# Nature Preservation & Income Generation for the Tribals of Yercaud (PROJECT NaSH)

# **ANNUAL** REPORT

2019-2020







Implemented by: Shevaroyhills Tribal Development Institute STDi, Yercaud, India

Supported by: SAVE Foundation (Belgium) and Jugend Eine Welt (Austria)

Project Title: Nature Preservation and Income Generation for the Tribals of Yercaud

(Project NaSH)

Project Code: 2019/IND/STDi/NaSH

Project Duration: 4 Years 01 - 09 - 2019 to 31 - 08 - 2023 Reporting Period: 01 - September - 2019 to 31 - August - 2020



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#### **EXECUTIVE SUMMARY**

The Shevaroy region is predominantly a tribal populated, with 67 % belonging to Scheduled Tribe community. They are called *Malayalis*. It literally translates to people of the hills. They are believed to be migrants from the plains of the northern parts of Tamil Nadu around sixth or seventh century.

Yercaud is the popular town in the Shevaroy Hills. Administratively the Shevaroy Hills is classified as Yercaud Taluk, one among the 9 Taluks in Salem District of Tamil Nadu State. Yercaud Taluk is further classified into 9 Panchayats comprising a total of 61 revenue villages, all remotely located and spread across difficult to access mountainous terrain.

The project seeks to address two main issues concerning the region. Firstly, to develop a sustainable livelihood option to the tribal Malayali community. Secondly, to promote an organic farming culture in the region among the tribals in particular and other people in general.

A Nursery of one Acre was established with facilities including iron frame work, green shade net covering with poly sheet roof and solar powered lamps. This nursery would also function as a resource centre in training the *Malayalis* in capacity building and organic farming.

Project Cooperation Agreement for Project Nature Preservation and Income Generation for the Tribals of Yercaud (Project NaSH) was signed by between SAVE Foundation VZW Belgium, Salesian Province of Annai Velankaani (INT) Trichy, India, Project Development Office (Cauveri), Tichy, India and Shevaroyhills Tribal Development Institute (STDi) Yercaud India and sent to SAVE Foundation, Belgium through Speed Post on 28th August, 2019. And the final signed scan copy of the agreement was sent by SAVE through email on 6th October, 2019. Also received the original copy of the contract signed on 23rd November, 2019.

On 11th September 2019, 27022.73 EUR at the exchange rate of 78.0749 which is equivalent to Rs. 21, 09,797 credited on to The Yercaud Salesian College Society FCRA account.

#### **Progress against outcomes**

The total area measures more than two acres, including an area that remains suspended from the main nursery and is used as production nursery. Part of the nursery was developed around the previously existing small nursery so that the production nursery can be extended in size to supply enough plants for the newly developed nursery.

- Six nursery sheds were built in 2 different structures (A "type house structure 3nos and one side slope structure 3 nos) with Iron frame work, green shade net covering with poly sheet roof.
- Requested for drip irrigation in the beginning. But as the landscape was getting completed, decided it to be better to take the water to the topmost point and then water the area with *hose pipes*. Hence installed a *1000 litres* Sintex tank and gave several outlet points in the pipes. Also installed an immersion motor to pump the water.
- The project had allotted *5 solar lamps*. We realized the insufficiency of solar lamps for the total area. Later, we decided to install another three in the main nursery area with our financial investment. Currently, there are *8 solar lamps* covering the nursery areas.
- Project NasH inauguration was held on 24<sup>th</sup> November, 2019. The Nursery was blessed by
   Rev. Fr. Vaclav Klement, SDB Salesian Regional Superior of East Asia Oceania and opened by
   Mrs. Neena George &Mr. Jochim Lourduswamy Save Foundation, Belgium.
- As per Project plan 800 tribals will be empowered in a span of 4 years. During the Year 1, i.e., from September 2019 to August 2020, *62* beneficiaries were identified through the field visits to the villages and trainings held.
- Out of 4 Awareness Raising Training planned during the year 2019 2020, only two awareness raising trainings happened. First training held on 24<sup>th</sup> November, 2019 and 32 men and women participated. The second training held on 8<sup>th</sup> March, 2020 and 47 men and women beneficiaries and 15 children participated.

#### **Key Challenges and Risks**

- The nursery area was mountainous and uneven. We did not have any idea how the land underneath would be. It was difficult to do any scientific study on it in terms of budget and time. It is almost at the level of 30 meters (around 100 feet) height from the lower nursery part to the upper part.

- Incessant rain the rainfall was more than other years. It was unexpected rain around that time
  due to delayed monsoon. Due to sloppiness of the area, the water started logging as the ground
  was still in preparatory stage.
- The cost went high as we had to separate the agro sheds into six pieces. The labour also increased. The 8 persons, who stayed for a ten days had to stay more days due to extra work. And the Institute had to bear their expenses of stay and food. The sheet was not ideal for this weather condition. But we had to keep to the budget constraint. It still presents as a great risk of damage, due to heavy rains and winds. Yercaud during the months of June, July and August and further on gets heavy rains and vociferous wind. The poly sheet that we have used is bound to tear.
- Due to COVID 19 lockdown, lots of restrictions for travel and movement and gathering of people and could not start nursery production through beneficiaries in the selected villages.
- COVID19 situation has practically stopped sale of plants, both wholesale and retail.
- In some of the villages it is very hard to meet the village people during the day time. Because most of them are going for estate work on all the days (8 AM to 5 PM) and they come back home only after 5.30 PM. So it was very difficult and challenging. Most of the field visits happened during the holidays and after 6PM. Even Sundays they engage themselves to spend time with their family and busy in marketing provisions and vegetables.
- There is no proper road facility and even two wheelers could not go inside to some places in the villages. So it is really taking more time to reach the people and building a rapport with them. Also it is very challenging to convince the people and gather them for the training irrespective of so many reminders and follow ups. So we could not start the training sessions as scheduled.
- Monsoon in Yercaud is between July and September and sometimes it continues till November.
   In the recent years, people in Yercaud town and in few villages faced scarcity of water during summer.

#### Recommendations

- Identification of Wholesale Buyers To increase the income of the beneficiaries, First of all the Wholesale buyers must be identified and the production of saplings should be based on the orders received from the wholesale buyers (Should be based on the need of the buyer).
- As of now 131 varieties of plants are available in the nursery. More varieties of saplings should be produced to increase the sales. Regular orders of saplings and production should go

simultaneously. Only when the orders are more, the production will be increased. So that the income of the tribal will be increased.

- It is recommended that the Reserve Fund (*Should have project head*) must have been allotted in the project to pay the beneficiaries immediately after the production of saplings. Because the people gets motivated only after seeing the fruit of their work immediately. It is recommended that the fund should be available at least for the initial stage. Once the income gets generated from sales the beneficiaries can be paid without any delay.
- Convincing the tribal people to explore new income generating activity is a very big challenge.
   But once the first batch of beneficiaries starts seeing the increase in their income then others would automatically join them.

**INTRODUCTION** 

Almost 50 per cent of the population fall on the working age group of which majority of them are

casual and agricultural labourers. They work in private estates besides working in their own fields.

They work in coffee plantations, horticulture farms etc. This being their major source of livelihood.

Besides there are few others who find livelihood in the tourism sectors such as labourers in

restaurants and cab drivers.

The ecological and environment impact of conventional farming is another great concern as it puts

to risk the future of next generations. Continuous use of chemical fertilizers and pesticides results in

degrading natural resources like soil losing its fertility, water pollution, soil erosion, extinction of

insects such as bees etc. Promoting organic agriculture among small marginal farmers is the need of

the hour, especially in regions such as Shevaroyhills which ecologically sensitive.

**Increasing Green Forest Cover** 

Yercaud region over the past few years has lost its green cover for which it was famous for and from

where it got its name Yercaud (Yeri – Lake, Kaadu - Forest). This is due to a number of reasons but

primarily due to felling of trees for economic benefits and developing living areas, failing monsoon

and water scarcity and also due to unconsidered urbanisation of Yercaud town by Tourism industry,

which has impacted the ecosystem adversely. This requires urgent and immediate intervention by all

the concerned stakeholders.

**General Objective -** Sustainable Livelihood for the Tribals of Yercaud

**Specific Objectives** 

- Increase the income of the Tribals so that they are able to access basic necessities of life

- Increase Greenery in the local area. Restore & Preserve indigenous plants and trees.

- Ensure a Financially Sustainable Nursery that will continue to reach out to more beneficiaries

even after the Funding for this Project stops

**Duration - 48 months** 

Year 1 - Sep 2019 - Aug 2020

Year 2 - Sep 2020 - Aug 2021

Year 3 - Sep 2021 - Aug 2022

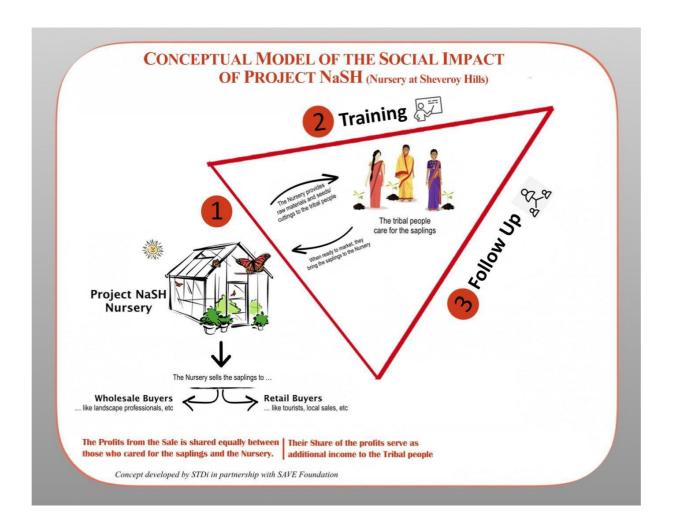
Year 4 - Sep 2022 - Aug 2023

Scope

- Build a Nursery to support project activities and ensure its financial sustainability

- Train the 800 Tribal People and empower them in increasing their income

- Plant at least 1,000 tree saplings to increase local green cover.



#### **INITIAL PHASE:**

#### Sign Contracts

The Project Contract documents were signed by Fr. Raj - Director of STDi, Fr. Antony Joseph - Provincial of Trichy Province, Fr. Arul Maran - Director of Cauveri Development office and sent to SAVE Foundation, Belgium through Speed Post on 28th August, 2019. And the final signed scan copy of the agreement was sent by SAVE Foundation through email on 6th October, 2019. Also received the original copy of the contract signed on 23rd November, 2019.

#### Transfer Funds

On 11th September 2019, 27022.73 EUR at the exchange rate of 78.0749 which is equivalent to Rs. 21, 09,797 credited on to The Yercaud Salesian College Society FCRA account.

#### > Finalize suppliers

Initial suppliers list was prepared during the Kick off meeting. The products and services suppliers list - for Land Preparation, Green House Shed, Agro Net, Drip Irrigation, Solar lamps, grow bags, organic manure, sapling covers, equipment and tools are given in the annexure.

#### Hire Employees

Two Nursery staff were appointed on 1st Sep, 2019 to do the Nursery work inpayscale of Rs. 10,000 each. Their names are Mr.Sathiyaraj&Mr.Ramamoorthy. Both the nursery staff have years of experience in working in the estates and they belong to the tribal community of Shevaroy Hills.

#### Delivery of Van

Commercial van TATA ACE - No TN 02AU 0598 was donated by Exodus Exports, Chennai for the period Sep, 2019 to August 2023.

#### > Finalize list of stakeholders

The Stakeholders list consists the Names of of the Donor Agency, INT Trichy Province, Cauveri Deveopment Office of Trichy Province, SAVE Foundation, STDi ), Panchayat and Local Coordinators (Ward Members) and the beneficiaries identified for the year 1.

#### > Finalize list of Beneficiaries Y1

As per Project plan 800 tribals will be empowered in a span of 4 years. During the field visits to the villages and trainings held in the first year, the beneficiaries were identified, data forms were collected. For the first year, 62 men and women were identified as beneficiaries.

#### Project Kick-off

Project kick off meeting was held on 24th September, 2019. Mr. Jochim Lourduswamy, Ms. Neena George from SAVE Foundation, Fr. Raj sdb, Fr. Abraham sdb and Sangeetha from STDi were present for the meeting through skype. The objectives, project plan and progress of the project were discussed in detail.

#### **INSTALLATION PHASE:**

#### Prepare 1 Acre Land

Location It was chosen keeping in mind a less fertile area where mostly bushes were growing. Availability of water was yet another major point that was considered (there is a well within the nursery area and that also gets filled during rainy season by the stream running close by). Access for people and also retailing without disturbing inmates was another important consideration.

#### Process of Installation

- The place was mostly rocky.
- The rest of the places it was clayish.
- The land preparation was majorly done through JCB machine, but it also required a lot of human labour both in the place where JCB could not operate and reach, particularly on elevated uneven areas.
- The work was happening almost over two months (through September, October and November)

**Fencing** - An almost rabbit proof fence was erected around the nursery in order to wild animals, rats and snacks and also other agricultural pests. The entire fencing is **457 Feet length** with around **51 Iron Poles**, **12 Cement Poles** and iron wires. The well also needed to be fenced as a requirement as there will be movement of people in the nursery. It was done with Green plastic mesh with **23 Iron Poles** around the well.

#### > Set up Green House Sheds & Agro Nets

- The Agro (Nursery) sheds were done on contract basis. The contractor has visited the place twice before setting up the agro sheds. The calculations changed on the second visit, as the ground preparation underwent several changes due to challenges mentioned earlier. After evaluation, it was decided to break into six sheds of different sizes.
- With the kind of elevation, we also needed to distribute at various levels. Once the place was marked, as per available area, the shed was designed in different sizes and shapes.

- Four sheds were built with green shade net covering with poly sheet roof in the sizes  $30 \text{ l} \times 15 \text{ b}$  (525 sqft),  $30 \text{ l} \times 20 \text{ b}$  (600 sqft),  $10 \text{ l} \times 10 \text{ b}$  (100 sqft),  $10 \text{ l} \times 5 \text{ b}$  (50 sqft) and 2 agro sheds were built only covered with Poly sheet roof in the sizes of  $30 \text{ l} \times 17 \text{ b}$  (510 sq ft)
- On top of the shed, mostly *polysheet roof* is used. It also allowed control the direct falling of rain and also gives sufficient light.

#### **Product Quantity Description**

UV 500, 75%, 4 mm GSM; 2.5 Bundles (Bought running feet - Approx 4000 Square feet; Width of Poly sheet - 10 feet)

#### **Description of Poly Sheet:**

• Grade: Gtv 4

UV Percentage: 90%

- IV (Infrared Radiation) Percentage: 35%
- It has higher light transmission for maximum plant growth.
- It has superior strength and toughness
- Polyethylene resin covers the durability up to 4 5 years.
- The sides of sheds were covered partially with green agro net. 2 bundles i.e., 200 feet  $\times$  2 nos = 400 feet green shade nets were bought and it was fully utilized.

#### **Decription of Green Shade Nets or Agro Nets (50 % Shade)**

Brand : Dura Net
Shade Rate (%) : 90%
Shelf Life : 3-5 Years
Color : Green
Material : HDPE

Application : Agro shade net

It has GSM service and the material is water proof and IV (Infrared Radiation) proof.

These nets are U.V stabilised with higher degree of stabilization to prevent nets from degradation by ultra violet ray of sun and thus they last longer than others. It helps in controlling temperature, light, water and moisture of nature as per requirement resulting in best output and quality of crop. Green shade net protects the plants against the Infrared (I.R) and Ultra Violet rays (U.V)

- Protects the plant against the heavy rain and air.
- Green House enables to best utilize the waste land and increase the cultivation area for increasing the output.
- With green net even small piece of land can yield in high output.
- The level of carbon dioxide remains high in green house which increases the photosynthesis process and results in higher yield of the crop cultivated.

- With green house the environment of the crop can be controlled resulting in healthy plant with better quality and better yield.

#### The following are the features of green shade nets:

- 50% shade net is the most popular of shade net for flowering and vegetable plants.
- Ideal to save tender plants from scorching sunlight.
- Light weight and easy to install.
- Resistant to all types of chemicals used in farming.
- UV stabilized so it tis fortified against degradation from the sun's UV rays.
- Made out of 100% virgin hdpe material, higher degree of UV stabilization helps the shade nets lasts longer.
- High chemical and wind resistant.
- Light weight and easy to handle.
- There were surplus of 30 feet Poly Sheets and 10 to 15 kgs of Iron rods after constructing the sheds.

We ensured that we could keep about around 100,000 plants in the entire nursery out of which around 30,000 could be kept inside the sheds. The constructed needs regular maintenance. Apart from treating the metals with anti-corroding materials, decided to paint some parts of metal bars with paint to make it last long.

#### > Set up Drip Irrigation :

- We had requested for drip irrigation in the beginning. But as the landscape was getting completed, we decided it to be better to take the water to the topmost point and then water the area with *hose pipes*. Hence, we installed a *1000 litres*Sintex tank and gave several outlet points in the pipes. We also installed a immersion motor (which in any case we had to do), to pump the water. We were advised that this practical to conserve both water and electricity. The water is stored always in the tank. The electricity is used when we when we pump water. Once it is done, due to landscape water is available all the time without any type of energy used.
- The pipes (*Type HD Hose, size 1 inch; Length Upward 75 feet & downward 50 feet*) ran along the fence, to give it a more protection. We were also advised to keep it open to mend any damages promptly and easily.

#### > Set up 5 Solar Lamps

The project had allotted 5 Solar lamps. We chose a vendor who is familiar to our institutions and who had already installed Solar lamps and Solar panels in our campus.

Among the 5 lamps, we decided to have two in the main nursery, one in the parking path, two above the mother nursery area. The contractor visited the place, and took note of how every solar lamps could be fixed. He decided two with poles that are concreted on the ground, and three making use of the existing building structure. The capacity of each lamp is *30 Watts* and it is guaranteed for 5 years. The fixing itself took two days work due to concrete to get drying.

We realized the insufficiency of Solar lamps for the total area. Later, we decided to install another three in the main nursery area with our financial investment. Currently, there are 8 solar lamps covering the nursery areas.

## > Document the Process / Lessons learnt and Knowledge Management Document of Installation Phase

Knowledge Management Document sent to SAVE for the review and uploaded in drive on 10th Jan, 2020. The review and feedback for the same received by mail on 12th Mar, 2020 and the guidelines were explained through Skype call by Ms.Neena George - SAVE Foundation on 8th April, 2020. The revised file of Knowledge Management document and the lessons learnt sent to SAVE on 15<sup>th</sup> July, 2020.

#### **PROCUREMENT PHASE**

#### Delivery of Grow Bags

In the month of Oct, 2019, 2000 grow bags were procured for the amount of Rs. 99,000 from Cauveri Development office. Since the GST or tax invoice is not available and the payment done through cash, the invoice for Rs. 99,000 was withdrawn. Again grow bags were procured in the month of July, 2020 with GST Invoice.

#### Delivery of Organic Manure and Pesticides

Organic manure was readily available in our campus since we have a fairly developed cattle farm. The major waste we get is from the cow shed and piggery, apart from chicken waste. We also have two big compost pits in the campus that supply regularly composted manure. We mix a measure of one third with soil and use them to grow plants. We could also make organic pesticides like panchakaviyam as we get the ingredients from our own cattle farm. Panchakaviyam is made out of Cow Dung, Cow Urine, Cow Milk, Curd, Ghee, tender coconut water, Jaggery and ripened banana.

The Retreat Estate is the donor who gives Organic Manure – Cow Dung Manure for Nursery production. Totally 900 kgs of cow dung manure were supplied by The Retreat Estate during the period September, 2019 to August, 2020.

#### Delivery of Sapling and Seeds

The nursery started almost two years ago with basic facilities in very miniscule scale with multiplying of plants available in the campus itself. There are several plants that could be collected as seeds, grafted or simply cut grown. We had developed considerable number flower, creeper and tree plants. We also purchased other seeds and plants that were not available. We started to develop through this method a mother nursery

#### Delivery of Equipment and Tools

Equipments and Tools worth Rs. 19,235 procured for Nursery. The following are the equipments and tools were procured

1. Pushcart – 1no, 2. Bonds - 5 nos, Shear Cutter & Spade - 2 nos, Leaf Rake - 1 no, Sprayer - 2 nos and 6. Other Tools - Set of 3

#### Document the Process / Lessons learnt and Knowledge Management Document of Procurement Phase

Knowledge Management Document sent to SAVE for the review and uploaded in drive on 10th Jan, 2020. The review and feedback for the same received by mail on 12th Mar, 2020 and the guidelines were explained through Skype call by Ms. Neena George - SAVE Foundation on 8th April, 2020. The revised file of Knowledge Management document and the lessons learnt sent to SAVE on 15<sup>th</sup> July, 2020.

#### **AWARENESS RAISING AND TRAINING**

#### Awareness Raising & Training Y1Q1:

Awareness Training on the best Practices Followed in Nursery & Preparation of Solutions for growth and Pest Control held on 24th November, 2019 at Retreat, Yercaud campus.

The Objective of the training session was to make the participants to gain knowledge about the Nursery Plantation and preparation of Organic Manure and Pesticides.

The Nursery was blessed by Rev. Fr. Vaclav Klement, SDB - Salesian Regional Superior of East Asia Oceania and opened by Mrs. Neena George &Mr. Jochim Lourduswamy – Save Foundation, Belgium. Followed by the Inauguration, the participants had Inaugural training and it was animated by Mrs. Arthi Devi M.Tech (Industrial Biotechnology) - Proprietor of UFG (Urban Farm Guide) Chennai. There were around 35 men and women from Yercaud, Manjakuttai, Piliyur,

Guntur and Sengadu participated in the Inaugural meeting and training session. The training started with the introduction and knowledge sharing about various practices followed in Nursery Plantation.

Two representatives from the participants were asked to volunteer to do the hands on training. They have learnt the techniques

To fill the soil and manure in the cove, Handling of Nursery Covers, Arrangement of Covers, How to sow seeds in the nursery cover

For PEST Control, they were taught to prepare

- 1. Neem Solution
- 2. Soap Solution
- 3. Ginger, Garlic, Green Chilli and Onion Solution

For Growth they learnt to prepareFish Meal solution.

The participants gained knowledge on the best practices followed in Nursery. They have learnt simple but most needed techniques to handle nursery garden in their places. They have learnt organic methods to prepare the solutions for Pest control and growth for the nursery plants.

#### Awareness Raising & Training Y1Q2:

Awareness Training on Best Practices Followed and Opportunities in Nursery
Plantation Production held on 8th March, 2020 at Retreat Campus between 1 PM to 4 PM.
Participants in and around Yercaud Panchayat - Murugan Nagar, Langilpettai, Lutherpettai, Mel Alagapuram, Mundagampadi, Guntur & Manjakuttai were participated in the training programme. There were 47 beneficiaries (Men and Women) and 15 children participated in the training session.

Mrs. Dhanalakshmi - DMK Women Wing Leader for Yercaud and Mrs. Devi - Ward Member and Mrs. Neela Kumar - Swatch Bharat India, Yercaud Block Coordinator were also present for the training session. Mr. Rajesh Kumar - CEO of Farm Harvest was the Resource Person for the training session.

Fr. Raj, SDB - Rector, The Retreat, Yercaud introduced the Resource Person and his credentials to the participants. Mr. Rajesh Kumar, resource person trained the women on marketing and sales and encouraged the women to start Nursery plantation production.

He has shared his own experience of connecting the farmers and how they generate income through sales and marketing in farming. He has also shared success stories and real time examples of people who have got benefitted through farming and micro business (*value added farming*) activities. He has assured his support in training and knowledge sharing in whatever way he could support in doing Nursery Plantation Production

#### > Awareness Raising & Training - Y1Q3 & Y1Q4

COVID 19 Lockdown started in Tamilnadu from 25th March, 2020. It has really affected the everyday life of the tribals in Yercaud. So there was no possibility to gather the people for any kind of trainings. So no trainings happened during the period April, 2020 to August, 2020.

#### **SOCIAL MEDIA**

"Project News, Training Updates are getting uploaded in Fb - Shevaroyhillstribaldevelopment, Instagram - Shevaroyhills tribal Development, Twitter - Shevaroyhillstribaldevelopment and Youtube - Shevaroyhills Tribal Development Institute. The following are the responses for the posts

- In Shevaroyhills Tribal Development Institute Youtube Channel 2 videos were uploaded.
- For Pictorial Report of Project NaSH 17 views and 2 likes
- Training feedback given by the beneficiaries of ManjakuttaiPanchayat 30 views and 2 likes.
- FB Four News and updates were uploaded in Shevaroy Hills Tribal Development Institute page during the period Dec, 2019 to Feb 2020.
- 19th Dec, 2019 Nursery Picture received 78 likes and 2 comments.
- 23rd Jan, 2020 Pictures of Field Visit and training to Nagalur, Kolagur, Manjakuttai and Murugan Nagar on 20th & 21st Jan, 2020 received 20 likes and 2 comments.
- 12th Feb, 2020 Pictures of Production Unit received 22 likes.

#### **MEETINGS**

#### Periodic Status Updates

This was more an operational call (*Whatsapp Call*) to update the status of the activities planned to SAVE Foundation. Status Updates held every two weeks for the first six months between Ms.Neena George of SAVE Foundation and STDi staff Ms.Sangeetha Teresa.

The following are the dates of status updates held during the year 2019 - 2020.

Month	Date	Status Update Period
October 2010	10-Oct-2019	25 - Sep - 2019 to 09 - Oct - 2019
October, 2019	24-Oct-2019	10- Oct - 2019 to 23 - Oct - 2019
November 2010	07-Nov-2019	24 - Oct - 2019 to 06 - Nov - 2019
November, 2019	21-Nov-2019	07 - Nov -2019 to 20 - Nov -2019
December, 2019	19-Dec-2019	20 - Nov -2019 to 18 - Dec - 2019
January 2020	16-Jan-2020	18 - Dec - 2019 to 15 - Jan - 2020
January, 2020	30-Jan-2020	16 - Jan - 2020 to 29 - Jan - 2020
February, 2020	13-Feb-2020	30 - Jan - 2020 to 12 - Feb - 2020
	27-Feb-2020	13 - Feb - 2020 to 26 - Feb - 2020

#### > Steering Committee 1:

Project NaSH Steering Committee meeting held on 26<sup>th</sup> November, 2019. Mr

JochimLourduswamy, Ms. Neena George of SAVE Foundaiton, Fr Arul Maran - Ex Director of Cauveri, Fr Raj SDB and Ms.Sangeetha Teresa were present for the meeting.

➤ On 23<sup>rd</sup> December 2019, online meeting held through skype call to discuss about the progress of the project. Ms. Neena and Mr. Jochim of SAVE Foundation and Fr. Raj sdb, Fr. Abraham sdb, and Ms. Sangeetha Teresa of STDi discussed in detail about the Wholesale buyers, Training, Followup, Financial Sustainability and Frame work of the Project.

#### **MONITORING AND EVALUATION**

General focus - Evaluate the Social Return on Funding

**Specific Focus** 

- Increase in the Income of the Beneficiaries
- Increase in Green cover (tree planting)
- Financial Sustainability of the Nursery

As part of monitoring and evaluation, STDi staff visited the villages and trained the women and created awareness on the best practices followed in nursery plantation and made them to do hands on training on preparing the organic solutions for plants growth and pesticides.

Most of the village people are working as estate workers and it is very difficult to meet the village people during the week days and morning time. So the Field visits were made between 5 PM to 7 PM on the weekdays.

The following are the details of project visits and meetings done by STDi staff during the period September, 2019 to January, 2020

- 5 Visits were made to the villages of Yercaud, Manajakuttai and Nagalur Panchayat during the period Sep, 2019 to Nov, 2019.
- The following were the villages visited during field visit. Ms. Sangeetha Teresa and Mr.Gunasekaran visited the people in the villages.
- Yercaud Panchayat Murugan Nagar, Jerinakadu, Langilpet, Guntur and Thepakadu
- Manjakuttai Panchayat Manjakuttai Maim, Mandhai, Piliyur
- Nagalur Bosco Nagar, Kolagur
- 8th Jan, 2020 Manjakuttai Field visit made to meet and interact with the people of ManjakuttaiPanchayat.
- 10th Jan, 2020 Manajkuttai, Guntur & Theppakadu Field visits made to interact with the village people and motivate them to attend the Nursery Plantation Training.
- 14th Jan, 2020 Field Visit to Nagalur Bosco Nagar & Kolagur Orientation about Project NaSH given to the village people. The data forms were collected.
- 15th Jan, 2020 Field Visit to Murugan Nagar Yercaud Orientation about Project NaSH given to the people and data forms were collected.
- 16th Jan, 2020 Guntur & Theppakadu Field Visit made to meet the village people of Guntur and Theppakadu.
- 20th Jan, 2020 Nagalur Bosco Nagar & Kolagur Field Visits and hands on trainings were given to the village people on Nursery Plantation and preparation of Organic Solutions for growth and pesticides.
- 21st Jan, 2020 Manjakuttai & Murugan Nagar Field Visits and hands on trainings were given to the village people on Nursery Plantation and preparation of Organic Solutions for growth and pesticides.

The data forms were collected from 62 beneficiaries who could start the Nursery plantation. Regular field visits, follow ups and meetings are conducted in the villages. The beneficiaries for nursery plant production were identified based on the maintenance of sample sapling covers which was given to them during the training session.

#### **LOCATION OF THE NURSERY**

#### Challenges

There was much challenge except that we had a vast property with a number of choices. Finally with the criteria that we had set the location was fixed.

#### Opportunities & Lessons Learnt

In the process we also learnt what kind of land and terrain could be used for what purpose.

#### **AREA**

#### Challenges

The area was mountainous and uneven. We did not have any idea how the land underneath would be. It was difficult to do any scientific study on it in terms of budget and time. It is almost at the level of 30 meters (around 100 feet) height from the lower nursery part to the upper part.

#### - Opportunities & Lessons Learnt

It is indeed unique for Yercaud as the entire nursery as One single unit and the movement path is arranged without difficulty to access all the plants.

#### **LAND PREPARATION**

#### - Challenges

- Since the land was both rocky and clayish, it was not easy to solve both the issues, we used around 25 loads of garden mud for leveling. It involved the work of around 30 people on various days depending on the type of work.
- The work was delayed due to unforeseen heavy rains during those days. The rains not only stopped the day's work, it was difficult to work on subsequent days until the ground is dry. It made it difficult for JCB to move in. After every heavy rain, we had to wait for restarting leveling work. But at times, we took up the work in order to meet the deadline.
- Since the ground was rocky with clayish soil, it became very challenging. Something that none of us had foreseen. More challenging was the clayish area.
- Incessant rain the rainfall was more than other years. It was unexpected rain around
  that time due to delayed monsoon. Due to sloppiness of the area, the water started
  logging as the ground was still in preparatory stage.
- In order to complete the work as per the deadline, we started working through wet areas in mild rainy days, but the movement of JCB and lorries broke the revetment to a good length. It is also due to vibrations created through JCB and constant movement of vehicles.

- Added to these woes, the telephone wires that were running under, were cut multiple times. Things became unprecedentedly testing and stretching.
- With more rains in the offing and water staying put without getting dry, it got difficult
  for even people to work as the ground in a particular place gave way upto waist deep.
  The wet clay is rather tricky and works like quick sand.

#### **Opportunities & Lessons Learnt**

- It was an exploration of a sort. We learnt that the land was totally very different from what we expected.
- We are satisfied and happy such an arid land (a type of Arabica coffee planted around the fencing area has not grown more than 4 feet for 7 years and has not yielded so far) is brought to a full use.
- While preparing the land, only those coffee plants that were not yielding properly
  were cut down. Every tree in the entire area was protected. We are even using them as
  shades for some plants.
- The only nursery that has used the elevation artistically in Yercaud. Many people, including those owning nurseries give positive comments in landscaping such a terrain for a nursery.
- The rains during these days, helped us to understand the way the water would flow. It helped us enormously to direct rain water back to the well.
- While preparing the land, the challenges were insurmountable, once the work was getting closer to completion; we were able to landscape creatively. In the run, we naturally got 3 pits and 1 tiny pond. Out of 3 pits one we store water and another 2 serves as a pit for garden waste for composting. It is a necessary addition to have them in the nursery itself. The tiny pond now serves as the place for ducks to move around. The water storage pit can be used for growing water plants in the future.
- With these, the nursery becomes an interesting area attracting people to walk around and inspect the plants.
- The rocks that were unmovable, are now sitting spaces and also to place plants decoratively.

#### **Fencing** - Challenges

A fencing of this nature was not contemplated initially. It was only decided during fencing. We had to also pack with stones below the fencing in order to check any type of creatures entering in. Due to variation in height of the ground some poles had to be joined in two to get the height.

#### Opportunities & Lessons Learnt

- There were constantly 6 people working around more than 20 days. Apart from regular hired workers, they were supported through our estate workers and the students of Philosophy and the tribal home boys in minor works.
- The fencing around the well was given to another contractor to finish the work on time. It took around 5 days to complete the same.

#### **Set up Green House Sheds & Agro Nets**

#### Challenges

- The cost went high as we had to separate the agro sheds into six pieces. The labour also increased.
- The *8 persons*, who stayed for a ten days had to stay more days due to extra work. And the Institute had to bear their expenses of stay and food.
- The sheet was not ideal for this weather condition. But we had to keep to the budget constraint. It still presents as a great risk of damage, due to heavy rains and winds. Yercaud during the months of June, July and August and further on gets heavy rains and vociferous wind. The sheet that we have used is bound to tear.

#### - Opportunities & Lessons Learnt

- It also turned out that we could also keep different variety of plants in different sheds. Later, we can change sheets according to the required temperatures. For example, we have started keeping Cactus in one shed.
- This is the cheapest alternative when we work within the budget. The sheets could always
  be changed or that particular torn part can easily adjusted with new sheets and still keeping
  the price low.
- We learnt that it is better to go for all weather proof sheets of higher GSM which are expensive but better in the long run.
- We have not compromised the quality and sturdiness of the structure of the shed; we can fix any types of sheet and make modifications on the nature of shed.
- Every space is envisaged for more small sheds with different set up that the plants require.

#### **Set up Drip Irrigation:**

#### - Challenges

Once we decided to change the system of irrigation, there was no challenge

#### Opportunities & Lessons Learnt

- It has proved to be one of the good decisions that were able to take on the spot. There is never shortage of water. There is always water in the well.
- The watchmen at the gate is regularly watering the plants and he is also kept engaged with taking care of the nursery

#### **Installation of Solar Lamps**

#### - Challenges

There was no much challenge as far as installation of solar lamps. But we realized the insufficiency for the total area. Later, we decided to install another three in the main nursery area with our financial investment. Currently, there are 8 solar lamps covering the nursery areas.

#### Opportunities & Lessons Learnt

- It was easy to coordinate with known vendor.
- The lesson we have learnt is on budgeting. Install anything that is durable even if its pricing is higher.

#### **Seedlings & Plants**

#### Challenges

- We lacked those plants that had greater value and mostly in movement.
- Often times, it was on trial and error method in growing. Hence, there was a lot of waste. We needed to reduce wastage.
- Buying plants that have higher value demanded higher investment.

#### Opportunities & Lessons Learnt

Today we have developed around **15,000 Plants.** We buy plants only with the intention of multiplying at a later stage.

#### **Organic Manure and Pesticides**

#### Challenges

- We always needed good mud. It either involved huge labour to extract from our campus/estate or money to procure from outside.
- We also had to constantly invest in cocopeat and other organic manures.

#### - Opportunities & Lessons Learnt

- The wastage from the cattle farm that was piled and cleared only once or twice in a year is now being cleared regularly for growing nursery plants.
- Since there is more need, we have started organizing the wastes in our campus to support our regular supply by segregating the waste and also digging deeper dumping yard.

#### **Marketing of Plants**

#### - Challenges

- Transporting to nurseries in Chennai. It is a high cost for a small vehicle like ours.
- COVID19 situation has practically stopped sale of plants, both wholesale and retail.
- The near future seems bleak.

#### - Opportunities & Lessons Learnt

- There are many willing to buy plants from us as we are charitable institute and also for the fact that local people are involved as beneficiaries.
- We have not stopped growing plants. We shall good reserve.

#### Awareness Raising and Training

- No own lands are available-In Yercaud Town, people showed interest in the trainings but unable to select them as beneficiaries to start nursery plantation because they do not own land to do nursery plantation in their houses. Because of this reason, few women during the training session requested to give them job in the Nursery in Retreat Campus.
- **No Proper Roads are available** During the initial visits to Guntur The village people showed interest but they own land only in the forest which is very far from their house and even if they produce nursery plants. Because of sloping path, the vehicle could not go and collect the produce from their place
- WaterScarcity: Monsoon in Yercaud is between July and September and sometimes it continues till November. During the summer people in Yercaud face serious water scarcity. In the recent years, the water-wells are getting dried up and people in town and in some villages suffered.

#### MAJOR RISKS AND MITIGATION MEASURES

#### **Empowerment of People in Shevaroy Hills**

We readily had several experts from the region in supporting to empower the power. They were always willing to assist. The project covers empowering of 800 tribals in a span of 4 years. And indirect empowering of 10,000 persons. The 4 years will also ensure planting of 1000 trees.

#### **Risks**

- The resource persons who are experts in different fields were finding difficult to teach people of this kind, who are mostly illiterate and they needed a local connect.
- It was a challenge for people to understand people who are experts in the fields but have no connect with the people.
- The lockdown that started on 22<sup>nd</sup> March 2020 has become an immense hurdle. There is nothing in movement in Yercaud. There are stricter rules for the hill stations. Four months through the lockdown, there are no buses and no gatherings are allowed.

#### Measures

- We have trained staff, who are connected with the people better and they are able to impart knowledge easily to people.
- From the experts in the field, our field and nursery staff learn better, and they have developed as best transmitters of knowledge for the beneficiaries.
- We have strong connect with people from all the 6 panchayats and about 50 plus villages. The above connect is strengthened with our regular communication and meeting up with *Panchayat* leaders and *panchayat* & Taluk officials.
- It was further strengthened through our COVID19 Lockdown Relief works in 50 villages with a team of 75 volunteers that included Member of Parliament of our constituency, Tahsildar and Public Health Officers and the like.

#### PARTNERSHIPS AND SUSTAINABILITY

We have collaborated with UFG - Urban Farm Guide. *Mrs.Arthi Devi - Proprietor of UFG* often visits and guiding and doing capacity building to the managerial, Nursery and field staff. Also we get suggestions and expert advice for the nursery training and setting up of nursery.

She has trained 32 men and women on the best practices followed in Nursery plantation and preparation of Organic solutions for plants growth and pesticides on 24th November, 2019 at Retreat, Yercaud campus.

*Mr. Ramesh, CEO of Yercaud Nursery* has made visits to Nursery to further strengthen the nursery and also work together for nature Preservation in Shevaroy Hills.He often visits and shares his knowledge and experience in Nursery plantation.

*Mr. Rajesh - CEO of Farm Harvest* accepted to train and guide the tribals on Nursery plantation and marketing techniques. He has already trained the beneficiaries on 8th of March, 2020. He has taught them about the marketing and sales techniques they could implement in the Nursery Production. Also the professors from Horticulture Research Institute, Yercaud accepted to train the beneficiaries of project NaSH.

Also *Mr. Peter - Horticulturist* accepted to train the beneficiaries of Project NaSH. He has trained the tribalson Nursery Plantation during the Project CALLS - COVID 19 Livelihood & Living Services held during the period June and July, 2020 initiated by Shevaroyhills Tribal Development Institute and in collaboration with JugendEine Welt, Austria& Don Bosco Network, South Asia to give an alternate livelihood for the deserving.

#### Revenue Generated by the Nursery

We have been making regular progress in identification of wholesale vendors and also retail by visiting tourists and through other outlets. Small or big, there is regular sale almost every day. Also the nursery supplies plants for institutional consumption. Retail sales got affected because of COVID 19 Lockdown extension.

Please find below the table represents the revenue generated during the period September, 2019 to August, 2020.

#### **CONCLUSION**

#### **Social and Cultural Impact:**

The women expressed desire to join in big number. They have given awareness in their own villages and that is bringing them together in their villages. This is fastering the unity and working as a team in their places. Culturally people realised that dignity of working partner in the new field of Nursery Plant creation. Since the project is at the end of Year 1, very little social cultural impact is created but we hope this would get systemize and increase.

#### **Impact on Environment**

"Largely on the plants and in our Nursery - Production unit in STDi'(The Retreat, Yercaud), we use organic manure, organic pesticides and we have scaled up plant creation that are available in the campus. Waste Management is taken care of - We use composting method and use it for our plants. Solar Power is being used in the Nursery area and in the campus. Efficient water management is followed and water is recycled efficiently. Rain Water Harvesting is also done.

During the Field Visits and training to the villages, the people are getting educated and empowered through various awareness training on government schemes, importance of savings, financial management etc., and Self Help group functions in all the villages of Yercaud. Team building activities are conducted to build the team spirit among themselves. During the field visits the beneficiaries of Project NaSH are motivated to prepare and use only the Organic solutions for plants growth and pesticides. The village people are educated to save the environment by practicing waste management, preserving the soil and saving the water.

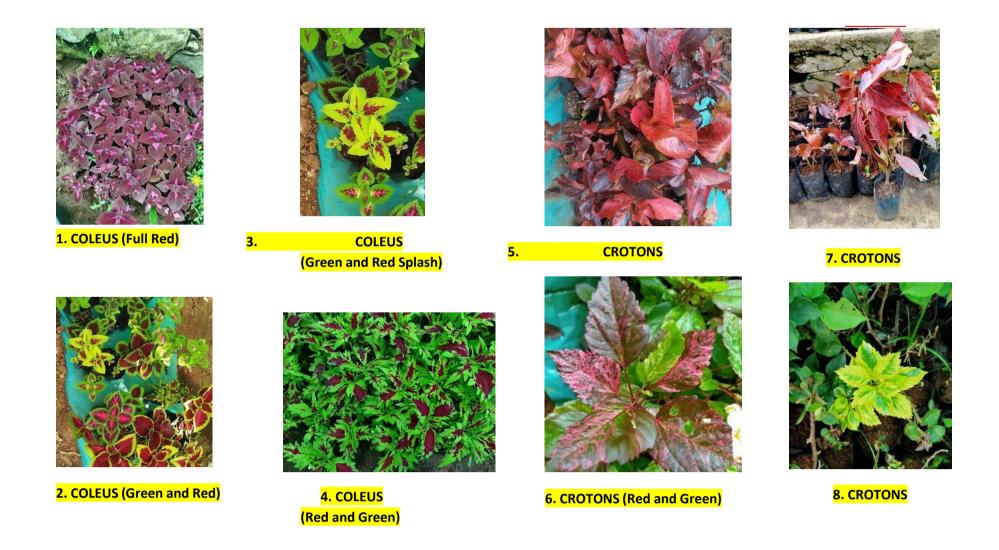
Most of the villages in Yercaud face water scarcity during summer and Monsoon starts only from May month. To manage the water resource for Nursery plantation, the beneficiaries requested to give them seeds/ cuttings during monsoon season. So that they could maintain the plants well. The production of saplings is not yet started in the villages. Once the production start increase the income of women would gradually increase.

#### The Project ...

- will have empowered 800 Tribals in a span of 4 years
- more than 10,000 tribals will indirectly benefit from this project
- at least 1,000 trees will be planted during the course of this project
- the Nursery will become Financially Sustainable from its 3rd year onwards
- at the completion of the project, the Nursery will have built a Reserve of Rs. 1.47 lakhs

### Nature Preservation and Income Generation for the Tribals of Yercaud (Project NaSH)

VILLAGES SELECTED FOR Year 1			
S. No	Name of the Village	Name of the Panchayat	
1	Guntur		
2	Theppakadu		
3	Mundagampadi	Yercaud	
4	Murugan Nagar	reredud	
5	Kovilmedu		
6	Jerinakadu		
7	Mandhai - Tribal Area	Manjakuttai	
8	Manjakuttai Main	Manjakuttai	
9	Mel Kolagur	Nagalus	
10	Bosco Nagar	Nagalur	





9. CROTONS



10. CROTONS



11. CROTONS



12. CROTONS



13. CROTONS



14. CROTONS



15. DURANTA (Light Green)



16. DURANTA (Full Green)



17. DURANTA
(Green and Yellow)



18. TABLE ROSE



19. TABLE ROSE



20. TABLE ROSE



21. CREEPERS IVY



22. CREEPERS Yellow Flower



23. CREEPERS **Blue Flower** 



24. ALTERNANTHERA (Ponnankanni Full Red)



**25. ALTERNANTHERA** (Ponnankanni Pink and Red)



26. THUNDER LILY



**27.** THUNDER LILY



**28.** LILY



<mark>29. LANTANA</mark> (Red)



30. LANTANA White)



31. LANTANA (Yellow)



32. CHRYSANTHEMUM (Red)



33. CHRYSANTHEMUM (Yellow)





**46. ACIANTHERA LUTEOLA** (Andhi Mandharai)



**49.MATCH STICK FLOWER** 



52. PASSION FRUIT



55. SURINAM CHERRY



47. BUTTER FRUIT



50. DRACAENA CANE



53. PENTAS



56. JACK FRUIT



48. LOQUAT



51. DRACAENA



54. BEGONIA <mark>(Pink)</mark>



**57. FALSE DAISY** (Karisalankanni)



58. BAMBOO



61. MONEY PLANT



64. MINI GERBERA



**67.** PELARGONIUM ZONALE



59. LEMON GRASS



62. CUP AND SAUCER



65. ADHADHODA



68. SEDAM



60. COFFEE



(Aruvatham Pachai)



<mark>66. BEGONIA</mark>



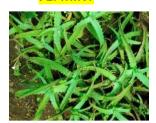
<mark>69. THYME</mark>



70. SYNGONIUM



<mark>71. MINT</mark>



<mark>72. ALOEVERA</mark>



72. AJWAIN (Omavalli)



73. MUSSEACHADA
ERYTHROPHYLLA
(Ashanti Blood)



74. CACTUS



75. CACTUS



76. <mark>DAHLIA</mark>



77. <mark>DATURA</mark> (Oomathai)



**GOLDEN CYPRESS** 

78.



79. IMPATIENTS



80. CHLOROPHYTUM COMOSUM
(Spider Ivy)



81. SALIX



82. OSTEOSPERMUM



83. EPIDENDRUM RADICANS



84. FRAXINUS EXCELSIOR



85. CARDAMINE IMPATIENTS



86. BAYLEAF



87. INDIAN CRESS
MORNING GLORY



88. HYDRANGEA



89. Euphorbia Milidesmoul (Crown of Thorns)



90. CENTELLA ASITICA



91. KESAVARDHINI



92. TABERNACE MONTANA



93. Ficus Microcarpa (Bonsai)



94. NERIUM OLEANDER



97. <mark>JATROPHA</mark>



100. SPIDERWORT



103. AMARANTHACEAE



95. CYPERUS ALTERNIFOLIUS



98. GRAPOTPPHYLLUM PICTUM



**SPIDERWORT** (Pink and Red)



104. SPHAGNETICOLA TRILOBATA



96. ACALYPHA



99. TRACHELOSPERMUM JASMINUIDES



102. Allamandha Cathartica (Golden Trumpet)



105. NEPHROLEPIS BISERRATA

#### TYPES OF PLANT SAPLINGS AVAILABLE IN NURSERY - 2019 - 2020



106. <mark>SAGO PALM</mark>



107. IMPATIENTS BALSAMINA



108. ALPINIA ZERUMBET



109. DWARF MONKEY TAIL



110. CHINESE PINK



111. **CACTUS** 



112. <mark>CACTUS</mark>



113. CACTUS



114. CACTUS



115. <mark>CACTUS</mark>



116. CACTUS



117. CACTUS



118. CACTUS



119. INSULIN PLANT



120. CREEPER

### **PROJECT TEAM**



Fr A Raj SDB Project Director



Fr S Abraham SDB Advisory Support

### **Project Team**



Ms A Sangeetha Teresa Project Coordinator



Mr Sathiaraj - Kodikadu Village, Yercaud Panchayat Nursery Staff



Mr Ramamoorthy - Kasikal Vilage, Guntur, Yercaud Panchayat Nursery Staff

#### Commercial Van TATA ACE - No TN 02AU 0598





**Land Preparation** 



JCB Vehicle Clearing the stubborn bushes and stones to level the ground





Labours involved in levelling the ground





Fixation of iron poles and fencing work in the Nursery

Land Preparation - With the help of JCB, Land filed with loads of mud to level the ground





### **Green House Shed & Agro Net**



Nursery Consultant Ms. Arthi Devi in discussion with her team of workers





Labours involved in construction of Green House Shed



Welding work done while constructing the shed in the nursery



Labours Involved In Measuring the Agro Net To Cover The Green House Shed In Nursery And Production Area

### Water System



Fencing the well for Nursery Water System



1000 Liters Storage Capacity Syntex Tank to water the nursery area with hose pipes

SOLAR LAMPS - Fixed in Nursery and Production Area









### **Equipment and Tools Procured for the Nursery**

























### **Monitoring and Evaluation**





STDi staff Interaction with the Beneficiaries during the Field Visit to Kolagur and Manjakuttai





STDi staff Interation with the beneficiaries in Murugan Nagar, Kolagur and Bosco Nagar



#### **Project NaSH Inauguration**



Nursery blessed on 24<sup>th</sup> November, 2019 by Rev. Fr. Vaclav Klement,SDB - Salesian Regional Superior of East Asia Oceania and opened by Mrs. Neena George & Mr. Jochim Lourduswamy – Save Foundation, Belgium.



Nursery on the day of Inauguration

### **Awareness Raising and Training**



During the training session by Ms. Arthi Devi held on 24<sup>th</sup> November, 2019



The Full Team Participated in the Training session on 24<sup>th</sup> November, 2019



During the Training session by Mr. Rajesh Kumar - CEO Farm Harvest held on 8<sup>th</sup> March, 2020



The Full Team Participated in the Training session on  $8^{\text{th}}$  March, 2020

# Production of Saplings, Arrangement of Plants and Spraying Solution by the Nursery Staff in the Nursery









Nursery Production Site & Plants arranged in the Nursery



