



Palni Hills Grasslands facing South

Palni Hills Conservation Council

36th Annual Report 2020-2021



Palni Hills Conservation Council

The 36th Annual Report 2020 - 2021

Introduction

PHCC applied for the Habitats Trust 2021 Lesser Known Habitats Grant. A site inspection team from Habitats Trust consisting of Mr Rushikesh Chawan and Ms Tanya Singh came midyear and were impressed with our *Grasslands Restoration with Associated Species* (GRASS) pilot project developed by Anna, Pritam, and Mark within the auspices of PHCC to restore and protect an endangered area of native grasslands in our Hills. GRASS pilot project is to be used as a model for the entire Palani Hills. We were a finalist in our category out of a total of 4000 applicants and nearly eight hundred contenders for the Habitats Trust grants, and PHCC was awarded a seed fund for our project.

PHCC is well-placed in the bio-diversity hotspot of the Palani Hills with experienced and dedicated environmentalists, staff, administration and outreach to Government, cooperation with NGOs, the local populace, tribal community and schools to conduct a grasslands habitat restoration project. This work is in accord with an expert committee report that emphasises this need of immediate hands-on restoration work. It is to be documented closely and serve as a replicable model for a mass community movement.

IISER-Tirupati-PHCC-Intach mapping of the Kodaikanal-Palani Hills ground conditions from 1973 to 2014 demonstrates the

alarming (95%+) loss of grasslands habitat, home to many threatened and endangered species like Nilgiri Tahr, Nilgiri pipit (an ancient bird species) that frequent grasslands as well as shola species like the mouse deer and Nilgiri langur, amphibians and other grazing and predatory mammals. Sighted at the GRASS project area by GRASS consultants have been the beautiful leopard-cat and the rare Nilgiri marten.

Grasslands moreover were always here for everyone, human, animal, and plant alike, to ensure year-round water for marshes and other wetlands, as they provide 'soaking patterns' and a sponge effect to hold and release rain fallen from the heavens to become rivers and streams headed down to lower elevations and the rain-hungry plains.

By contrast, the exotic widespread plantations of alien species of Acacia, Pine, Alnus, Eucalyptus and other smaller exogenous flora species encourage flash flooding and runoff that creates erosion and landslides and guarantees a devastating boom-bust cycle for natural species in the Hills for local farmers as well as for agriculturalists in the plains. It is to these communities the water eventually reaches for groundwater replenishment and for direct agricultural and domestic use.

Another element in the problems created by alien tree and other plant species is the fact of allelopathy is the process describing the chemical suppression of native species in their germination and growth by the activity of alien (exogenous) plant species. In other words, the concern around alien species of trees and shrubs is that they actually inhibit by *allelopathic* action the germination and development of ancient native species of flora, which are unprepared by local evolution for this alien invasion. Grasslands and associated species provide a well-documented sponge-like surface that sustains water generation to springs, streams and wetlands that serve the whole of life beyond the monsoon season and thus throughout the year.

To restore grasslands and associated species is not an easy task. Certainly the perceived "quick fix" of clear-cutting of



plantation species—as witnessed in a 2017 experiment with Acacia (wattle) near Kookal in the Palani Hills—has proved disastrous. The sunlight exposure brought about by clear-cutting not only fails to create grasslands but only redoubles the plantation species in an exponential sprouting of millions of seeds into a thick congregation of new Acacia etc, even trapping smaller wild animals like barking deer in their artificial jungle. Moreover, the mature standing plantations of alien plants at least provide serendipitous shade for certain resistant sholai (native tree) species to come up as though in nursery conditions. Where push-back procedures prove untenable let us promote sholai species coming up inside the mature alien plantations and go forward step-by-step.

Native habitat restoration is a huge task requiring scientific understanding, engagement by Government and community participation as well as a transparent push-back plan from open areas into the newly spreading plantation species. Let us try and reverse the mistakes of the past, but not by yet more mistakes! We must say NO!—to clear-cutting and to mass poisoning of plantation species which can only lead to serious impacts on water, humans and wildlife. Hence, Acacia and Eucalyptus which, for instance, dominate and continue to spread into remaining grasslands in the middle and upper hills of the Palani Range must be pushed-back systematically from these extant grassland areas, especially from targeted and threatened small streams and marshes and other grassy wetlands that are likely to be further drained by the ongoing spread of plantation species like Acacia (Wattle), Eucalyptus, Pine etc. This targeted “push-back” is to be accompanied by replanting with native grass species from marsh nurseries, with expertise already in place with PHCC. This push-back is to be accomplished through a proven and transparent system researched and initiated by environmentalists around the world. A push-back from extant ancient areas into the spreading plantation species on a massive scale to restore habitat? This requires

cooperation from all beneficiaries and a clear documentation in a replicable project, that will facilitate ancillary research into less-studied grassland animal (e.g., shrew, mouse deer) avian and flora species. This effort is a sustainable one, which is to be demonstrated through implementation of this project in line with the best environmental thinking and planning with the restoration of grassland habitat as its major goal.

PHCC was proud to implement the donation of fourteen (14) large size (47 litres) oxygen cylinders of 99.7% purity courtesy PHCC member Mr Saravanan CEO of Arasan hGas, Madurai, to the Kodaikanal Government Hospital through Dr Ponrathi for Covid-19 relief—as well as a large shipment of masks, PPT Kits, and visors courtesy the Keystone Foundation fund implemented by PHCC. This funding package included organising with the Block Medical Officer Dr Aravind the transportation costs of RTPCR testing from the villages and from town to the testing centre Dindigul during the height of the second wave.

PHCC received a grant from GROW-TREES to plant 25,000 native trees around the foothills on the northern (Kuthiraiyar, Andipatti) and southern flanks (Manjalar, Vaigai basin) of the Palani Hills. The planting took place in November 2021 under optimum conditions as south-western Tamil Nadu again experienced copious rainfall during this 2021 south west monsoon (August-November). We planted several model forests on our private lands at Genguvarpatti (nr Manjalar) and Viruveedu (Vaigai basin), to create cooling microclimates, soil percolation, and to support bird and insect life in their respective neighbourhoods.

A special shout-out of appreciation goes to Mrs Pippa Mukherjee for her invaluable funding support to PHCC; to Mr Madhu, Mr Mark and others who volunteer for the cause, and to the PHCC Staff for their hard work and dedication in these demanding times.



The PHCC Annual Report

The outgoing Executive Committee of PHCC—constituted with the following office bearers and Executive Committee members—hereby submits its Report for the 35th year of functioning of the Palni Hills Conservation Council. The Executive Committee met seven times during the past year.

Emeritus President	Mr M S Viraraghavan.
President	Mr Mark Antrobus.
Vice President	Mr Madhu Ramnath (Projects).
Vice President	Mr V R Rajagopal Dorai Raja.
Secretary	Mr G Bala
Joint Secretary	Ms Janani Krishnamurthi
Treasurer	Mr Sankar Chatterjee.
Executive Committee Members	Ms Pippa Mukherjee Mr Clarence Maloney Mr George Roshan Mr P Pandian Mr S Ramji
Co-opted Members	Mr Satheesh Muthu Gopal Mr Danish Khan Mr P M Mohan Ms Krishna Bauer Ms Maya Ganesh
Life and Annual Membership	151



Report of PHCC Centres

Upper Hill PHCC Activities

2000 m / 6000 ft

Kodaikanal Nursery Centre and Office

The Kodaikanal Sholai Conservation Nursery at Endhavin/ Amarville raised and distributed 1000 saplings of thirty (30)

varieties of sholai (indigenous, avian and insect supportive) species to the local residents and institutions largely during the second wave of the Covid-19 period itself. The PHCC nursery at Endhawin in Kodaikanal continued to concentrate on high-altitude sholai tree propagation and free distribution to schools in the area. PHCC maintains a stock of above 6500 saplings. This year, again, due to plentiful rains from December 2020 to December 2021 and thus higher forest fertility, PHCC was able to gain more seed from more varieties of native trees and build up our nursery numbers.

PHCC appeals as always to members and well-wishers for support by volunteerism or direct funding this valuable ongoing project of native tree propagation in tune with the TN Action Plan-2 of greening up the country. The Centre maintains two colonies of *Apis cerana indica* in Newton and Top Bar hives for demonstration, observation; awareness programs around world patterns of hive-loss due to climate change and aforesaid challenges of the pesticide-herbicide menace.

We had a very good response and high survival rate for the walnut (*Juglans regia*) saplings distributed in 2021. PHCC has a goal of promoting long-term walnut cultivation around Kodaikanal. Walnut is a good tree-based cash crop: walnuts are anti-inflammatory and have a high Omega-3 content for immunity boost! *Eleocarpus glandulosus* (kottlam) is a wonderful forest fruit from the rudraksha family that many wildlife species depend on and can be taken by humans as well. *Syzygium densiflorum* (jamun) is another tree popular with wildlife and can be enjoyed by people as a reducer of sugar levels in diabetes. *Ilex wightiana* (vellodai) when fruiting is much favoured by birdlife. Saplings of these and other shola species, flowering plants and fruiting native trees can be obtained for private reforestation projects for 1800m to 2400m at very low cost.

Kodaikanal Lake quality monitoring work continued in 2021 in seven (7) sites. Due to the spread of a foreign floating water weed, *Salvinia molesta*, oxygen levels in the Lake are endangered. Constant removal of this dangerous parasitic weed is necessitated by the Municipality. The sites that underwent



testing by our PHCC team are Bryant Park, Boat Club, Children's Park near Township Offices, Skating Hall, Gymkhana Marsh / Sterling Resort, Ferry Crossing, and Green Acres. The testing was done in four different seasons over the past year (2020-2021) around thirteen parameters: i) ammonia content, ii) iron, iii) pH, iv) dissolved oxygen, v) residential chlorine, vi) chloride, vii) fluoride, viii) nitrate, ix) phosphorus (from washing powders), x) hardness, xi) temperature, xii) turbidity, and xiii) depth and visibility.

High contamination sites displayed high ammonia and iron content and hardness of Lake water, a sure sign of sewage being mixed into the Lake. Interested members of the Kodaikanal Community are welcome to go over the PHCC results and then appeal to those around the high contamination sites to take action about effluent pollution of the Lake upon which Kodaikanal business depends for the tourist's attraction. As we know, lower elevations are likewise dependent on this precious resource for more basic needs, and agriculture. Lake water eventually goes down through the streams to the Palar reservoir via Pettuparai for the Palani town of many thousands of inhabitants and regular influx of temple pilgrims.

PHCC Kodaikanal Office is a retail outlet for a very special organic honey, organic pickles, and rare hill turmeric grown by our member Mr N Badrinarayan who received awards and television coverage as the first farmer to raise high altitude organic turmeric on a commercial scale. Nursery Guides, and books by members (listed below) are available at the Office.

Kodaikanal PHCC Office Staff: Mr S Antony, Mr M Sheriff, Mr M Kariyamal. Accountant: Mr A Suresh. Office Secretary: Ms W Latha. Nursery Staff: Ms Y Suganthi, Mrs Pramila John, and Mr John Peter.



PHCC Pallangi Tree Centre

1800m / 5400ft

The Pallangi Tree Centre supported by PHCC Founding Member Ms Pippa Mukherjee maintains three colonies of Apis cerana

indica in Newton hives for demonstration and observation of conditions in bee life. The area is a high pesticide agricultural community, and the heavy rains meant the bees stayed close to the hive. The bee population has been sadly declining due to the rains and pesticide / herbicide use locally. Efforts at converting farmers to organic methods has been an uphill battle since this is a cash crop area for potato, carrot, cauliflower, cabbage, green beans, and peas near easily available water sources. It is up to the consumer to demand organic produce.

PHCC Pallangi Nursery supplied **3228** fruiting, ornamental and sholai trees to the community. The fruiting varieties (peaches, avocado) especially are prized by local farmers.

PHCC follows strictly organic methods of raising and maintaining saplings supplied to farmers and the residential community. Local farmers informed us that the PHCC fruit saplings have a very high (90%) success rate on their lands; we always remind them this is due to organic methods of sapling raising. The standing stock of tree saplings is about **3000** with germination of fruiting trees of around **3000** on the way.

The Pallangi Nursery is a useful and productive tree base for locals living in the villages around and is constantly stocked with plant cuttings of shrubs and trees grown in Ms Mukherjee's garden.

Pallangi Nursery Staff: Ms Pothumponnu. Supervisor, Mr S Antony.



Middle Hills Centres and Activities

1000 m / 3000 ft

PHCC Adukkam Resource Centre and Marshland Nursery

PHCC Adukkam Centre is located in Adukkam village of the Palani Hills, about 25km from Kodaikanal, at an altitude of 900-1100m, in a coffee estate with tropical vegetation.



Adukkam Resource Centre and Nursery extends an invitation for learning and internship. The Adukkam Centre of the Palni Hills Conservation Council (PHCC) and the Non-Timber Forest Products Exchange Programme-India (NTFP, India) is now open to an Internship Programme. The Centre hosts a wild-food garden and nursery, a nursery of useful native plants set in a surrounding forest.

Adukkam Centre: Supporting Women to Restore Natural Water Resources: PHCC SWRN

PHCC SWRN Project covers the villages (1) Adukkam on the moffusal road to Periyakulam, (2) Thamaraiikulam / Sambakadu and (3) Tribal Colony—in the Kumbakarai Watershed. This supplies the Vaigai river basin that feeds the southern plains. A new area (4) of Thandikudi Panchayat Patlankadu has been included in the target range.

The SWRN Project engages grass roots efforts for water conservation and outreach. Two PHCC-trained women field-workers from Adukkam Panchayat interact with their communities for research, discussion and awareness-raising on water sources. The importance of this work is underscored by the fact that the majority of commonly avoidable illnesses are brought about by contaminated water. As we know 40% of people in the world suffer from lack of clean drinking water and the local problems, despite the beautiful environment around, are reflected in that number.

Three thousand (3000) marsh plants of the PHCC Adukkam Nursery of up to ten species known for their purifying and conservation qualities are maintained and replanted around water bodies by the villagers. Road collapse due to along the Perumalmai-Adukkam-Periyakulam road brought about an interesting collaboration with environmentalists and the highways department contractors. Seven streams and springs that were severely damaged have been renovated by excavation and erosion protection, and replanting with the cooperation of

the Forest Department and Adukkam Panchayat. We initiated a marsh plants nursery in Patlankadu this last year.

PHCC SWRN Project response continues to be very positive. SWRN staff and PHCC field workers conduct awareness-raising meetings in the target villages in topics like afforestation, re-vegetation, water conservation, public hygiene, climate change, and organic farming. PHCC conducts monthly water testing in more than a dozen parameters to be shared with Farming and Tribal communities. The dangers of pesticides and herbicides and their alternatives is especially stressed. The Adukkam Panchayat works with PHCC to protect water sources to maintain sustainability. Due to the second wave of Covid-19 we are playing catch up on funding—for Grasslands Restoration and Endangered Native Tree seed collection. Adukkam received funding from People and Nature Fund (PNF).

Due to cyclone activity in late 2020 the Perumalmalai-Adukkam -Periyakulam Road experienced landslides and heavy erosion. As a consequence roadside perennial springs and streams were seriously damaged and temporary streams appeared in unexpected locations. While the Highways Department was engaged in many tedious months of road repair, PHCC SWRN advocated to them for the importance of the springs for the local community, tourists, agriculture etc. We brought in a particularly powerful local woman speaker to emphasise the points. As a result, the Highways Department cooperated with our suggestions constructing a retaining wall for the perennial springs damaged and silted up by the cyclone. Because of the intervention, the Highways Department renovated springs with stone and cement. Everybody happy.

One day, however, we noticed that many of our planted *Acorus calamus* (sweet flag, *vasambu*) in the springs periphery had mysteriously gone missing! We discovered that villagers had harvested them for use at home, knowing full well the tradition of these marsh species as water filters and purification media.



When our sweet flag planting around the springs began to disappear mysteriously we discovered they had been replanted in the drainage grey water from houses. Coming to understand this receptivity to the use of natural methods of water purification at home, we began to distribute sweet flag and other species free from the PHCC marsh nursery on demand.

To talk about the water, health, condition of water flow from the hills and plains, the PHCC SWRN team linked up with downstream area villagers who are dependent on water from the Adukkam hills. These villagers included farmer families from Murugamalai, Endapuli, Puthupatti, Jeyamangalam, Melmangalam, Vadukapatti and Periyakulam. They told us that the water quality and flow is in good condition only up to the foothills where the mango plantations and paddy, sugar cane, and other high fertiliser, pesticide-use, and herbicide agriculture areas negative impact drinking water; as well as this, the Periyakulam town waste water is mixed into the river. During local temple festivals the villagers themselves pollute their own drinking water by careless activities. They said that only during the rainy season do they get pure water. PHCC SWRN has become a lone voice of organic advocacy and municipal vigilance in this large and diverse community. The PHCC SWRN team is continuing to strengthen its links for water advocacy in the downstream communities

The SWRN team have an unexpected opportunity in the new target village of Thandikudi Panchyat Patlankadu village community. Formerly, the SWRN team found it difficult to get necessary village data from the authorities around water supply, population details, and other information on the village. Now, one of our PHCC SWRN team staff Mr Kariyamal has been working with the Palni Hills Conservation Council for the past twenty five (25) years as a bee keeper, apiary trainer, and shola nursery seeds collector has become a Ward member of Thandikudi Patlankadu village. This means that we can access

village information pertaining to water and women issues in educated detail and straightaway.

In our project research area of the Varataru River at Sotthuparai near Palamalai we gathered an object lesson in the importance of community consciousness around shared water resources. In the story we documented it is clear that whether or not a spring happens to be on someone's private land, it has to be respected and treated as affecting the entire ecology around. A farmer known to us on our inspection rounds, one Mr Vanaraj aged around fifty, began chatting one day as he was packing his crop of vegetables for market. Upon hearing that we were there researching water use in the hills, he told us a sad story. On his thirteen acres his family had a nice spring which from his father's time never went dry. This spring was known as a resource for others around.

One day a neighbour came by to visit and while conversing the neighbour managed to convince Mr Vanaraj that if he dug out the spring and widened the catchment area he would have a great deal of water to draw from. Mr Vanaraj confessed to us that he got greedy. He employed labour for an extensive digging project and spent more and more money digging deeper and deeper into the site of the spring only to find that disrupting the spirit of the place, as he said, the spring ran dry. Now with his head hung low he said he has little water for his family and agriculture, and has to carry water from the Varataru below his land.

The SWRN team dialogued with him about water, climate, and agriculture. He said when he was young rainfall was more regular and water flow was high. His father raised naturally organic crops and realised a decent income. Now water is low and sufficient for only two crops per year. Because of the water shortage there is increased man-animal conflict. Monkeys and giant squirrels damaged the fruit crops and gaur and deer damaged the vegetable crop. Visiting peacocks and (root loving)





◆ Oriental Magpie Robin at Pallangai Nursery with Coffee Plant



◆ Bos gaurus at PHCC Campus, Kodaikanal



◆ Natural Beeswax Smoke-free Candle-making Class
at Fr KM Matthew Environment Centre



◆ Downstream Water Testing.
Community Women with PHCC at Manjalar river



◆ NTFP Wild Foods Tuber Harwesting



◆ Traditional Indian Culture honours the role of the Tree in the wider life of Humanity, *Ficus religiosa*, the Bodhi Tree



◆ PHCC GROW-TREES Tree Planting Project at Viruveedu Centre



◆ PHCC GROW-TREES Tree Planting work at Kuthirayar River Basin

porcupine only compound the problem. Mr Vanaraj understood about the grasslands being a sponge for water and that they are diminished due to monoculture plantations. Mr Vanaraj has six (6) acres under cultivation with banana, jackfruit, coffee, pepper and some areas under two crops of green beans and other crops like chow-chow. In the dry season, partly due to his spring loss, he faces water shortages for his house and other purpose. The locals around Mr Vanaraj also now depend on the Sotthuparai Varataru River (leading to Manjular) which is drying. Vanaraj says he should have respected the local spirits. We talked about the spirit of Nature and how we all need to become more aware of Climate Change and hold water bodies in the greatest respect, whatever else we might believe in.

Present stock at Adukkam Nursery 3000. Meanwhile, 3000 plants from Adukkam were contributed to the GROW-TREES Project in Genguvarpatti. Water testing spring and stream during ten (10) sites are conducted every month. Spring restoration work is ongoing. GPS Points and mapping work is ongoing.

PHCC Adukkam Centre and Marshland Nursery Staff: Ms Saravana Devi, Ms Nayaki. Supervisors, Mr S Antony, and Mr M Sheriff.



Plains Centres Activities

Sea Level

Father K M Mathew Environment Centre

**Genguvarpatti / Kamakapatti Law's Ghat Road,
Manjular Dam, Vaigai Basin**

In our 36th year PHCC Father Mathew Centre distributed **11244** native tree seedlings to farmers and the wider community. PHCC has a longstanding association with GROW-TREES promoting tree planting all over India. Since 2018 GROW-TREES has sponsored a green belt program implemented by PHCC. In



2020 and 2021 PHCC planting **7500** indigenous evergreen trees around Manjular Dam below Thalaiyar (Rat-tail) Falls. Father Mathew Centre at Genguvarpatti maintains a stock of around 22150 native tree seedlings.

A Medicinal Plants Nursery consisting of twenty five (25) varieties of traditional herbs has been initiated at the Centre. This was initiated for schools and colleges to gain a better understanding of our nature cure heritage and for local people to replant at home for folk medicine and health. This past year around two hundred (200) seedlings of medicinal plants have been distributed free of cost to interested local public and schools.

For the Non-Timber Forest Products (NTFP) project twenty (20) types of wild yam and other varieties of edible wild species are maintained at the Centre for research into genetic viability for cultivar breeding.

Due to second wave Covid-19 restrictions we were sadly unable to conduct schools and colleges "Tree Day" planting Programme as usual.

Wild Organic Honey Sales Centre stocks rare Apis dorsata wild honey with sales of around 175kg. Palni Hills' pepper, organic shade coffee, delicious pickles, turmeric, organic and creams are also featured. After Covid-19 restrictions were eased Ms Selvi and Mr Jeyaram with the help of Mr Antony and Mr Sheriff conducted trainings for the local hill area communities in nursery care, beekeeping, medicinal plants, bees wax products etc.

PHCC Arboretum at Kamakapatti, Fr Matthew Centre, is rich with native trees acting as a centre for Handbook Distribution on public awareness of Watershed resources. More than a hundred species of native trees, with new varieties are added yearly, labelled with descriptions of their uses and history for research and education.

PHCC Staff at Fr Matthew Environment Centre. Supervisor, Mr R Jeyaram. Group leader, Ms Selviswari.



Kuthiraiyar Tree Growing Centre

Next to Kuthiraiyar Dam, Cauvery Basin

Kookal Forest nr Palani

Twenty (20) Tribal Community families were engaged on a day-to-day basis during the two-month PHCC GROW-TREES Planting Programme re-wilding process. Thirty five (35) acres were targeted for the planting of 10,000 tree saplings. A minimum of one metre (3ft) in height for healthy saplings was required to maintain a superior survival rate. Most importantly, locals are involved in post-plantation maintenance intrinsic to the Programme.

These include tamarind and other trees appropriate for avian restoration. Along with native trees like Terminalia bellerica (thanri-kay) and Emblica officinalis (amla) for Ayurvedic triphala churna. The PHCC NTFP Project around wild foods is maintained at Kuthiraiyar with around fifteen species of yam (Dioscoreaceae sp) collected and maintained by our Tribal col-leagues.

GROW-TREES / PHCC Tree Planting Programme in 2020 and 2021 was successfully conducted as an exercise in re-wilding in PWD "wasteland" around Kuthiraiyar Dam (due West of Palani Town) abutting the Reserve Forest in the Palani Hills northern slope foothills, and located at the border of the IGWS: Anaimalai Tiger Reserve. Andipatti and Papampatti and Mannthittu Tribal Colony also received around 3000 saplings which the locals pledged to protect.

Habitat loss due to degradation and deforestation in recent times is a major conservation issue for the region. GROW-

TREES / PHCC Tree Planting Programme serves to protect and nurture flora and fauna of forest and grasslands. The target Area of thirty (30) acres under the stewardship of the Public Works Department (PWD) has been despoiled over decades down to low weeds and small bushes from its once pristine forest. The local villages of Andipatti and environs need more trees for shade and microclimate support. Many fine trees are safe from depredation and have been maintained to the point of coming up in height from the autumn of 2020 already. The Project Area next to the Reserve Forest is an ideal habitat for our endangered Indian elephant and endemic and endangered Nilgiri tahr at the fringes of the Anaimalai Tiger Reserve. The Programme Area possesses a vital corridor and hunting ground for the endangered Bengal tiger and the Indian leopard; other mammals include 'near-threatened' Indian pangolin, 'vulnerable' gaur, sambar deer, Nilgiri langur, rusty-spotted cat, sloth bear, Indian giant squirrel, wild dog, jackal, and Malabar gray giant squirrel.

The GROW-TREES / PHCC Tree Planting Programme

surroundings next to the Kuthiraiyar Dam possesses high avian diversity. Some amongst 250 species identified in the Tiger Reserve and confirmed in Kuthiraiyar by PHCC birder Mr Satheesh Muthu Gopal are ibis, owl, tern, lapwing, hornbill, jacana, flycatcher, cattle egret, plover, swift, sandpiper, stone curlew, warbler, water-hen, spoonbill, drongo, robin, magpie robin, pied shrike, and reef egret. Amphibians and reptiles include rare endemic forms like the elusive purple frog, thin legged leaping frog, Anaimalai flying frog—while reptiles include the endangered Indian rock python, King cobra, forest lizards and many others. 315 species of butterflies belonging to five families have been identified in the hills next to the re-wilding site. Hence many varieties of mammals, reptiles, snakes, amphibians, insects and pollinators are to be benefitted from this effort over thirty acres. The many-layered aspects of tree-life from shade delivery to soil-interaction support wildlife in



regulating the ecosystem and its services through this re-wilding. Stakeholder families comprise small Tribal communities, small-scale farmers and daily-wage workers. Locals are dependent on collecting non-timber forest products (NTFP) from the Kookal-Kuthiraiyar Forest and Grassland slopes; we want to point out that regeneration of above-soil animals and subsoil microbial life links with wild foods and direct engagement by locals to improve the sensitive economy with enhanced forest-based livelihood options.

Awareness: PHCC conducted awareness workshops to local communities on the significance of environmental conservation and sustainable development by involving more folks in conservation action. Implementing the Tree Planting Programme involves such workshops to sensitise communities to the value of the natural world to their needs and humanity at-large, to understand re-wilding for its positive impacts on weather and water stresses; also the vital importance of curtailing illegal wildlife trade—which makes us all vulnerable to viral epidemics as has been warned of by epidemiologists worldwide who say “Leave Nature alone!”

Nursery Raising: for the past thirty (30) years PHCC has maintained a Forest Tree Nursery at Kuthiraiyar Dam. PHCC has great expertise in arboreal cultivation. For GROW-TREES / PHCC Tree Planting Programme PHCC nursery workers raised 10,000 saplings of twenty five (25) species for the Project implementation. Key members of the local Tribal Community are highly invested in Tree Planting work and PHCC Nursery activities, of a direct benefit economic and cultural; tree raising and planting reinforce and renew bonds with Nature even as benefitting directly through wages.

Planting Work: GROW-TREES / PHCC Tree Planting Programme was conducted during the rainy season from October 2020 to mid-December 2020. And again in the south west monsoon of 2021. This year (2021) during the tree-planting season we were

again blessed by ample rain so the success rate looks to be quite positive. To make up for the previous year (2019) sapling

Kuthiraiyar Staff: Mr S Krishnamurthy, Ms G Mariammal, M.Kariyamal.



Viruveedu Tree and Beekeeping Centre

Viruveedu, Vaigai Basin, Batlagundu

Viruveedu Tree and Beekeeping Centre has lacked a proper water supply for about ten years, due to the area lacking sufficient ground water during low rainfall. We had maintained honey collection but had to sadly close the tree nursery. Due to the copious rains of the past two years the groundwater situation has improved and we have restarted the well. In the autumn 2021 southwest monsoon which brought heavy rains to southwestern Tamil Nadu we took the opportunity of planting up a mini-forest implementing GROW-TREES funding. This mini-forest consists of around 6000 native trees saplings of good size under very strict protection and water availability. These miniforests are to create cooling microclimates, soil percolation, and to support bird and insect life in their neighbourhoods.

Viruveedu Staff: Mr Vairan, Ms Rasatthi.



Credit to **Jennifer Harris**



Environmental Books by PHCC Members

Madhu Ramnath and Ramon Razal: *Wild Tastes in Asia: Coming Home to the Forest for Food*, NTFP Exchange Programme, 2020
Illus. <tinyurl.com/wildtastes>

Madhu Ramnath: *Woodsmoke and Leafcups: Autobiographical Footnotes to the Anthropology of the Durwa people*, Harper Litmus, 2016. Illus.

Madhu Ramnath: *A Nursery Manual*,
Kodaikanal: PHCC, 2019. Illus.

Pippa Mukherjee, *Flora of the Southern Western Ghats and Palnis*, New Delhi: Niyogi, 2016. Illus.

Pippa Mukherjee, *Trees of India*, New Delhi: WWF-OUP Nature Guides, 2014. Illus.

Robert Stewart, *Meet the Trees of Kodaikanal, An Island in the Sky*, ed Jayashree Kumar, Kodaikanal: INTACH, 2019. Illus.

Satheesh Muthu Gopal, *Yarukkanathu Bhumi?—Earth, for Whom?*
Chennai, Crownest, 2018, illus. <<http://ivansatheesh.blogspot.com/2019/08/blog-post.html?m=1>>



Credit to Jennifer Harris

PHCC's Invaluable Donors

Both **ENDS**, The Netherlands. **GROW-TREES**, Mumbai.

People and Nature Fund (PNF): Keystone Foundation, Kotagiri.

NTFP, Non-Timber Forest Products Exchange Programme Asia.

Ms Pippa Mukherjee, INDIA. Mr Sateesh Mutthugopal, INDIA.

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Donations to PHCC from Members and Well-wishers are always needed and most Welcome. Our Banking Information is -



INDIAN Contributions

Palni Hills Conservation Council

State Bank of India, Kodaikanal.

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FOREIGN Contributions

Palni Hills Conservation Council

State Bank of India, New Delhi.

Acct No. 40108914266

IFSC Code SBIN0000691

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"Stay Safe! Eat Healthy! Give back to Nature!"

PHCC President - Mark Antrobus, <vibusgo@gmail.com>

Kodaikanal, December 4th, 2021



MADHAVAN & ELANGO, CHARTERED ACCOUNTANTS.
 C-17, 10-B CROSS, THILLAI NAGAR, TRICHY-620018. PH:0431-2741908, 2740113.

PULNI HILLS CONSERVATION COUNCIL, PUDUCHERI.
 CONSOLIDATED RECEIPTS AND PAYMENTS ACCOUNT FOR
 FOR THE YEAR ENDED 31.03.2021

<u>RECEIPTS</u>		<u>PAYMENTS</u>	
Opening balance:		Seedling exp	557044
Cash in hand	11923	F C Project exp	1375480
Bank bal	376191	Treasurer Exp	477847
OB FD	500000	Closing balance:	0
Membership fee	10200	Cash in hand	4843
F C received	1053159	Bank bal	13493
Bank interest	40459	Fixed deposit	500000
IT refund	9103		
Interest on IT refund	357		
Cont from seedlings	512243		
Money contribution	3502		
Room Rent	71350		
Grow Trees	339203		
	-----		-----
	2928709		2928709
	-----		-----

As per our report of
even date annexed

For Madhavan & Elango
Chartered Accountants (F.R.N.:0054482)

(Signature)

S. Madhavan (M.No.:022257)
Proprietor

Trichy
21.12.2021



UDIN:21 022257. AAA AFB 18 16



MADHAVAN & ELANGO, CHARTERED ACCOUNTANTS.
C-17, 10-B CROSS, THILLAI NAGAR, TRICHY-620018. PH:0431-2741509, 2740113.

PALMI HILLS CONSERVATION COUNCIL, BOGAIRAMAL.
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR
FOR THE YEAR ENDED 31.03.2021

EXPENDITURE		INCOME	
Seedling exp	557046	Membership fee	15200
F C Project exp	1375480	F C received	1053159
Treasurer Exp	477847	Bank interest	40455
		Cont from seedlings	512262
		Honey contribution	3502
		Room Rent	71350
		Grow Trees	339203
		IT Return	5103
		Int on IT refund	357
		Deficiency	369778
	-----		-----
	2410373		2410373
	-----		-----

As per our report of
even date annexed
For Madhavan & Elango
Chartered Accountants (F.R.N.:0054488)

Trichy
31.12.2021


R. Madhavan (M.No.:022257)
Proprietor



UDIN:21 022257. AAA AFB 18 16 * J

MADHAVAN & ELANGO, CHARTERED ACCOUNTANTS.

C-17, 10-B CROSS, THILLAI NAGAR, TRICHY-620018. PH:8435-2741508, 2740113.

PAJMI HILLS CONSERVATION COUNCIL, KODAIKANAL.

CONSOLIDATED BALANCE SHEET AS AT 31.12.2021

LIABILITIES		ASSETS	
Capital fund		Land & building	3129164
Opening bal.	4060911	Tools & equipments	639947
Less: Deficiency	-369718	Furniture	237789
	-----	4491033 Computer scanner	8200
Life Membership fee	111851	Debtors	26448
Advance from members	159000	Closing Balance:	0
		Cash in hand	4843
		Bank bal.	13493
		Fixed deposit	502000
	-----		-----
	4760884		4760884
	-----		-----

As per our report of
even date aforesaid
For Madhavan & Elango
Chartered Accountants (F.N.N.:0054485)

Trichy
21.12.2021


R. Madhavan (M.No.:022257)
Proprietor



UDIN:21 022257. AAA AFB 18 18 '21

MADHAVAN & ELANGO, CHARTERED ACCOUNTANTS.

C-17, 10-B CROSS, THILLAI NAGAR, TRICHY-620018. PH 0431-2741508, 2740113.

CERTIFICATE TO BE GIVEN BY CHARTERED ACCOUNTANT

We have audited the accounts of

accounts of

**SAIKI HILLS CONSERVATION COUNCIL, ENDHANAH, LOWER SHOLA
ROAD, JODAIKKEERI Reg No 88/1486**

for the period ending 31.03.2021 and examined all relevant books and vouchers and certify that according to the audited accounts-

(i) The brought forward Foreign contribution at the beginning of the year 01.04.2020 was Rs. 328853/-.

(ii) Foreign contributions of worth Rs. 1058159/- were received by the Association during the period from 01.04.2020 to 31.03.2021.

(iii) Interest accrued on foreign contribution and other income derived from foreign contribution or interest thereon of worth Rs.4341/- was received by the association at the end of the year.

(iv) The balance of unutilized Foreign Contribution with the Association at the end of the period 31.03.2021 was Rs. 2664/-.

(v) Certified that the Association has maintained the accounts of Foreign Contribution and records relating thereto in the manner specified in section 19 of the Foreign Contribution (Regulation) Act, 2010 read with rule 11 of the Foreign Contribution (Regulation) Rules, 2011.

(vi) The information furnished above and in the Balance Sheet and statement of Receipt and Payment is correct as checked by us.

(vii) The Association has utilized the foreign contribution received for the purposes; it is registered/granted prior permission under foreign contribution (Regulation) Act, 2010

For Madhavan & Elango
Chartered Accountants (F.R.N.: 0154488)



R. Madhavan (F.No.: 022257)
Proprietor

Trichy
21.12.2021



UDIN:21 022257 . AAA AFB1B1G





Fr. KM Matthew Centre Nursery. Staff with White Teak (*Gmelina* sp)



**PALNI HILLS
CONSERVATION COUNCIL**
(Regd. Soc. 88/1985)

Palni Hills Conservation Council

(Regd. Soc. 88/1985) P.O. Box 34, Endhawin,
Lower Shola Road, Kodaikanal - 624 101, TN, India.
info@palnihills.org | 📞 04542 - 240157 | www.palnihills.org



NTPF Wild Food Nursery at Adukkam