- vii. Repair and Construction of steps
- viii. Entrance structure
- ix. Installation of Nagaraja idols on the parapet wall

Type: Stepped Tank
Location: On the way to
Dhanushkodi – inside the forest
Coordinates:

Lat-9.25655, Long-79.31602

**Measurements:** 

L9.14 m B 9.44m D 3.65m Water holding capacity: 314927 litres

Water availability:

Throughout the year

**Literary mention:** 

Sethu Purana Vasana Kaviyam Affiliated to: Ramanathaswamy

Temple; HR&CE Deity: Lord Rama

Survey no: 1044/2, Rameswaram village, Rameswaram Taluk

Ritual cleansing: Cures Diseases and

Removes the Sins Year of renovation: 2022

#### 4. Sharabha Teertham

#### **Etymology:**

Sharabha refers to "legendary animal with eight legs" (living in the forest), according to the Ramayana chapter 2.29. Sharabha is a creature in Hindu mythology that is part of lion and part of bird. According to Sanskrit literature, Sharabha is an eight-legged beast, mightier than a lion and elephant and which can kill the lion. Sharabha, can clear a valley in one jump.

Shaiva scriptures narrate that god Shiva assumed the Avatar (incarnation) of Sharabha to pacify Narasimha. While as per Skanda Purana: The purpose of Shiva assuming the form of Sharabha was to ensure that the lion body of Vishnu was discarded and he got united with his original divine form

#### Location

Sharabha Teertham is a tank located in the forest area of Rameswaram Municipality, on the way to Dhanushkodi. Other water bodies namely Jatamukuta, Sarvaroga nivarana and Jatayu Teerthams are in the vicinity. Tharavai wetlands are approximately 1kms away from Sharabha Teertham.

It is located 6.4 KM from the west tower of Sri Ramanathasamy temple towards the South West direction.













Following works were carried out:

#### Architecture

The entire construction of this water body is to suit cattle and wild animals. Thus, there is no gate so that the cattle can reach the water source without any difficulty. Only the steps have been constructed, even that are wide and almost like a ramp.

- I. Cleaning the surrounding area which was full of plates, paper, plastic bottles etc.
- ii. Removing the throny bushes
- iii. Taking out loads of sand and dumping it away by way of tractor
- iv. De-silting the Tank
- v. Giving proper shape to the water body

Constructing steps so that the devotees can enter the water body properly

Type: Stepped Tank

Location: On the way to Dhanushkodi – inside the forest

Coordinates: Lat-9.25655, Long-79.31602 Measurements: L5.48 m B 3.05m D 3.05m

Water holding capacity: 50977 lits

Water availability: Throughout the year Literary mention:
Skandanusanam Affiliated to:

Skandapuranam Affiliated to: Ramanathaswamy Temple;

HR&CE

Deity: Lord Sharabeswara Survey no: 1044/2, Rameswaram Revenue village: Rameswaram Taluk.

Ritual cleansing: Cures Diseases and Removes the Sins Year of renovation: 2022

Renovation work sponsored by:

#### 5. Vibhishana Teertham

# Mythology and religious significance

As per Skandapurana there is a Teertha made by Bibhisana (Vibhisana). It liberates one from sins. It subdues great miseries. It dispels ailments. It is like fire unto the heaps of great sins. It is the destroyer of the torture of Kumbhipaka and other Narakas. It destroys evil dreams. It is conducive to wealth. It removes poverty. He attains Vaikuntha.

#### **Architecture**

The entire construction of this water body is to suit cattle and wild animals. Thus, there are no wall or gate so that the cattle can reach the water source without any difficulty. Only the steps have been constructed on one side for easy access to the devotees.

#### Location

Vibhishana Teertham is a water body located in the forest area of Rameswaram Municipality, on the way to Dhanushkodi near Kothandaramar Temple. Other water bodies namely Jatamukuta, Sarvaroganivarana and Jatayu Teerthams are in the vicinity. Tharavai wetlands are approximately 1 kms away from Vibhisana Teertham.

VibhisanaTeertham is located 6.4 KM from the west tower of Sri Ramanathasamy temple towards the South West direction.













Type: Open with steps on one side

#### **Process of Renovation**

Though this has been located by the Green Rameswaram team in the year 2016 itself, we could renovate it only in November 2022. Green Rameswaram team was helped by the temple authorities for locating the Teertham. Teertham was tough to reach. Especially the materials transportation was a great challenge. After cleaning the area with JCB, Tractors were used with great difficulty as the pathway was wet and slippery because of the adjacent Tharavai wet land. Construction material was carried on head in the last stretch.

Following works were carried out:

- 1. Removing the thorny bushes
- 2. Cleaning the entire area
- 3. Digging the water body and cleaning the debris etc.
- Giving proper shape to the Traditional Water Body – Teertham
- 5. Providing steps for entry to the water body to the devootees
- 6. Installing Nagaraja idols on the entry pillars

for easy access to the water Location: on the way to Dhanushkodi inside the forest Coordinates: Lat-9.234226, Long-79.36455, Measurements: L 5.78 m B 3.11m D 3.20m Water holding capacity: 51000 litres Water availability: Throughout the year Literary mention: Skandapuranam Affiliated to: Ramanathaswamy Temple, HR&CE **Deity: Lord Rama** Survey no: 1044/2, Rameswaram village, Rameswaram Taluk Ritual cleansing: Cures Diseases and Removes the Sins

Year of renovation: 2022 Renovation work sponsored by: Vivekananda Kendra - NARDEP

## Maintenance of Renovated Teerthams

Vivekananda Kendra — Nardep started Reviving and Renovating the Traditional water bodies in the year 2013. Now after 9-10 years, time has come to repair, maintain and colour the water bodies again. This is essential as the erosion becomes fast because of saline atmosphere and gusty wind. Following works were carried out.

- 1. Removed the algae formation
- 2. Desilted some of the water bodies
- 3. Cleaned and plastered the walls and steps
- 4 Colouring of the walls and main gate





2.Kapi Teertham



3.Parasurama Teertham



4. Gyan Vapi Teertham



5. Arjuna Teertham



6. BhimaTeertham



7. S.K Kulam



8. Brahma Teertham



9, 10. Sahadeva & MahadevaTeertham



Mandapam renovated for Mahisasura vadham

Rameswaram people wanted us to do the repairing of mandapam for Mahisasura vadham festivals.







# 3. Sustainable Agriculture:

## Sustainable farming stands for:-

(I) Effective harvesting of sunlight (ii) Efficient water utilization(iii) Bio-diversity (iv) Integrated Nutrient-management and (v) Integrated Pest management

Besides reducing the costs and increasing the yield, the residue is non-toxic

Besides reducing the costs and increasing the yield, the residue is non-toxic, preserves the soil nutrients, and enlivens the MOTHER EARTH. The produce is also of a better quality.

Agriculture covers the following Sustainable Development Goals (SDG's)\_



## 3. Sustainable Agriculture:



- 4 Progm. - 59 participants



#### 2 . Training on Vermi Wash technology :

Participants Learnt - What is Vermi wash, Mass scale production of Vermi wash, Specialties of Vermi wash, Nutrient value of Vermi wash, Field application of Vermi wash for different type of crops.

Participants felt, the new system introduced by the Vivekananda Kendra is very simple and cost- effective to produce more vermi wash than regular vermi compost system and considerably reduce the space and good for Farmers. Vermi wash can be taken at a time of more than 200 litres. It can be used for an area of 5 to 20 acres.

#### 1. Training on Azolla Technology

Participants learnt, Package of practices for Azolla cultivation, Nutrient value, Azolla cultivation for feed and bio-fertilizer purpose, Pest and disease management of Azolla Cultural practices for optimisation of quality and quantity.

Participants felt that the Azolla technology is simple and cost effective. Azolla can be used as an ideal feed substitute for Dairy cattle. After implementing this technology, we will spread this in our relatives and friends circle.

#### - 6 Progm. - 128 participants



#### 3 Progm. - 82 participants



## 3. Training"Preparation of Liquid Bio-formulations"

Participants learnt - Different types growth promoters, Panchagavya, Fish amino, Amrita karaisal (Jeevamritam), Bijamritam, Compost tea, Themor karaisal, Multi-grains solution, Cow ark Factors involving in preparation, Storage techniques and application for differenttype of crops.

Participants felt that instead of purchasing in the market, we will start to prepare the growth promoters in our home and save the money

### 4. Training programme on "Organic farming"



#### - 7 programmes - 260 attended



Participants learnt Benefits for organic farming, Seed treatment Methods for increasing soil fertility (nutrient management), Crop rotation, Bio-control techniques for pest control, Four tier agricultural system, Irrigation management etc.

### 4 programmes - 44 participants

Participants learnt preparation of potting mixture, Selection of vegetables and fruits, Different types of composting techniques, Water management, Pre & Post harvesting techniques, Usage of waste materials fortheterrace, Horizontal and vertical gardens.



## Following Agriculture products prepared at J.C.Bose Nursery for Local Farmers:

seed packet - 2073 nos.

Grow Bag -152 nos.

Neem Cake - 102 kgs.

Plants -1158 nos.

Dry Ginger Astra -5.5 liters

Agni Astra -81 liters,

Azofert -50 packets

Azolla -137 packets,

Bijamirtham - 15.5 liters

Biomanure7,

Bio Pesticides -19 liters

Brahma Astram -39 liters

Sale Of Earth Worms-39 kgs.

E.M solution - 55.5 liters

Fish Amino - 675 liters.

Living Water 13 liters

Neem Astram - 12 liters

Neem Oil - 87.5 liters

Vermi compost - 2560 kgs.

Jeevarmirtham - 27.5 kgs.



# IV. Holistic Health

The ministry of AYUSH — representing Ayurved, Yoga and Naturopathy, Unani, Siddha and Homeopathy — has been making considerable strides towards incorporating these traditional health care systems into main stream health care practices. There efforts driven by the principles of Holistic health and wellbeing, have had for — reaching effects on the health landscape in India and beyond.

Thanks to Covid-19, slowly and gradually these alternative system of medicines are replacing the so called modern medicines. Vivekananda Kendra — Nardep is propagating Siddha system of medicine since last three decades very effectively.

Health covers the below mentioned Sustainable Development Goal





#### IV. Holistic Health

- Green Health Home 85 days 1546 patients
- Rural dispensary 17 days 59 patients
- Varma massage and Varma point treatment 659 patients





## Free Siddha Varmam Medical camp 1 progm. -128 attended

Local people benefited by the camp. 6 pharmacists voluntarily given the free medicines. A few siddha doctors gave voluntry service .Patients treated in Varmam massage, Varmam points stimulation etc.,

Some special case patients taken for further Varmam Research studies. Vivekananda Kendra - NARDEP thanked the Doctors and pharmacy companies for their valuable help

"National seminar on Traditional and Scientific wisdom of

## 1 progm. – 54 attended

2 days Seminar conducted at our Technology Resource center, Anjaneyapuram . Siddha, Ayurveda students and Doctors and Botany students attended the seminar and presented the scientific papers.



#### **Certifcate Course on Varmam**



One year Varmam Ilanilai Arigner (Junior) Certificate course conducted. Total 35 persons attended (varmam vaidhyars, siddha and Ayurvedic students, Doctors) for 7 capsules. Following subject covered - History of varmam medicine, Identification of Varma points and Varmam Adangal Points, Different type of massages, stimulation of varma points, Different type of Bone setting methods, Varmam Adangal, Varmam medicine preparation for particular problems, varmam Kalari.

Method of communication - Lectures, power point presentation, practical demonstration, case studies, Field visits,

Trainees has to submit assignment during the training.





## National seminar on "Traditional Siddha Varmam therapy for Child Health Care"

#### 98 attended

"Traditional Siddha Varmam Therapy for Child Health Care" programme was conducted at Yoga Hall, Vivekanandapuram. Posters and papers were presented. Books and charts were released during the programme. Govt.Siddha College Principal, Local District Siddha Medical Officer were the main Resource persons. During valedictory function "Varma Arignar "Certificates were distributed to the students who have completed one year course.





## **International Ayush Summit 2023**

On 27,28 and 29 Jan 2023 International Ayush Summit was held at Vivekananda Sabhagriham, Vivekanandapuram. Vivekananda Kendra -NARDEP was one of the partners in organising the summit. 730 delegates attended including a few foreigners. During the summit, 97 posters and 130 papers were presented. 40 pharmaceutical companies exhibited their products.



VK-NARDEP Secretary Shri.G. Vasudeo welcomed the Governor and other delegates during the Valedictory function.

Shri.Arif Mohammad Khan Governor of Kerala was the Chief Guest. He distributed certificates to the Participants



#### Case Study - Submucosal CA



Dr.V.Ganapathy and Muthushanthi, Varma Research and Resource Center, Vivekananda Kendra – Nardep, Kanyakumari.

A 60 yr old male from Anjanaeyapuram, who is reported to the varmam OPD of Siddha in Vivekanandha Kendra-Nardep on 23.12.2023.

Present complaints: Pain and swelling in left inner cheek, numbness, difficulty to open the mouth, swallowing difficulties and weight loss. He also had a small lump in neck since 1 year. He was mentally stressed due to intermittent pain.

Past History: There is no history of Tobacco and Betel nut use.

Co-morbid conditions: He is a Hypertensive

Medical history: He was previously treated with NSAIDs for 6 months with frequent intervals. Regularly taking Anti Hypertensive Medicines

Personal history: Lean body, Mixed diet habit and Non-alcoholic.

Observation/ palpation: Intra-oral examination revealed a painful normal-colored nodular lesion with smooth surface in the left buccal mucosa with small yellow papules at the surface with approximate size of  $2.5 \times 1.5$  cm and firm in consistency. Nodular lesion seems to be cancerous although patient is not aware.

Diagnostic focus: By considering the characteristics of the lesion and our physical examination findings, our differential diagnosis were minor salivary gland tumors and other tumors of mesenchymal origin.

Therapeutic focus: Internally Arokya capsules 2 B.D, RGM Capsules 2 B.D, Parangipattai, Palagarai and Sangu Parpam in combination 2-3 gm B.D with milk, Chandamarutham Milagalavu B.D with Honey and External application of Neer kovai pills with hot water.

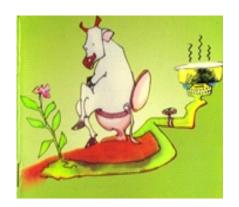
Before treatment: A single sub-mucosal and well-circumscribed nodular lesion was observed in the posterior region of the left buccal mucosa. The lesion was covered with clinically normal mucosa, measuring approximately 2.5 cm x 1.5 cm

After Treatment: The size of the nodule is reduced and the leision is now 1.5 cm x 1 cm and pain also much reduced. Now there is no swallowing difficulties and he has gained 3 kg weight

Conclusion: Buccal mucosa cancer is a rare cancer that develops in the inner cheek of mouth. The present Siddha treatment protocol ensures the regain of the normalcy of oral mucosa. It is effective in the management of the disease without any adverse effect as well as having sustained relief in follow-up. It can be considered as a better alternative to the modern treatment in the management of Sub

mucosal CA.

Representative photos



# V.Renewable Energy:

The threat of global warming is forcing the nations to switch over to New and Renewable energy sources such as (i) Wind (ii) Solar and (iii) Bio-energy. Among the three bio-energy is the cheapest and best for everybody's use.

Vivekananda Kendra — Nardep has made tremendous strides in the field of Biomethnation technology and has been acknowledged by the different stakeholders. Renewable Energy Covers the below mentioned Sustainable Development Goals (SDG's)





## V.Renewable Energy:

#### Shakti Surabhi Biogas plant at Ramanathapuram Dist.

We have taken up Installation of kitchen waste based Bio methantion plants. We selected Thattankudiruppu, Sathanur and Appanendhal villages of Mudhukulathur block along with Rameswaram Island for executing the project as we have already developed a social capital in these places. In the first phase, awareness camps were conducted for the stakeholders. 15 programmes conducted 461 participants attended. During the camps, survey forms were distributed for collecting the data for final selection of stakeholders. Villagers were kind enough to give space for manufacturing the units at site by giving store room for keeping the material and room for workers for staying.





After scrutinising all the forms, hundred and two beneficiaries were selected for commissioning the plants.







A total of 102 Plants were installed i.Thattankudiriru- 59 nos, ii. Sathanur – 12 nos, iii. Appanendhal – 11 nos iv. Ramanathapuram -3 nos. and v. Rameswaram -17 nos. All Beneficiaries trained for i. Do's, Don'ts ii. How to increase the efficiency of the bio gas plant iii. Bio gas stove maintenance and iv. usages of slurry at the backyard. We conducted follow - up training programme for all beneficiaries after a few month.

In addition, we have also installed 4 nos of 6 cum capacity plants 2 each in Ramanathapuram and Rameswaram Island.

From this project per day Benefit is I. Safe disposal of 800-900 liters of cooked and vegetable waste ii. 60 kg worth of LPG is saved iii. 6000 rupees worth of money saved iv.1500 to 1600 liters of liquid fertiliser used in the farm, v. 125 cubic metres of methane gas is safely used for cooking. Thus, avoided global warming.

BrahMos Aerospace, New Delhi supported this CSR project



#### Bio-Methanation plant at perumpakkam and Kummidipoondi

Installed 83 nos of one cum capacity Bio-methantion plants at Slum Development, Rehabilitation and Resettlement housing unit at perumpakkam of Chengalpattu Dist and 30 nos.one cum capacity plant installed at Kummidipoondi, of Thiruvallur dist. Beneficiaries underwent Awareness, Training and Follow up training programme. Beneficiaries were very much interested to have a plant at home. Now nearby house holds also wanted to have this plant for saving of LPG cost and Bio manure for their kitchen garden.







#### Gobardhan Scheme - Installed 6cum capacity plant at Schools:

Installed 6cum capacity plant at 8 schools at Kanyakumari Dist., In addition, one school at Villupuram Dist. and 4cum plant at Tenkasi Dist, under Gobardhan scheme. Constructed Plantform for keeping the plant and steps for feeding waste. Trained Noon-meal workers for proper maintenance and use

Sale of 6cum capacity plant -1 no , 2cum plant -1 and 1cum -1 no









# VI. Networking:

It covers various other general activities sush as 1. Empowering differet stake holders ii. Visit of school and college students to see and study our activities iii. Publications iv. Media coverage etc.,

Thus it Covers the below mentioned Sustainable Development Goals (SDG's)









## VI. Networking:

#### 1. Faculty Development programme -

#### 27 nos attended

Faculty members learnt various Green technologies and its relationship with Sustainable Development Goals. They also assured that a few technologies will be adapted in their college campus for demonstration



# Gill responded (1) The state of the state o

#### 2. Cultural Leadership center at Ayyappa college

Launch of cultural leadership Centre at Sri Ayyappa college for women, one day "Leadership training programme for Student Leaders". Shri. Krishnamoorthy Dr. Savitha, Shri. Naveen and VK-NARDEP staff members acted as a resource persons. Samskruti Foundation, Telengana supported the programme.

#### 3. Refresher course for "Rameswaram Volunteers"

#### 47 nos attended

3 days programme conducted for Rameswaram volunteers. . Stakeholders from Rameswaram learnt different 9 verticals which are used for Green Resilient Rameswaram. They also practiced songs from the book – Rameswaram Songs and learnt how to conduct Teertha Pooja

#### 4. Personality Development camp

for Avvai Ashram and Sowbhagya Illam Children, Dindigul -46 nos. attended

3 days programme conducted for children's . They learnt practical science , Indian culture, yoga, communication skills etc., Children enjoyed the excursion to beach for Sun rise, Sun set, Vivekananda Rock Memorial, Gramodaya park and Ramayan Darshan etc.



#### 5. J. Krishnamoorthy Foundation - 30 nos

J. Krishnamurthy school staff and students came to see Vivekananda Kendra -NARDEP activities on sustainable development. Shri.Ramakrishnan explained Green technologies for sustainable development. Participants visited Gramodaya Dharshan Park to get complete knowledge



## 6. Motivation camp for White Field's Primary School, Srivilliputtur -110 attended

One day Motivation camp for Teaching and Non-Teaching staff and Parents of the students. Shri. Saraswathi and Shri. Ramakrishnan facilitated the programme through participatory lectures, thought provoking games and songs etc.,



#### 7. Visit of the Team from Central University, Tiruvarur

Part of the Research Capacity Building and Human Resource Development activities on the core concept "Climate Change" project. A twelve members team visited Vivekananda Kendra-NARDEP to learn Green Technologies to achieve SDG's



#### 8. Training programme on "Idol making from local soil" -40 nos.



Eco-friendly Ganesha Idol making from local soil was conducted. Students and SHG members attended the programme. Participants prepared Vinayaka with their own hands and taken to home for Vinayaka Chathurthi celebration. Shri.Shiva and his wife from Jamestown, Kanyakumari gave the training.

#### 9. Amrita Vishwa Vidyapeetham

2nos = 90 students

Two batches of students from Department of Social work, Amirtha Institutions (one day).

Learnt Technologies on water management, Agriculture and Bio-energy etc.,



10. Study tour -

12 nos. – 541 attended

Students coming from Agricultural university, Arts colleges, Engg. colleges and schools - Learning Green technologies for their project, In-plant training and Research studies.



- 11. Exposure visit -
- 7 progms. 169 attended
- Farmers from ATMA, Thoothukudi and Kanyakumari .
- Watershed programme from Viruthunagar and Dindugal Dist.
- Other voluntary Organisations to learn Agricultural and watershed programmes



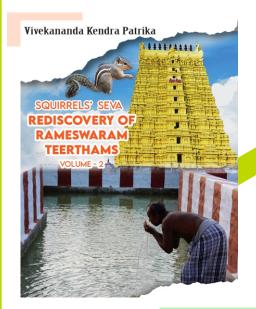


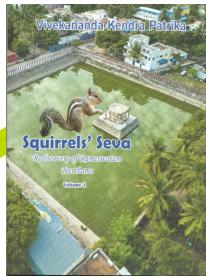
#### VII. Publication:

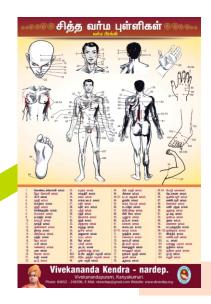
Kendra Patrika – Squirrels' Seva – Rediscovery of Rameswaram Teerthams (Volume-II) – 800 copies Kendra Patrika – Squirrels' Seva – Rediscovery of Rameswaram Teerthams (Volume-III) – 800 copies Varma Beerangi chart – Tamil - 980 copies

These books have documented the teerthams of Rameswaram ....

The chart is useful for learners to identify the varma points







## VIII. . Media Coverage:

Shri.V.Ramakrishnan briefed AIR Nagercoil, about VK-Nardep receiving 2nd prize in the best NGO category for our work of "Reviving and Renovating the Traditional Waterbodies in Rameswaram" from the Ministry of Jal Shakti, Govt. of India, New Delhi during the 3rd National Water Awards Ceremony.



Shri. Ramakrishnan gave a talk on AIR, Nagercoil. – Importance of training in organic farming cultivation.

#### Paper presentation:

- World Environmental Day was organised by Centre for Pollution Control and Environmental Engineering, Puducherry University on 8<sup>th</sup> June. Shri.G.Vasudeo gave a power point presentation on "Living Sustainably in Harmony with Nature". 65 members along with faculty attended this online programme.
- + Shri.G.Vasudeo gave a power point presentation on "Bio Village An experiment to bring back Grama Swaraj with the help of Sustainable farming" on 18th November during the celebration of Dr.T.S.Soundram Memorial Endowment at Gandhigram Rural Institute, Dindigul. 200 participants attended the programme.

## IX. Sri Amudha Surabhi womens SHG Federation

There are 94 SHG's groups.

Groups are having Following Activities:

- 1. preperation of Cosmetic products
- 2. Deepa Pooja.
- 3. Reading Good books during meeting
- 4. Family welfare pooja
- 5. Functions on Guru poornima, Gita Jayanti, Universal Brotherhood day, Sadhana Diwas, Vivekananda Jayanti etc.,



## Conducting various competition such as

- I. Elocution ii. Rangoli iii. Preparation of dishes with Millet iv. Drawing
- v. Essay vii. Sports vi. Memory games etc













## **Annual Day Celebration:**

Celebrated Amudha Surabhi Womens SHG's Federation 24th Annual Day and Swami

Vivekananda Jayanti . - 425 participants attended from 61 SHG's . Winners received the prizes







## New activities:



We are happy to inform the readers that this year we have started the following new activities.

- 1. Cow related products such as (i) Vedic Vibhuti (ii) different type of Lamps (iii) Panchagavya lamps (iv) Sambrani (v) Cow dung cake vi. idols vii. Boards etc.
- 2. Fiber glass Anjaneya, Ganesha, Swami Vivekananda etc.

We hope to get expertise in this new venture in the coming months











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