

LONGWOOD SHOLA CONSERVATION CENTRE

The word 'Shola' is probably derived from the Tamil language word “Solai” meaning grove. Sholas are found in valleys at elevations greater than 1700 m higher regions of South India, largely in Tamilnadu. In Nilgiris, the shola-grassland mosaic is characteristically patchy. Often though, shola fragments are linear strips that may or may not be contiguous with lowland evergreen forest which contain a different suite of species. Sholas of different regions exhibit little similarity in species composition. Sholas consist of profusely branched, stunted trees (rarely exceeding 15 m) with prolific epiphytic growth. These patches of shola forest are found mainly in the valleys and are usually separated from one another by undulating Montane grassland. The shola and grassland together form the shola-grassland complex or mosaic. The shola-forest and grassland complex has been described as climatic climax vegetation with forest regeneration and expansion restricted by climatic conditions such as frost or soil characteristics while others have suggested that it may have anthropogenic origins in the burning and removal of forests by early herders and shifting agriculturists.



Typical Shola & Grass land eco system

The Shola forests and associated grasslands store large quantities of water on the mountain ranges, thus serving as huge `water harvesting and storage structures. In the Nilgiris District about 118 patches of Sholas have been recorded. Shola is the main perennial source of

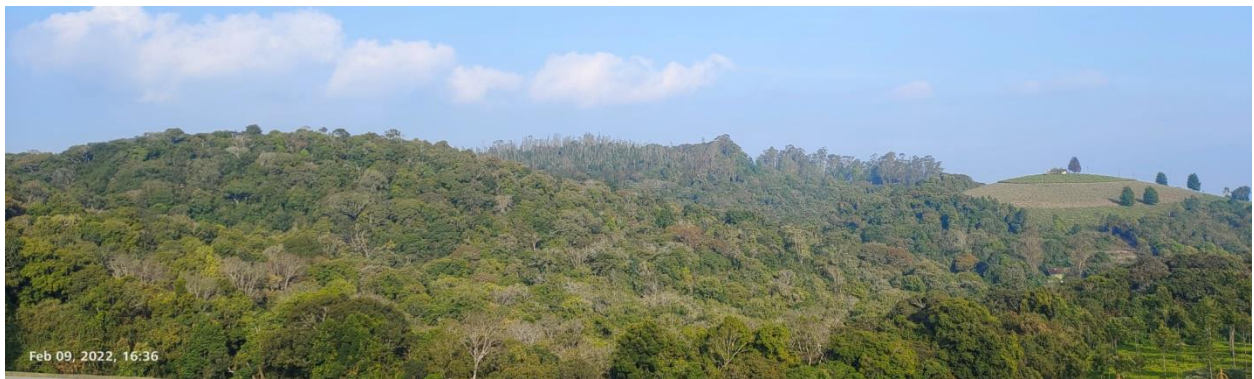
the water. Many of the rivers in Nilgiris originate from the Shola grasslands. The conservation of Shola is very important to conserve water for future generation.

The Longwood Sola is also an important sola patch in the Sola forests of the Nilgiris. The Longwood Shola is one of the most amazing dense wooded forests in Kotagiri town of Nilgiris District. The Longwood Forest, also known as the Dodda Shola by the local people of Kotagiri, is 3 kms away from the town of Kotagiri, spreading out over 116 hectares. This sylvan retreat is a major water source for Kotagiri and over 18 villages in the Aravenu area and plays an important role in balancing the ecosystem of the region. This shola is an integral part of the very fragile Nilgiri eco-system. Location of Longwood Shola (LWS) is Latitude. 11.438244 and Longitude. 76.87353. It is the only major pocket of natural shola left in the vicinity of the Kotagiri. With an area of 116 Ha, this Shola forest has 3 main perennial streams, out of which two join in a central swamp and the third joins in a pond. Together, they supply thousands of cubic meters of water to 18 villages downstream, notably, Kairbetta, Hosahatti, Aravenu and Jakkanarai.



Aerial view of Longwood Shola

There is a lot of wild flora and fauna species recorded in the LWS such as Indian Giant Squirrel, Barking Deer, Bonnet Macaque and Indian Gaur. Nocturnal animals include Wild Boar, Porcupine, Black Napped Hare, Jungle Cat, Mouse Deer, Leopard Cat and Nilgiris Marten. Even today, Longwood Shola provides shelter to varied fauna. Visitors can easily spot Nilgiri Laughing Thrush, Grey Jungle Fowl, Golden Backed Woodpecker, Wood Pigeon, Shikra, Spotted Munia and Emerald dove to name a few. Shola forests harbour a very wide variety of flora, the most conspicuous of which are, of course trees which are endemic species.



Longwood Shola

Hence the preservation of Longwood shola forest is very vital. It plays a vital role in Kotagiri's microclimate, attracting and regulating rainfall.

Conservation History of Longwood Shola

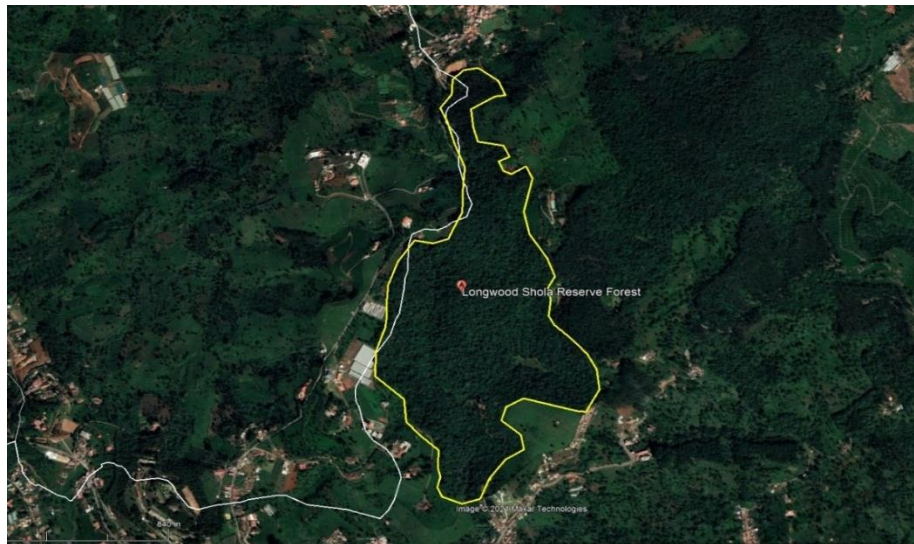
Longwood Shola was declared as a Reserved Forest during 5.8.1884. In spite of its long standing remarkable history, the Longwood Shola has suffered much over the last 3 decades. A number of villages and settlements, both big and small are located around this Shola. They have expanded their territory considerably near to this Shola boundary line. Subjecting it to increase population, despite the chain link fence erected in 1987 to help the Shola preservation, in May 1998 the forest department constituted an 8 member **Longwood Shola Watchdog committee**

The main objective of proposing this committee was

- a) To realize the immense benefits people get from this Shola.
- b) To create awareness in the minds and hearts of the local residents, school students and the tourists. By this way, it should be an eye opener to everyone who is still not passionate about the Sholas.
- c) To implement for involving local people voluntarily in conserving the Sholas.

This Watchdog Committee consisting of native citizens of Kotagiri. In collaboration with the Forest Department, this Committee keeping watch on the sholas ground situation. The committee conducts awareness meeting nearby villages to convey the important of Longwood Shola. Also taking school children into Shola and creates awareness among young generations. In this way the villagers around the Sola at present do not go into the Sola area and cause any disturbance.

This committee is also involving with villagers and students living around the Longwood Sola and removing exotic weeds such as Wattle (*Acacia mearnsii*) and *Solanum robustum* that have infiltrated the Sola. In collaboration with the Forest Department, committee brings local people and school students to Longwood Shola on Wildlife Week Celebration and World Forest Day to raise awareness.



Google Earth Map of Longwood Shola

Establishment of Longwood Shola Conservation Center

In general the maintenance of biodiversity, ecosystem functions and associated ecosystem services in a changing environment is a challenging issue, as is identifying the scale and intensity of human use compatible with conservation of biodiversity and ecosystem services. It is imperative to develop governance models that enable participatory management and a more equitable, just and sustainable approach to conservation. However, our understanding of the complex web of social, political, economic and environmental change, the forces underlying these changes and the impact of these changes on biodiversity, local communities and humanity at large remains poorly understood.

Therefore it is imperative to start the Longwood Shola Conservation Center to protect the Longwood Shola with the participation of people living around Longwood Sola. Thereby people will get benefits and it will create awareness among the people and students visiting there. Through establishing this Centre will build Longwood Shola's vital knowledge of biodiversity, environmental activities and ecosystem services of natural and managed ecosystems in the context of local change and challenges. Understanding the role of biodiversity in sustaining human welfare is crucial to galvanizing conservation awareness and eliciting civil society support for conservation. Recognizing the structure, function, and value of biodiversity of Longwood Shola will enable us to prioritize outreach activities and natural resource management initiatives.

The Centre's main objectives are:

- a) Designing and implementing various conservation programs and projects;
- b) Providing methodological and consultative assistance to conservation initiatives and green activists;
- c) Promoting partnership between forest department, people and environmental organizations, coordinating their efforts in wild nature protection;
- d) Developing efficient mechanisms of fundraising for nature conservation projects;
- e) Improving management of protected natural areas and developing conditions for sustainable livelihood of their residents

Thrust Areas of Longwood Shola Conservation Centre

1) Education for Children

The Centre will develop, coordinate and conduct a number of awareness programmes for school children. It will endeavour to bring a hands-on, field-based awareness to school children through opportunities offered by governmental and non-governmental initiatives such as the eco-clubs, camping, trekking in and around Longwood Sholas.

2) Education for Youth

The center will raise awareness and engage young people in protecting the Longwood Shola. The center will provide environmental education through lectures, seminars, workshops, programs, etc. for young people who are on the verge of becoming active participants in the community as citizens, decision makers and leaders.

3) Interpretation

Since Longwood Shola attracts numbers of visitors throughout the year, the interpretation through Photo-text panels, Dioramas, Life-size and lifelike models, Wayside and directional signage, Interactives and Augmented Reality, Audio-visuals and publications is essential for conserving the Shola area. Installing the cameras on the canopy which will be linked to a monitor in the interpretation center will give live images of all the activities on the canopy.

4) Forming Village Level Eco Development Committee

Longwood Shola Eco Development Committee with the cooperation of local tribes living in and around Longwood Shola will be very helpful to develop the livelihood of the local tribes. EDC can be used as revolving fund to enhance co-operation of this community and to build partnership with the forest department with participatory in Shola Conservation, Eco tourism etc.,

5) Other Thrust Areas

The center should be set up biodiversity laboratories in the shola to monitor - pollinators on the canopy, insects in the litter and soil, camera traps to monitor regularly wildlife movement, water

flows and springs monitoring network. The centre should have a set of permanent staff trained to collect and keep records of biodiversity which can be shared as part of education and outreach material. A Cafeteria, Souvenir shop will help enhance the life of the local indigenous people who live in and around Longwood Shola.

The Activities which will be part of Longwood Shola Conservation Centre

- 1) Interpretation Center with Library
2. Cafeteria & Souvenir Shops
3. Children's park
4. Trekking Paths
5. Camping Facilities
6. Procuring Camera Traps & Binoculars
7. Ticket counter
8. Eco friendly Rest room
9. Watch towers (Small & Big)
10. Awareness boards in every 30 meters in the trekking path
11. Employing the Eco Guides from local youths
12. Providing chain link fencing along the walking trails
13. Boundary demarcation.

APPROXIMATE FINANCIAL OUTLAY

S.No	Description	Rupees in Lakhs
1.	Longwood shola Conservation and Interpretation Centre with Library	50.00
2.	Cafeteria	30.00
3.	Children's park	25.00
4.	Trekking path	20.00
4.	Canopy walk @ 500 m length	30.00
5.	Eco shop	20.00
6.	Ticket counter	5.00
7.	Eco friendly Rest room	5.00
8.	Watch tower	25.00
9.	Awareness boards in every 30 meters in the trekking path @ Rs. 25000/board (25 boards)	6.25
10.	Clearing of Exotic weeds	20.00
11.	Creation of new EDC	5.00
12.	Providing chain link fencing along the walking trails in both sides @ 3 km (1.5 x 1.5 km)	70.00
13.	Boundary demarcation (5.54 km @ 3500 per meter)	193.90
	TOTAL	505.15

EXPECTED OUTCOME

It is expected that after implementation of the present LWS conservation Centre, inflow of tourists will grow. It is also expected that school students and youths will gain awareness in protecting the Shola. At present, organized conservation through ecotourism is absent in Nilgiris. This Centre may fulfill this absence. There will be more flow of revenue on account of tourism and significant benefits will flow to the local tribal communities in and around Kotagiri. The money generated can be used for conservation of Longwood Shola in the future.

ANNEXURES

1. List of Floral Species Documented by Key Stone Foundation, Kotagiri
2. List of Mammals Recorded in Longwood Shola
3. List of Birds Recorded in Longwood Shola
4. List of villages that receive drinking water from the water generated in Longwood Shola

ANNEXURE – I

LIST OF FLORAL SPECIES DOCUMENTED BY KEY STONE FOUNDATION, KOTAGIRI

S.No	Botanical name	Habit
1.	<i>Cayratia pedata</i>	Climber
2.	<i>Elaeagnus kologa</i>	Climber
3.	<i>Jasminum brevilobum</i>	Climber
4.	<i>Piper mullesua</i>	Climber
5.	<i>Piper schmidtii</i>	Climber
6.	<i>Sageretia hamosa</i>	Climber
7.	<i>Smilax wightii</i>	Climber
8.	<i>Tetrastigma leucostaphylum</i>	Climber
9.	<i>Toddalia aculeata</i>	Climber
10.	<i>Cissampelopsis walkeri</i>	Climber
11.	<i>Vitis</i> sp.	Climber
12.	<i>Asplenium decrescens</i>	Fern
13.	<i>Asplenium erectum</i>	Fern
14.	<i>Asplenium normale</i>	Fern
15.	<i>Dicranopteris linearis</i>	Fern
16.	<i>Nephrolepis</i> sp.	Fern
17.	<i>Pteris quadriaurita</i>	fern
18.	<i>Isachne bourneorum</i>	Grass
19.	<i>Isodon wightii</i>	Herb
20.	<i>Calanthe triplicata</i>	Ground Orchid
21.	<i>Arisaema tortuosum</i>	Herb
22.	<i>Laportea bulbifera</i>	Herb
23.	<i>Pilea melastomataceae</i>	Herb
24.	<i>Scutellaria violacea</i>	Herb
25.	<i>Solanum anguivi</i> var. <i>multiflora</i>	Herb
26.	<i>Carex lindleyana</i>	Sedge

S.No	Botanical name	Habit
27.	Hedyotis sp.	Shrub
28.	Lasianthus venulosus	Shrub
29.	Maesa indica	Shrub
30.	Ophiorrhiza sp.	Shrub
31.	Psychotria bisulcata	Shrub
32.	Psychotria nilgiriensis	Shrub
33.	Psychotria truncatus	Shrub
34.	Solanaceae type	Shrub
35.	Memecylon randerianum	Smal Tree
36.	Actinodaphnae bournei	Tree
37.	Celtis tetrandra	Tree
38.	Cinammonum wightii	Tree
39.	Cinnamonum sp.	Tree
40.	Cryptocarya neilgherrensis	Tree
41.	Daphniphyllum neilgherrense	Tree
42.	Debregeasia longifolia	Tree
43.	Eleocarpus serratus	Tree
44.	Euonymus crenulatus	Tree
45.	Eurya japonica	Tree
46.	Excoecaria crenulata	Tree
47.	Gardneria ovata	Tree
48.	Glochidion neilgherrense	Tree
49.	Gordonia obtusa	Tree
50.	Ilex denticulata	Tree
51.	Ilex gardenaria	Tree
52.	Isonandra perrottetiana	Tree
53.	Ixora pavetta	Tree
54.	Litsea floribunda	Tree
55.	Litsea myrsticifolia	Tree
56.	Litsea sp.	Tree

S.No	Botanical name	Habit
57.	<i>Litsea wightiana</i>	Tree
58.	<i>Litsea wightii</i>	Tree
59.	<i>Melicope lunu-ankenda</i>	Tree
60.	<i>Meliosma simplicifolia</i>	Tree
61.	<i>Meliosma simplicifolia</i> var. <i>pungens</i>	Tree
62.	<i>Myrsine wightiana</i>	Tree
63.	<i>Neolitsea scrobiculata</i>	Tree
64.	<i>Neolitsea zeylanica</i>	Tree
65.	<i>Nothapodytes nimmmoniana</i>	Tree
66.	<i>Phoebe paniculata</i>	Tree
67.	<i>Phoebe wightii</i>	Tree
68.	<i>Symplocos cochinchinensis</i>	Tree
69.	<i>Symplocos foliosa</i>	Tree
70.	<i>Syzygium calophylloium</i>	Tree
71.	<i>Syzygium densiflorum</i>	Tree
72.	<i>Syzygium montana</i>	Tree
73.	<i>Turpinia nepalensis</i>	Tree
74.	<i>Vernonia arborea</i>	Tree

ANNEXURE - II

LIST OF MAMMALS RECORDED IN THE LONGWOOD SHOLA

S.No	Name of the Species
1	Indian Gaur
2	Leopard
3	Wild boar
4	Barking deer
5	Porcupine
6	Wild cat
7	Bonnet macaque
8	Malabar Giant Squirrel
9	Black napped hare
10	Mouse deer
11	Sambar Deer
12	Nilgiri marten
13	Leopard cat

ANNEXURE - III

LIST OF BIRD SPECIES RECORDED IN THE LONGWOOD SHOLA

S.No	Name of the Species
1	Nilgiri laughing thrush
2	Nilgiri Flycatcher
3	Black and orange flycatcher
4	House sparrow
5	Indian Black bird
6	Hill myna
7	Jungle myna
8	Spotted dove
9	Emerald dove
10	Jungle babbler
11	Spotted babbler
12	Great Tit
13	Purple rumped sunbird
14	Small sunbird
15	Oriental white eye
16	Pied bush chat
17	Red vented bulbul
18	Red whiskered bulbul
19	Hoopoe
20	Green barbet
21	Small sunbird
22	Jungle crow
23	House crow
24	Scaly breasted munia
25	Rose finch
26	Golden backed wood pecker
27	Shikra
28	Black eagle
29	Painted bush quail
30	Malabar whistling thrush
31	Jungle owlet
32	Nilgiri wood pigeon
33	Scarlet minivet
34	Rose ringed parakeet
35	Grey headed bulbul

ANNEXURE – IV

LIST OF VILLAGES THAT RECEIVE DRINKING WATER FROM THE WATER GENERATED IN LONGWOOD SHOLA

S.No	Name of the Village
1.	Kaithala
2.	Thavitumedu
3.	Aravenu
4.	Jakkatha
5.	Jackanarai
6.	Thumboor
7.	Thinniyoor
8.	Selavai
9.	Bangalada
10.	Moon Road
11.	Kesalada
12.	Kairbetta
13.	Hossatty
14.	Donnington
15.	Gandhi nagar
16.	Adubettu
17.	Kallada
18.	Suthukkal area



QCC Project Accreditation Form and Checklist

Project data		
Name of nominated project	Longwood Shola Conservation Centre	
I	Name	District Forest Officer, Nilgiris
	Job title	Tamil Nadu Forest Department
	Address	Office of Nilgiris Forest Division, Tamil Nadu, India
	Phone number	0423-2444083
	Email	dfonlgsouth@gmail.com
	Website	Nil
Location	Country	India
	Region	Nilgiris Biosphere Reserve, Tamil Nadu
	Grid reference	Latitude. 11.438244, Longitude. 76.87353
	Location map	Location map is attached electronically
Canopy details (if known)	Total acres protected	116 Hectare
	Number of Trees planted	All trees are naturally grown
	Number of local people involved in management	8 people
QCC criteria		
<p>Evidence of the endorsement of the Government (at ministerial-level) and the national forestry/conservation authority for the project to be dedicated to the QCC.</p> <p><i>(Letters to be addressed to Mr Nathan McKenzie, QCC Project Office, The Royal Commonwealth Society)</i></p>	<p>As the proposal is currently being prepared, approval for this project from Government & National Conservation Authority has not been obtained</p>	
<p>Describe the history, development and current management of the project, and provide evidence that the project includes objectives that include sustainable forest conservation.</p>		

The Longwood Sola, spreading out over 116 hectares. It is also an important sola patch in the Sola forests of the Nilgiris. It was declared as a Reserved Forest by section 16 of Tamil Nadu Forest Act, 1882 during 5.8.1884. It is one of the most amazing dense wooded forests in Kotagiri town of Nilgiris District. It is the only major pocket of natural shola left in the vicinity of the Kotagiri. With an area of 116 Ha, this Shola forest has 3 main perennial streams, out of which two join in a central swamp and the third joins in a pond. Together, they supply thousands of cubic meters of drinking water to 18 villages downstream, notably, Kairbetta, Hosahatti, Aravenu and Jakkanarai. There is a lot of wild faunal species recorded in the Longwood Shola such as Indian Giant Squirrel, Barking Deer, Bonnet Macaque and Indian Gaur. Nocturnal animals include Wild Boar, Porcupine, Black Napped Hare, Jungle Cat, Mouse Deer, Leopard Cat and Nilgiris Marten. Even today, Longwood Shola provides shelter to varied fauna. Visitors can easily spot Nilgiri Laughing Thrush, Grey Jungle Fowl, Golden Backed Woodpecker, Wood Pigeon, Shikra, Spotted Munia and Emerald dove to name a few. Shola forests harbour a very wide variety of flora, the most conspicuous of which are, of course trees which are endemic species. Funds received from the schemes every year are spent to protect or manage this shola. The alien weed species that infiltrate the shola, such as wattle and solanum, are also periodically eradicated with these funds. And from time to time people living around shola are being made aware regarding shola conservation. As mentioned above this shola forest is currently being managed. As this Shola is reserved forest, the sustainable forest protection is being ensured by the existing Tamil Nadu Forest Act, 1882 and the Wildlife Protection Act, 1972.

Explain, if appropriate, how local people are involved in management of the project

In spite of Longwood Shola having long standing remarkable history, it has suffered much over the last 3 decades. A number of villages and settlements, both big and small are located around this Shola. They have expanded their territory considerably near to this Shola boundary line. Subjecting it to increase population, despite the chain link fence erected in 1987 to help the Shola preservation, in May 1998 the forest department constituted an 8 member **Longwood Shola Watchdog committee**.

The main objective of proposing this committee was

- a) To realize the immense benefits people get from this Shola.
- b) To create awareness in the minds and hearts of the local residents, school students and the tourists. By this way, it should be an eye opener to everyone who is still not passionate about the Sholas.
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Promotional materials (as applicable)

Logo/brandfiles of the proposed project, and partners (as applicable), for the purposes of promotional activities by QCC partners.	No
High-resolution photographic examples (JPEG or PNGfile, with a minimum resolution of 1000 pixels)of the project for promotional activities by QCC partners.	The photographs are attached Separately.

ANNEXURE – PHOTOGRAPHS

Typical Shola & Grass land eco system



Aerial view of Longwood Shola



Longwood Shola



Google Earth Map of Longwood Shola

