



# help Foundation

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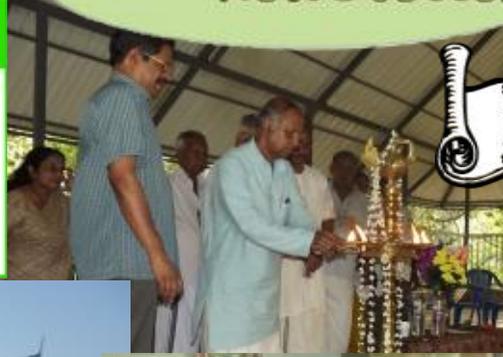
Quarterly Journal

Newsletter  
newsletter

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Energy Conservation Campaign in Kollam District

Jointly carried out by  
HELP Foundation &  
Department of Environment and Climate Change, Kerala  
With technical support from Energy Management Center, Kerala



Program  
ion Council  
a River

Attachment Area: Originates from the low hills of Karakunnu (250 above sea level) adjacent to Madathara in the foothill region of the Western Ghats and flows through Yeroor Reserved Forest area (Approximate 7 km)

- 1. Vellinloor and Pallickal (7km)
  - 2. Vellinloor and Kalluvathukkal (23km)
  - 3. Pooyappally and Kalluvathukkal (4km)
  - 4. Adichanalloor and Kalluvathukkal (1km)
  - 5. Adichanalloor and Chathanoor (8km)
- Total of 42 km



Merger with Paravur Lake: Flows underneath NH47 at Bhikkara, travels 7 kms and merges with the Paravur Lake and eventually opens up into Arabian Sea when in spate through the Estuary at (Mukkam Mayyanad)





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### **NATURE PHOTO DIVISION– WILD LIFE**

**Nature Photo Feature**

The 2016 HELP Foundations annual lecture was held on 17th January at our training centre in Mayyanad. Renowned Scholar Umayanallor Kunjukrishna Pillai spoke on the subject of “ParisthitithudeRashtream”



Permanent Mangrove/Wetland Nursery

We have started to professionalize and maintain (probably the state's first) a wetland plant nursery, established in 2011. In addition to operating as a nursery to assist in our conservation and ecosystem restoration efforts, the nursery is an integral part of HELP Foundation's education and research endeavors. Currently, HELP Foundation cultivates approximately 12 wetland plant



species. This nursery is the cornerstone of HELP Foundations Wetland Academy. This nursery is maintained by HELP Foundations personnel and Mayyanad High Schools, Boomitra-sena Club. The nursery is being gearing up for an official inauguration so as to be made available to the student community of Kollam.

## Study on Umayanallor Ela



It's HELP Foundations objective that we want to bring in all stakeholders together so that they can look at what is needed to start farming in all earnestness in Umayanallor Ela, such that nature can be restored from becoming waste dump landfills to shades of its glory by turning the clock full circle. It's our awed goal that we at HELP Foundation will be able to bring in systems and processes in association with the local administration and the agricultural office so that the responsible people and systems will be entrusted with the task of, Revival of Paddy Cultivation at Umayanallor Ela.

Towards the above we conducted a detailed study such that it will enable the local government authorities to Combat Desertification, Land Degradation, Water Conservation, Food

Security and Releasing Clean Air. This study was supported partially by the Department of Environment and Climate Change, Government of Kerala.

We are on the verge of publishing this book so that copy of it can reach every household who gets his drinking water from the natural ecosystem surrounding Umayanallor Ela, thus enabling them to becomes custodians of the natural asset and protect it from the local real-estate /trader/businessmen politicians who govern/control the local Panchayat.



Social Audit

HELP Foundation team conducts Social Audit Training at the State Institute of Rural Development, Kottarakkara



HELP Foundation in association with ‘Social Audit Network’ (SAN – India) has commenced the yet another project on ‘Social Accounting and Audit’. The work started with Stakeholder mapping and consultations through Focused Group Discussions (FGDs) and personal interviews of various stakeholders of Manappuram Foundation (The CSR body of Manappuram Finance Limited).

The assignment primarily target to access on how far the CSR projects of Manappuram Finance Limited has impacted the targeted beneficiaries and to identify gaps if any on the service delivery mechanism thereby improve the overall social impact.

HELP Foundations personnel also conducted a Social Accounting & Audit Training for SIRD (State Institute of Rural Development, Kottarakkara) trainees who are embarking to implement Social Audit in the Government Sector. To our surprise due to political pressure, SIRD is forced to roll out a namesake Social Audit mechanism which will not in any way add value to our schemes and programs. They are planning SAA through an army of retired government employees and political party nominees.

HELP Foundation will continue to advocate with SIRD for adopting the SAN – India/ HELP Foundation jointly promoted SAA globally accepted framework



## Guild of Old (GOLD) PakalVeedu

HELP Foundation teamed up a host of other likeminded NGOs to execute this project. It looks at elderly care holistically and seeks to rationalize programmes for creating a strong protective environment for elders, diversify and institutionalize essential services for the elderly, mobilize inter-sectoral response and set standards for care and services. Pakal Veedu Offers day long fellowship to the senior citizens. The day is well spent with activities aimed at social, physical and intellectual nourishment of the old people. So there are memory games, physiotherapy, songs, meditation, house fellowships, lectures, messages, medical check-ups, picnics etc. They are picked up in the morning and taken back home in the evening to spend their nights in their own homes. Through this concept we intend to help people come out of their loneliness and depression and thus less hospitalization and enhanced quality of life.



## HELP CLUB

One of the issues we have been facing in our social outreach programs and interventions have been the lack of participation of youngsters or their indifferent attitude to the problems we have been trying to highlight. HELP Foundation decided to create HELP Clubs locally where ever possible so as to be able to interact with them on a regular basis

and possibly try and bring their attention to the issues which we seek solutions and thus their participation.

Over the last quarter we have been able to establish 3 such clubs in our vicinity. We want to explore how we can go about getting our local youngsters involved in HELP Foundations activities and programs.

## Meeting with Farmers

While interacting with the farmers to come up with a report on reviving Uma-yannallor Ela for cultivation, they started sharing the problems they face with rice cultivation and how the indifference of the local Panchayat and the elected representatives have been contributing to their woes while money is spent in the name of agriculture. We realized that the challenges they face are significant also given that the Panchayat members are all angling to convert the paddy field for business purposes. More detail of the problems faced by small holder farmers, can be seen in the study report to be released shortly.



## Reception and training given to newly elected members of Mayyanad Panchayat



State Election Commissioner addressing the newly elected Members of Mayyanad Grtama Panchayat

Newly elected Panchayat members before they go the normal path of looting and racketeering, we decided instead of filling RTIs and going after their misdeeds let's give them a proper orientation of their roles and responsibilities. A training cum felicitations session was arranged by Mayyanad based NGOs, Mayyanad Sangamom, Janasakthi Mayyanad

and HELP Foundation for the newly elected members of Mayyanad Gramapanchayat.

The Chief Guest was none other than the Election Commission of Kerala. The function was inaugurated by Retd. Justice Siri Jagan.



SIRD Faculty takes session for the newly elected Members of Mayyanad Grama Panchayat

## DAYA- HELP Foundation's Dialysis assistance programme

Our commitment to the society, to the neediest and of those whose days are numbered, HELP Foundation channelizes the support of the kind hearted through DAYA Schemes.

It is not the contribution of HELP Foundation but the contribution of the people who support this program that gets to the most deserving. We just provide a platform and act as the catalyst to make it a reality.

### How we do it?

*Never underestimate the difference one can make in the lives of others. Step forward, reach out and HELP. Even the smallest act of caring for another person is like a drop of water- it will make ripples throughout the entire pond...*

Initially this programme was supported by the fund generated from among the HELP Foundation members & well wishers. Our Drop Boxes placed in and around Kollam is another source we depended on but now we have to go beyond the routine and scale it as we are inundated with requests for support.

### Our Schemes:

**Little Drops:** An amount of **Rs.100/-** as a one time or as a monthly contribution from many can support patients coming to us for the first time and can continue till finding a sponsor.

**One Dialysis:** An amount of **Rs.800/-** is sufficient to support one dialysis.

**Sponsor a patient:** This is the most popular scheme of DAYA Programme. Under this scheme one patient is given **Rs. 2,000/-** per month. Once a sponsor come forward to sponsor one patient for at least **four months** both Donor and patient will be informed and start supporting from the very next month onwards.

**Adopt a patient:** It is a painful scene when some people come to seek support for the bread winner of their family or for their young children. When Dialysis is the only option and with an abrupt stoppage of income, the future is a big question mark. This scheme is a long term scheme which goes beyond 6 months at a very minimum.

**Support Medicine:** An average cost of Dialysis patient is approximately Rs.8,000/- for a month while the cost of medicine and other supplies for a month will be roughly the same. Many people discontinue medicines due to the paucity of funds. This affects the entire health of that person and leads to other complications. There are several organizations and Government itself

provide support for Dialysis but the medicine part is not catered to or supported as the patients are left to fend for themselves.

**Awareness Programmes:** It is practically difficult to screen potential renal failure cases. In most cases renal failures identifies itself only at the end stages. So prevention is the best option. It can be done through wide awareness programmes. Eminent personalities from medical field support us to conduct such programmes. Awareness and education is always effective to a student's group. So we give special focus on student and parents groups at school level.

<b>Little Drops</b>	<b>Rs. 100/- (every month)</b>
<b>One Single Dialysis</b>	<b>Rs. 800/-</b>
<b>One Month Support</b>	<b>Rs.2000/-</b>
<b>Sponsor one patient for 4 months or more</b>	<b>Rs. 2000/- X 4 =8000/- (or more)</b>
<b>Adopt one patient</b>	<b>Rs. 8000/- X 12 (or more)</b>
<b>Support medicine</b>	<b>Rs. 1000/- (or more)</b>

### Following is the Bank A/c details of HELP Foundation's DAYA Programme:

Name of Bank : **State Bank of Travancore**

Account Name: **HUMAN EMPOWERMENT AND LIVELYHOOD PROMOTION FOUNDATION**

SB A/c No : 00000067199614110

IFSC Code : SBTR0000057

MICR Code : 691009016

Branch : Mayyanad

District : Kollam

State : Kerala

Address : P.B.No.1, Kunnumpadam  
Buildings, Mayyanad P.O.,  
Kollam, Kerala, Pin-691303

## Even 0.5°C more global warming can have big climate impacts

A new study has shown that limiting global warming to 2°C instead of 1.5°C would result in longer heat waves and more extreme rainfall events. The study warns that heat waves in tropical regions will last up to 50 per cent longer in a 2°C world than at 1.5°C.

Even as more than 150 countries prepare to sign the Paris Agreement, research published in journal *Earth System Dynamics* has shown that a global warming of 2°C will be substantially more devastating for the planet's climate than 1.5°C by 2100. Researchers have found significant differences in impacts of 2°C and 1.5°C on water availability, agricultural yields, sea levels, extreme weather events and coral reefs.

While the Paris Agreement adopted in December 2015 insists on a limit of 2°C and treats the 1.5°C-limit as desirable, the paper shows that limiting global average temperature to 2°C instead of 1.5°C would mean higher sea-level rises, longer heat waves, lower crop yields and all coral reefs being virtually obliterated.

An additional 0.5°C would result in a 50-cm-rise in global sea levels by 2100, 10 cm higher than under 1.5°C, the study says. "Sea level rise will slow down during the 21st century only under a 1.5°C scenario," explains the study's lead author, Carl Schleussner, a scientific advisor at Climate Analytics in Germany.

In a 2°C-scenario, freshwater availability in the Mediterranean region would be 17 per cent lower as against 9 per cent under 1.5°C. Crop yields in tropical regions such as Central America and West Africa would be twice as much lower in a 2°C world than in 1.5°C. Tropical regions are likely to fare worse if the rise in global average temperature is not kept under 1.5°C. Warm spells or heat waves in the region will last up to 50 per cent longer in a 2°C world than at 1.5°C, the study warns.

Almost all of the world's coral reefs could be severely degraded due to coral bleaching from the year 2050 under a global warming of 2°C. But limiting the global average temperature rise to under 1.5°C could reduce the extent to 70 per cent by 2100.

The researchers from Germany, Switzerland, Austria and the Netherlands analysed the climate models used in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report to consider the impacts for 11 different indicators.

### Effects of a 2°C limit over South Asia

Heat waves in the South Asian region will become longer in a 2°C scenario. "Under 1.5°C, the longest annual warm spell would span about 1.5 month while under 2°C, this would rise to about 2.5 months. This indicates a substantial increase in risk of heat extremes in a region that is highly vulnerable to extreme heat," says Schleussner in an interview to *Down To Earth*.

He also hints at a possible intensification in extreme monsoon rainfall events, with a 10 per cent increase in extreme precipitation under 2°C than 7 per cent under 1.5 °C. South Asia will see the strongest increase in extreme rainfall events compared to other regions.

"Science is very clear that extreme weather events are increasing both in frequency and intensity and that a clear

anthropogenic footprint is visible for most of the already observed changes. This is in particular the case for temperature related extremes," Schleussner says while explaining the reality of climate change. While he admits the role of natural variability and weather phenomena like El Niño-Southern Oscillation (ENSO) in extreme weather events, he states that climate change can "affect monsoon patterns and ENSO and lead to more extreme ENSO events".

As for risk to crop yields, Schleussner explains that if one excludes the positive effects of CO<sub>2</sub> fertilisation on the growth of plants, the study finds that there will be a 15 to more than 20 per cent-reduction in yields for wheat, maize, rice and soy. This risk is lower—10-15 per cent—if global warming is kept under 1.5°C.

### Is the 1.5°C target practical?

Developing countries are likely to bear the brunt of climate impacts due to global warming. African countries, Least Developed Countries (LDCs) and Small Island Developing States (SIDS)—all vulnerable nations—have backed the call for including the 1.5°C target in the Paris Agreement. While everyone seems to concur that achieving this target would be ideal, the agreement is devoid of elements that can place the world on a 1.5 °C trajectory.

If the world wants to raise the certainty of meeting this temperature goal to 66 per cent, then the carbon budget is a mere 400 Gt CO<sub>2</sub>, according to the Fifth Assessment report of IPCC (AR5). But in a comparison drawn by experts with the Intended Nationally Determined Contributions (INDCs) of countries, it becomes clear that the available carbon budget will be exhausted well before 2100. For instance, the US and the EU alone would consume 128 Gt CO<sub>2</sub> between 2011 and 2030.

"The carbon space for a 1.5°C-target is so limited that developed countries will have to reach net zero emissions in the next five to 10 years," says a joint statement released by Chandra Bhushan, deputy director general, Centre for Science and Environment, and professors T Jayaraman of Tata Institute of Social Sciences and Anand Patwardhan of University of Maryland and IIT-Mumbai. "Even for 2°C, the developed countries' INDCs fall well short of their fair shares," it adds.

In addition to a fair and equitable distribution of the carbon budget, the experts call for significant increase in finance and technology support for developing countries.

Schleussner agrees that there will be an increase in adaptation needs between 1.5°C and 2°C and respective increases in finance needs for adaptation. He also asserts that achieving the 1.5°C target is physically and economically feasible. "Limiting warming to below 1.5°C by 2100 requires similar transformations in the energy system as holding warming to below 2°C during the 21st century, but the decarbonisation of the energy system needs to be faster and more pronounced. Holding warming below 2°C also requires early and rapid action with the level of action in the next ten years (until around 2025) very similar to 1.5°C. By the 2030s, action towards 1.5°C needs to be faster than for 2°C," he says.

**Source: Down to Earth**



## Gaur (*Bos gaurus*)

- Also known as** : Indian bison, seladang.  
**Size** : Shoulder height: 1.7 - 2.2 m  
**Body length** : 2.5 - 3.3 m  
**Weight** : 700 - 1,000 kg

### Gaur description

The gaur is one of the larger of the wild cattle, and individuals can reach over two metres at the shoulder. The sleek, dark coat is black in mature males and dark brown in females and juveniles. The legs are light coloured and, unusually amongst cattle, there is a ridge of grey between the horns. These cattle are extremely heavyset and bulky; they have a large shoulder hump and a dewlap of skin under the chin reaching between the forelegs. Both gender bear horns that are yellow with black tips; the horns leave at the side of the head and curve upwards growing up to 80 centimetres in length.

The Indian bison also called gaur is the largest bovine in the world, native to South Asia and Indian

<i>Kingdom</i>	<i>Animalia</i>
<i>Phylum</i>	<i>Chordata</i>
<i>Class</i>	<i>Mammalia</i>
<i>Order</i>	<i>Cetartiodactyla</i>
<i>Family</i>	<i>Bovidae</i>
<i>Genus</i>	<i>Bos</i>



subcontinent and listed as vulnerable. Gaur is the tallest species of wild cattle and Malayan gaur is called seladang, The gaur is a strong and massively built species and are among the largest living land animals.

The GAUR (*Bos gaurus*, previously *Bibos gauris*) is a large, dark-coated forest animal of South Asia and Southeast Asia. The largest populations are found today in India. The gaur belongs to the Bovinae subfamily, which also includes bison, domestic cattle, yak and water buffalo. The gaur is the largest species of wild cattle, bigger than the African buffalo, the extinct Aurochs (the ancestor of domestic cattle), wild water buffalo or bison. It is also called seladang or, in the context of safari tourism, Indian bison. The domesticated form of the gaur is called gayal or mithun.

Wild gaur feed mainly on grasses, herbs, shrubs and trees, with high preference for leaves. In Goa, finer and fresh grass was preferred to coarse grasses, though *Strobilanthes* species *ixiocephalus* and *callosus* were the most preferred food. Gaur spent 63% of their daily time feeding. Peak feeding activity was observed in the morning between 6:30 to 8:30 am and in the evening between 5:30 to 6:45 pm. During the hottest hours of the day between 1:30 to 3:30 pm, they rest in the shade of big trees.

Gaur was very sort after animal by hunters for its massive head and horns, and lots were shot during the British rule & by the Maharajas, the population had decimated to a very low numbers, and it seems that since the complete ban on hunting in India, the Gaur is thriving for its better future.



## *Chameleon*

Chameleons or chamaeleons (family Chamaeleonidae) are a distinctive and highly specialized clade of old world lizards with 202 species described as of June 2015. These species come in a range of colors, and many species have the ability to change colors. Chameleons are distinguished by their zygodactylous feet; their very long, highly modified, rapidly extrudable tongues; their swaying gait; and crests or horns on their brow and snout. Most species, the larger ones in particular, also have a prehensile tail. Chameleons' eyes are independently mobile, but in aiming at a prey item, they focus forward in coordination, affording the animal stereoscopic vision. Chameleons are adapted for climbing and visual hunting. They live in warm habitats that range from rain forest to desert conditions, various species occurring in Africa, Madagascar, southern Europe, and across southern Asia as far as Sri Lanka. They also have been introduced to Hawaii, California, and Florida, and often are kept as household pets.

### **Description**

Chameleons vary greatly in size and body structure, with maximum total lengths varying from 15 mm (0.59 in) in male *Brookesia micra* (one of the world's smallest reptiles) to 68.5 cm (27.0 in) in the male *Furcifer oustaleti*. Many have head or facial ornamentation, such as nasal protrusions, or horn-like projections in the case of *Trioceros jacksonii*, or large crests on top of their heads, like *Chamaeleo calyptratus*. Many species are sexually dimorphic, and males are typically much more ornamented than the female chameleons.

### **Distribution and habitat**

Chameleons inhabit all kinds of tropical and mountain rain forests, savannas, and sometimes deserts and steppes. The typical chameleons from the subfamily Chamaeleoninae are arboreal, usually living in trees or bushes, although a few (notably the Namaqua chameleon) are partially or largely terrestrial. Most species from the subfamily Brookesiinae, which includes the genera *Brookesia*, *Rieppeleon*, and *Rhampholeon*, live low in vegetation or on the ground among leaf litter. Many species of chameleons are threatened by extinction. Declining chameleon numbers are due to pollution and deforestation.



**Common names:** *large-scaled pit Viper, large-scaled tree viper*

**Scientific Name:** *Trimeresurus macrolepis*

**Trimeresurus macrolepis** is an arboreal, green coloured, forest-dwelling venomous pitviper species endemic to the Southern Western Ghats. No subspecies are currently recognized.

**Geographic range:** It is found in the mountains of southern Western Ghats south of Palakkad Gap, in the Indian states of Kerala and Tamil Nadu, at elevations of 2,000-7,000 ft (610-2,100 m). The type locality is listed as "Anamalai hills (Tamil Nadu State, southwestern India)"

**Habitat:** *T. macrolepis* prefers evergreen forests, and is also found in tea plantations.

**Venom:** Even though tea pickers are frequently bitten by this species, the bites are seldom fatal.

**Description:** Adults may attain a total length of 68 cm (27 in), which includes a tail 12 cm (4.7 in) long.

Dorsally, *T. macrolepis* is bright green, with blackish skin between the scales in some places. There is a yellow or white stripe on each side of the body, which runs along the first dorsal scale row. The upper lips are pale green, and there may be a black streak behind the eye. Ventrally, it is pale greenish.

The dorsal scales, which are large, keeled, and overlapping, are arranged in only 12-15 rows at midbody. The dorsal scales in the 10 middle rows are always the largest, and additional rows are made up of smaller scales. An even number of dorsal scale rows is frequently found in this species, even though it is uncommon in snakes in general. Ventrals 133-143; subcaudals divided 44-58.

The scales on the top of the head are very large, smooth, and overlapping. There is an elongate subocular, which is separated from the upper labials by a row of a few small scales. There are 7-8 upper labials, of which the 3rd is the largest.

*Description:*

*Scientific Name: Trimeresurus macrolepis*

*Family: Viperidae*

*Venom Type : Haemotoxic*



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