



The trees in our lives: Trees around the Sompura campus

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Google Earth image of trees around APU SLS campus

About us

The residential campus of the School of Liberal Studies of Azim Premji University is situated in Sompura. Sompura falls under Anekal taluk of Bengaluru, and the campus is located in a typical peri-urban interface with rural and urban features existing alongside each other. Thus, in this peri-urban landscape, it is not an uncommon sight to see cows saunter along paved streets followed by their herders amidst the upcoming layouts and apartment complexes.

It is in this rapidly urbanizing landscape, that the undergraduate students at the University who had taken the elective “Urban sustainability in India: A social-ecological perspective” were involved in an exercise to map the trees in the vicinity of the campus. The students, working in groups of two, identified tree species (which they found was not an easy task!), used tape to measure the tree girth and calculated the height of each tree using a clinometer. They then used this information to make calculations (in the classroom) of the biomass, both above ground and below ground, and the carbon sequestered by these trees. The objective of the exercise was to engage with the ecological landscape in which the campus was located, by getting to know the trees in the surroundings. Along with this the students were also required to understand the multiple uses—ecological, economic, social and cultural—of these trees. The students documented the uses of trees in terms of raw materials sourced from the different species such as for food, fodder, fuelwood, timber and medicines. The cultural and religious significance of the trees in the lives of people also formed a part of the information collected. The students observed and photographed the different parts of the trees such as the bark, leaves, fruit, and flowers.

This booklet is the collective output of this class, based on their observations, the data they collected in the field and secondary information they sourced mainly from the internet. Any errors are entirely their own, and they request to be forgiven for the same!

About the trees

In all, the students mapped 63 trees of 20 different species in the vicinity of the campus. The trees included both native and introduced species. The more common trees that the students identified were coconut, neem and tamarind, all of which have multiple uses. They also observed the peepal, a keystone species, in the landscape, as well as fruit bearing trees such as jamun, mango and jackfruit. The students also identified a specimen each of the Indian hog plum and the gooseberry. The ornamental flowering species they recorded included the African tulip with its bright red flowers, the more subdued pink poui, the fragrant Indian cork and the canopy of blue jacaranda. The students also identified and measured teak and casuarina that are popular plantation species grown for their wood. The canopy trees that are popular avenue trees in Bengaluru included the rain tree and Indian beech. Mesquite, an aggressive invasive, was the other species that the students could spot in the landscape. They also recorded the large leaved Indian almond and the camel-foot tree that gets its name from the hoofed shape of its leaves.

List of tree species mapped and their numbers

Scientific name	Common name	Number
<i>Albizia saman</i>	Rain tree	1
<i>Artocarpus heterophyllus</i>	Jackfruit	3
<i>Azadirachta indica</i>	Neem	9
<i>Bauhinia purpurea</i>	Camel-foot tree	1
<i>Casuarina equisetifolia</i>	She oak	1
<i>Cocos nucifera</i>	Coconut	13
<i>Ficus religiosa</i>	Peepal	3
<i>Jacaranda mimosifolia</i>	Blue jacaranda	2
<i>Mangifera indica</i>	Mango	3
<i>Millettia pinnata</i>	Indian beech	1
<i>Millingtonia hortensis</i>	Indian cork tree	1
<i>Phyllanthus emblica</i>	Indian gooseberry	1
<i>Prosopis juliflora</i>	Mesquite	2
<i>Spathodea campanulata</i>	African tulip	3
<i>Spondias mombin</i>	Indian hog plum	1
<i>Syzygium cumini</i>	Jamun	3
<i>Tabebuia rosea</i>	Pink poui	4
<i>Tamarindus indica</i>	Tamarind	6
<i>Tectona grandis</i>	Teak	2
<i>Terminalia catappa</i>	Indian almond	3
	Total	63

Scientific name: *Albizia saman*
Common name: Rain tree
Kannada name: Baage mara

The rain tree has an erect stem with arched branches. The flowers are pinkish to rose in colour and have multiple stamens. The leaves are bi-pinnate and arranged opposite to each other. The rain tree is primarily a shade tree, but is also grown for ornamental purposes.

The wood of the tree is sometimes used in carving and also in making furniture. Many parts of the tree have medicinal uses: the leaves are used as a laxative and a root decoction in hot baths. Seeds too are believed to have medicinal uses.

The rain tree is an exotic to India but is of ecological significance. The tree fixes atmospheric nitrogen and also supports biodiversity. There is a belief that the tree produces rain at night, but this is actually secretions from insects that can be found in large numbers in the tree's foliage.



Scientific name: *Artocarpus heterophyllus*

Common name: Jackfruit

Kannada name: Halasu

The jackfruit tree is of importance in archaeological findings of India. The tree was cultivated as far back as between 3000 and 6000 years ago and continues to be found extensively today, especially in southwest India. This evergreen tree grows to a height of 20 m. The trunk of this tree is reddish brown in colour, rough and scaly. The leaves are broad, glossy, and dark green above and pale green on the underside. Both the male and female flowers occur on the same tree and are yellow in colour. The male flower is club-shaped and the female elliptical or round. The flowers are pollinated by wind as well as by insects. Fruits are found on the trunk of the tree and have a hard spiny outer covering. The fruit is very large, with the weight reaching upto 35 kg and a length of 80 cm. The fruit ripens between June and October and has a sweet aroma.

The tree is cultivated for its fruit which is used as food when both raw and ripe. The seed of the jackfruit is also widely consumed. The tree also provides raw material as the wood is used for timber. The latex of the tree is used in healing wounds while the flowers cleanse the oral cavity. Other medicinal uses of the tree include treating skin diseases and mouth ulcers.

The ecological significance of this tree is that it can act as a windbreak for smaller plants, it absorbs pollutants, sequesters carbon and its deep roots can firmly hold the soil to prevent soil erosion. The tree is also a source of food for birds and insects.



The jackfruit is culturally significant, and finds mention in several ancient Hindu texts such as Atharava Veda, Charaka Samhita and Astanga Hridaya. Its fruits are used for the Hindu festival of Vishu celebrated as the New Year in the state of Kerala. The wood of the tree is used in making ornate planks and Buddhist statues, and the leaves are used to decorate temples and places of worship.

Scientific name: *Azadirachta indica*

Common name: Neem

Kannada name: Bevu, Kirbevu

The neem tree is an evergreen tree native to the Indian subcontinent. The tree belongs to the Mahogany family, i.e. tropical hardwood species. The trunk is straight, not very thick, dark and rough, with a thick crown and spreading branches. The leaves are dark green, narrow, small in size (3-4 cm in length), serrated and fragrant. The leaves are arranged in an alternate fashion, and are extremely bitter to taste. The tree has white bell-shaped flowers, and both male and female flowers exist on the same tree. The fruits are almost round, greenish when raw and yellowish-white in colour when ripening, pulpy with a few small seeds inside. Unlike the leaves, the fruits are not bitter and are edible.

The neem is a multi-use tree, popular since the Vedic times and used in Ayurvedic medicine. Almost all parts of the neem are used for medicinal purposes due to its anti-fungal, anti-bacterial and anti-viral properties. The leaves, flowers and fruits are used to treat a host of ailments: eye and skin diseases, cardiovascular issues, urinary tract infections, intestinal problems, fever, and diabetes. Owing to its anti-inflammatory properties, the leaves are commonly used in home remedies for preventing rashes during chicken pox, for dressing wounds, and treating acne and warts. Neem leaves are dried and burnt to keep away mosquitos in tropical regions. Neem leaves are also dried in India and placed in cupboards to prevent insects attacking clothes and are also kept in tins in which rice is stored. Oil is extracted from the leaves and used in cos-



metic products, as mosquito repellents and for making beverages such as teas. Neem oil is also used as a contraceptive. Leaves mixed in bathing water are believed to help relieve body pain and fever. While neem twigs are traditionally used as toothbrushes, neem extract is an ingredient in toothpastes as well as breath mints. The seed pulp is used in methane gas production, and the wood is used as fuel and to make furniture. The bark yields fibre to make ropes and the trunk is also tapped for resin. Neem cakes are used as fertilizer while the seeds and bark are used as pesticide by farmers. Livestock such as goats, camels and buffaloes, and poultry are fed processed neem leaves.

The leaves and fruit of the tree are consumed as food in various regions of India. Rasam, a dish in Tamil Nadu, uses neem flower extracts, and neem leaves fried in oil (nim begun) is a dish in Bengal.

The tree aids in carbon sequestration and in absorbing pollutants, and it gives out large amounts of oxygen. It is planted to regenerate degraded ecosystems and wastelands to prevent soil erosion and in restoring soil fertility. The tree acts as a windbreaker, is used in flood control and also cools surrounding temperatures. The thick crown of the tree provides a habitat for a variety of birds and animals, while the fruits, flowers and leaves are consumed by some birds and mammals. The fruits and the flower of the tree attracts bees.

The neem tree is also culturally significant and thus grown in most households. The belief is that having a tree in the backyard grants passage to heaven.



The neem flowers are used in preparing the Ugadi chutney in Andhra Pradesh or bevu-bella (combination of neem leaves and jaggery) in Karnataka to celebrate the New Year. The tree is used in certain rituals associated with Hindu goddesses and finds mentions in several stories and Vedic texts. While leaves are strung on top of doorways to ward off the evil eye, the tree itself is said to be the abode of ghosts and spirits. In some parts of India, brides bathe in water infused with neem leaves. The tree is also planted in raised platforms known as kattes that have small shrines.

Scientific name: *Bauhinia purpurea*

Common name: Camel-foot tree

Kannada name: Basavanapaada

The camel foot tree is a deciduous tree that can grow up to a height of 10-12 m. The flowers of the tree are pink with five petals and the fruit is a long pod with many seeds. The pod and flowers of the tree are used as a spice.

Scientific name: *Casuarina equisetifolia*

Common name: She oak

Kannada name: Sarve mara, Gaali mara

This tree is used for its timber and is widely used as a bonsai subject. It is generally considered as an invasive species. It has the ability to fix atmospheric nitrogen, and live in symbiotic relationship with *Frankia actinomycece*, a nitrogen fixing bacteria.

Scientific name: *Cocos nucifera*

Common name: Coconut

Kannada name: Tengina mara

The coconut is one of the most common trees found in India, specifically in the southern region of the country. It is a tall tree, growing to a height of 25 m, emerging from a lightly swollen or bulbous base and getting thinner at the top where the coconut and the branches are found. The coconut tree has a single, long trunk, with a bark of continuous ridges. The leaves spiral out from the top of the trunk and are shaped like blades. The flower of the tree is slightly yellow in colour and blooms as large inflorescences. The fruit and the seed of the tree is the coconut which is actually a drupe.

Almost all parts of the coconut tree are useful in one way or the other. The fruit is probably the most important of the tree, and is eaten directly or used in cooking. The white part of the fruit is extremely nutritious and the coconut water is a refreshing drink. Coconut milk too is highly nutritious and used in cooking. Coconut oil is used for cooking, and for nourishing the skin and hair due to its high vitamin E content. Coconut is also used as an ingredient in

detergents and shampoo. Other products from coconut tree include nectar and toddy.

Coconut trees reached inland areas owing to human domestication, and are now the source of raw material for hundreds of cottage industries in India that make brooms, ropes, hand-fans, and so on. This tree is unique because of its commercial value and because of the fact that the entire tree caters to multiple commercial and personal needs. Coir, copra, husk and shells, coconut trunk and roots have high economic value. The coir (the fibre from the husk of the coconut) is used in making ropes, mats, brushes and as fuel. It is also used in horticulture for making potting compost. Copra is the dried flesh of the seed which is the source of coconut oil. The dried shell is used as charcoal. The wood from the trunk is used in construction of buildings, residential houses and furniture. The wood is also used in making boats. Leaves are used to make brooms, are a source of food for elephants and are also used in the construction of houses. The root is used as a dye, and as a medicine for diarrhea and dysentery.

The coconut tree is culturally significant in India, especially among coastal communities. In Hindu ceremonies, a coconut is placed on the opening of a pot representing the womb. In Kerala, the coconut flower is an important part in Hindu marriage ceremony. The flower and coconut is used as a welcoming for Lakshmi. Coconut leaves are used to make shamianas for particular wedding rituals among Indian Christians called Roca.



The coconut is seldom planted for its ecological significance and is often found as plantations offering little to no ecological benefits other than perhaps shade. But the coconut tree has a strong root system that can prevent soil erosion, and is planted mostly on the coast.

Scientific name: *Ficus religiosa*

Common name: Peepal

Kannada name: Arali mara

The peepal is deciduous or semi-evergreen tree mostly found in India and Indochina. It belongs to the species of fig and can grow upto a height of 30 m. The leaves of the peepal are heart shaped and have an extended pointed tip. The tree has fig-like fruits which turn from green to purple when they get ripe. They are edible, but not popular in the market. The trees also yield yellow coloured flowers.

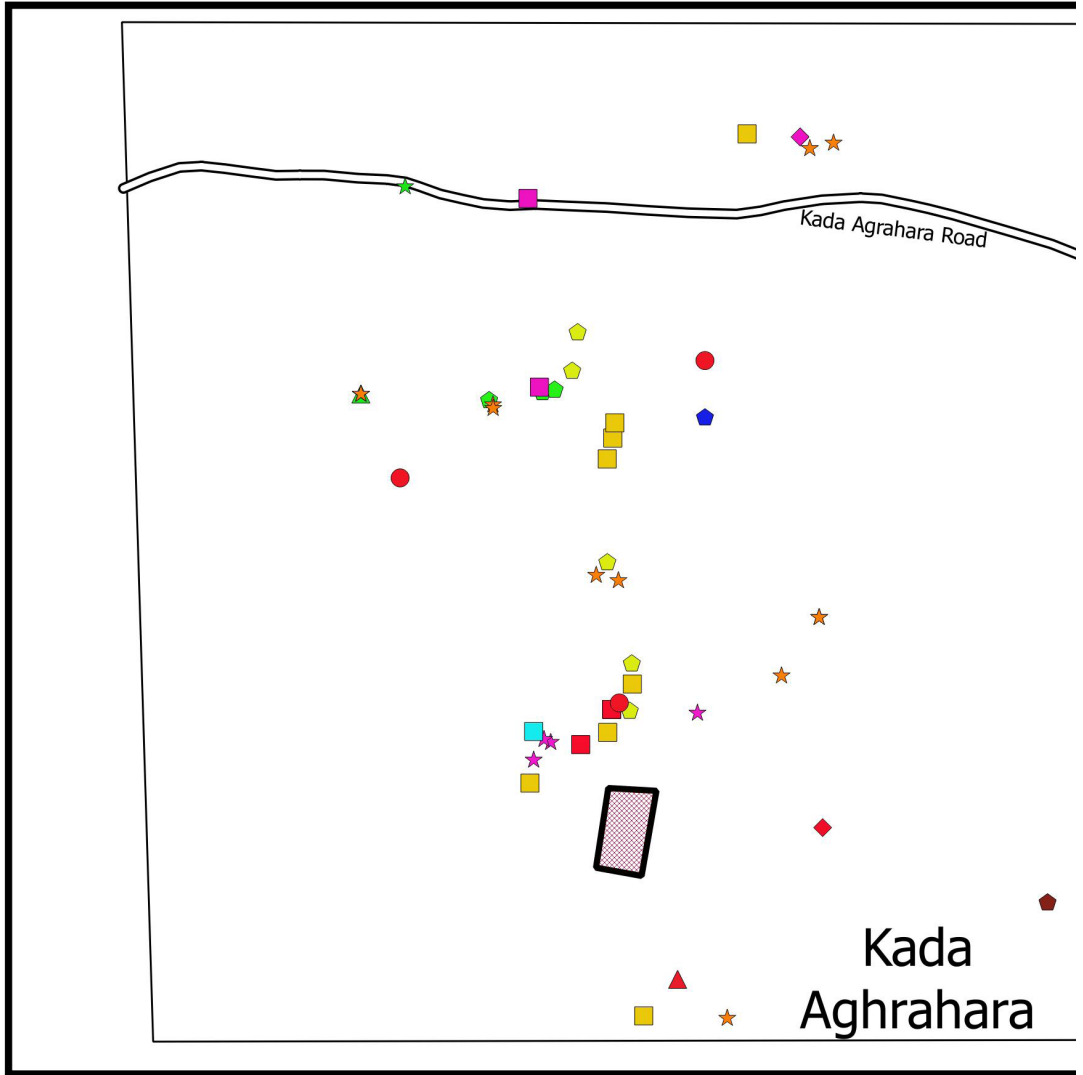
The peepal is used widely in Indian medicine. The juice of the leaves is used as eardrops, the bark to heal inflammations and the root is chewed to prevent gum diseases. The wood from the tree is used as fuel.



In terms of ecological significance, the roots prevent soil erosion and improve fertility of the soil. The tree can grow in poor soils too. It is sensitive to pollution and serves as an indicator of pollution in the air. It is also believed to release more oxygen into the air than other trees.

The tree is considered sacred in many religions including Hinduism and Buddhism. Especially for Buddhists, the tree holds great significance as Gautama Buddha gained enlightenment under this tree. The tree shade is considered an ideal spot for meditation and it is believed that gods reside in the leaves of this tree.

Location of Trees around



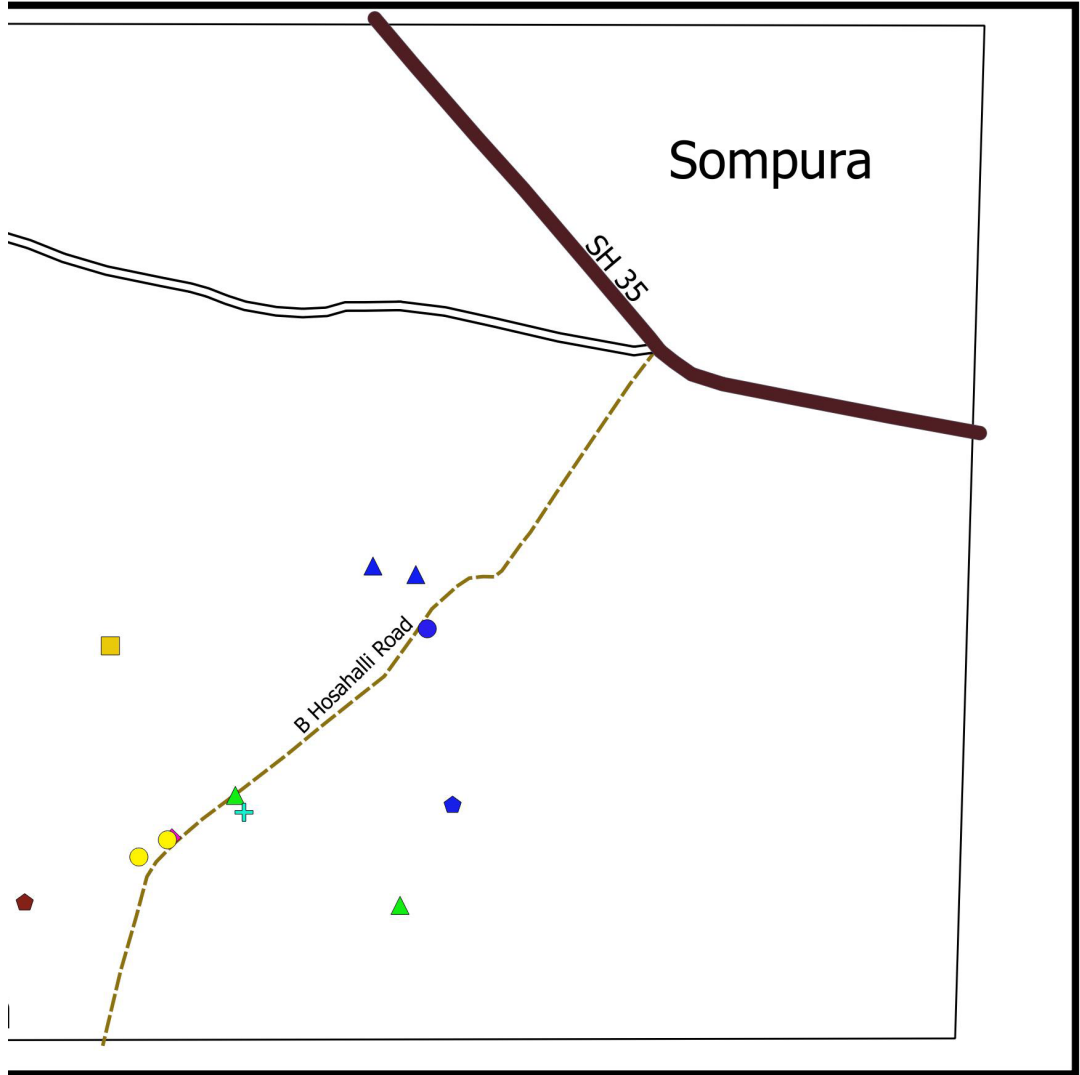
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Legend











- | | | | |
|-------------------|--------------------|-----------|---------------------|
| ● Jackfruit | ■ Indian Cork Tree | ★ She Oak | ▲ Blue Jacaranda |
| ● Mesquite | ■ Teak | ★ Coconut | ▲ Indian Gooseberry |
| ● Rain Tree | ■ Neem | ★ Peepal | ▲ Indian Almond |
| + Camel Foot Tree | ★ Pink Poui | | |
| ■ African Tulip | | | |

Ind APU SLS Campus



200 300 400 m



-  Jamun
-  Indian Hog Plum
-  Tamarind
-  Indian Beech
-  Mango
-  SH 35
-  Kada Agrahara Road
-  B. Hosahalli Road
-  APU Campus
-  Area around the trees mapped



Scientific name: *Jacaranda mimosifolia*
Common name: Blue jacaranda



The blue jacaranda has brilliant lavender-blue coloured flowers and grows anywhere between 5 and 15 m in height. The bark is light brown and slightly scaly. The tree bears singular woody pods which contain miniscule winged seeds.

The tree is mainly planted for its ornamental value, but also provides shade. The dried leaves of the jacaranda are used for healing wounds, and the bark is used for treating ulcers. It is also a source of fuel and wood for furniture.

Scientific name: *Mangifera indica*
Common name: Mango
Kannada name: Mavina mara

The mango is an evergreen tree that can grow upto 40 m, with simple and broad green leaves. The trees have a brownish-grey broad trunk and a wide canopy. The flowers are small and white with five petals. The fruits are oblong or kidney shaped.

The mango is the national fruit of India, consumed raw and ripened. It is said to have been domesticated around 2000 BC in our country. The Mughal emperor Akbar (1556–1605CE) is said to have planted a mango orchard having 100,000 trees in Darbhanga, in eastern India. India is the largest producer of mangoes. Indian cuisine makes use of mangoes in a variety of ways: from



chutneys made of raw mango to aam-panna, a drink, made of ripe ones. Dried mango skin and seeds are also used in Ayurveda.

Ma-ilaigal (Tamil for mango leaves) are also used to decorate archways of houses during weddings and festivals in India. In Hinduism, a perfectly ripe mango is often held by Lord Ganesha as a symbol of attainment, regarding the devotees' potential perfection. The tree is sacred to the Jain community and is associated with the Goddess Ambika.

Scientific name: *Millettia pinnata*

Common name: Indian beech

Kannada name: Honge



The bark of the Indian beech is light brown in colour, and the trunk is mildly crooked. The tree bears clusters of flowers beginning in the onset of spring. The calyx is green and bell-shaped. The seeds are flattened and kidney-shaped, at a length of about 2-3 cm with a rough and brittle coat.

Oil extracted from the tree was used to light lamps. The oil is also said to be antiseptic and resistant to pests. The oil is also used in soap-making and as a lubricant, and the residue from oil extracted is used as fertilizer and animal feed. The bark can be used to make ropes and also yields a black gum that has historically been used to treat wounds caused by poisonous fish. The wood is beautifully grained and splits easily, so it can be used only for firewood, posts and tool handles.

The tree is used for landscaping purposes because of its shade-providing canopy. It also acts as a windbreak and its dense network of lateral roots makes the tree ideal for controlling soil erosion and building sand dunes.

Scientific name: *Millingtonia hortensis*

Common name: Indian cork tree

Kannada name: Akashamallige

The Indian cork tree gets its name from Thomas Melington and the word “hortensis” that means “grown in gardens”. This evergreen tree is thus an ornamental species grown in gardens and along avenues. These tall trees can reach a height of 24 m, and the Kannada name means “flower of the sky”. The bark of the tree is grey, rough and corky. The wood is brittle and can break even in a strong wind. The tree has milky white tubular flowers which are bisexual with yellow anthered stamens. The flowers have a light fragrance of jasmine, and bloom usually from April to December. The flowers grow in clusters at the tip of the branch. The flowers are waxy which makes them remain fresh for a long period of time. The leaves of the tree resemble that of the neem.

The Indian cork has many medicinal uses, and all parts of the tree are used in treating a range of ailments: lung diseases, fever and throat disorders, asthma, food poisoning, blood pressure and blood sugar. It also possesses anti-fungal properties. The leaf of the tree is used as a substitute for tobacco in cigarettes.



Scientific name: *Phyllanthus emblica*

Common name: Indian gooseberry

Kannada name: Nelli

The Indian gooseberry has tiny pinnate leaves, close to each other with a droopy look. The fruit is nearly spherical, light greenish yellow, quite smooth and hard, with six vertical stripes or furrows.

The taste of the Indian gooseberry is

bitter-sour. In Bengaluru, and other parts of the country as well, it is commonly eaten with salt and chilli, or a sweet jam is made out of it called murabba. Dried gooseberry powder is used in Ayurvedic medicine. Other parts of the tree both dried and fresh including the seed, root, bark and flower are also used in herbal preparations.

In Hinduism, the gooseberry is believed to have originated from the drops of nectar spilt accidentally on earth during the churning of the ocean, or the Ksheera Sagara Mathana, which was a fight between the gods and demons. It is this belief that led to it being seen as a cure for diseases and as a source of longevity. Hindus also believe that the Lord Vishnu dwells in the tree, and the tree is also worshipped on Amalaka Ekadashi. Half of an Indian gooseberry fruit is said to have been the final gift to the Buddhist Sangha by the great Indian emperor Ashoka.



Scientific name: *Prosopis juliflora*

Common name: Mesquite

Kannada name: Jaali

The mesquite has a trunk of medium thickness, with spikes on its branches. The bark of this tree is dark coloured. The leaves are bi-pinnate, compound with 12-20 leaflets, and are light green in colour. The flowers are greenish-yellow, while the seed pods are 20-30 cm long and contain 10-30 seed pods.

The wood of the tree is used as fuel and building material, and the pods can be consumed both by humans and animals. The medicinal uses include curing conjunctivitis and itching and as a treatment for stomach ache.

While it is an aggressive invasive species in India, it is planted to control soil erosion.



Scientific name: *Spathodea campanulata*

Common name: African tulip

Kannada name: Neerukayi mara

The African tulip is a flowering plant not native to India; it was introduced as an ornamental plant. It is also known as the fountain tree because of the presence of water sealed in its flower buds. It has flattened, curved bell shape orange-red flowers which is what makes it popular as an ornamental tree. The tree grows to a height of 7-25 m and has a straight trunk. The leaves are glossy green and pinnately arranged, and the seeds have a woody capsule. The branches have

spotted white lenticels and the bark is greyish and smooth.

The seeds of this plant are edible, and parts of this tree have several medicinal uses. The water in the buds is considered as a tonic. The bark has antiseptic properties, and is chewed to treat swelling in cheeks. The extract of the bark, leaves and flowers is used in treating malaria, diabetes mellitus, edema, dysentery, constipation, gastrointestinal disorders, ulcers, skin diseases, wounds, fever, urethral inflammation, liver complaints and as a poison antidote. It is also a control for *Aedes* mosquitoes.

The wood does not burn well, but blacksmiths use the wood to make bellows. The timber is only used as plywood. The tree also has uses in agroforestry and is planted to improve fertility of soil and prevent soil erosion.

Scientific name: *Spondias mombin*

Common name: Indian hog plum

Kannada name: Amtekai

The Indian hog plum has a thick, dark bark. The leaves are narrow and elliptical in shape. The flowers of the tree are small and fragrant. The fruits are



yellow in colour and look like plums.

The fruits of the tree are a source of food. A gum obtained from the tree is used to make glue. The wood of the tree is used for many purposes such as carpentry and making matchsticks. Many parts of the tree like the fruits and leaves have medicinal properties and are used to cure a wide range of ailments.

The tree can act as a wind barrier for smaller plants, prevent soil erosion, help in carbon sequestration and absorbs pollutants.

Scientific name: *Syzygium cumini*

Common name: Jamun

Kannada name: Jum nearle

The jamun is a common tree that can grow in all soil types and varied climatic conditions. The tree can reach a height of 30 m and has a lifespan of 100 years. The bark of the tree is of different shades: at the base it is dark grey and turns a lighter grey towards the top. The tree has simple elliptical shaped leaves to a lanceolate structure with a pleasant smell. These leaves are pinkish turning into dark green as they mature. The flowers of this tree are really small (5 mm in diameter) and have a pleasant smell. The tree usually flowers between March and April. The fruit is purplish-black in colour and oval in shape. The fruit too changes colour as it matures: from green to pink, then shining crimson red and finally to the purplish-black colour.

This tree is grown for its ornamental value as it provides a good shade. But it has many other uses as well. The wood of this tree is water resistant, hence it is used for making furniture, railway cars, bridges and so on. The tannin rich bark is used in leather tanning. The leaves have anti-bacterial qualities. The fruit is edible, having a combination of sweet, sour and astringent tastes. Fruits are also used to make juices, vinegars and wine. The fruit is rich in iron



and used for treating anemia and as a blood purifier. It is a good source of Vitamin A and C and helps maintain skin and cardiovascular health. Ripe fruits turn the tongue purple in colour when eaten. A host of other ailments are also treated using the fruit such as blood pressure, diarrhea, ringworm, lung diseases, oral infections, treating ulcers and sore throat, and depression. The medicinal uses of the jamun is mentioned in the Charaka Samhita, as a cure for vomiting and urinary infections.

The tree is also culturally significant in different parts of the country. It is mentioned in the Bhagvata Gita that

the Lord Krishna had the jamun symbol on his right foot. In Maharashtra and Andhra Pradesh, the leaves of the trees are used in marriage celebrations. Culturally, beautiful eyes are compared to the leaves of this tree and the body of Lord Krishna is compared to the colour of its fruit.

In terms of ecological significance, the tree serves as a windbreak and can be planted to re-establish lowland forests.

Scientific name: *Tabebuia rosea*

Common name: Pink poui

The pink poui is a flowering tree non-native to India. The tree prefers sunlight and does not grow well in shade. It gets its name from the pink colour of its flower, which blooms during the dry season between February and March. The tree is almost leafless when it flowers making it very attractive. Flowers are funnel shaped, white and pink coloured arranged in inflorescences. The leaves of the tree are compound, elliptic to elliptic-oblong in shape with medium to dark green leaflets. The fruit is long, slender and inedible. The tree has a narrow trunk, with a smooth bark.



Pink poui has significance in terms of its medicinal uses, and the flowers and leaves are used in several medicinal preparations. The cortex of the tree is used to eliminate intestinal parasites and to treat malaria and uterine cancer. In addition, it is also used for treating anemia, constipation, fever, and pain. A decoction of flowers, roots, and leaves is used to cure fever and tonsil inflammation.

This timber is used for heavy construction, furniture, interior finish, and boat building. The tree is mainly used as an ornamental plant because of its pink flowers which grab attention. It is an avenue tree planted on streets as it provides shade. It is wind and salt tolerant. The nectar produced by the flower is an important source of honey for bees.

Scientific name: *Tamarindus indica*

Common name: Tamarind

Kannada name: Hunase mara

The tamarind is a long-lived medium sized dicot tree with a thick trunk. It is indigenous to Africa but has been naturalized in India. This semi-evergreen tree grows upto a height of 10-20 m. The trunk is thick, and bark is rough and dark grey. The leaves are alternately arranged pinnate leaves that are small in size. The tree has small flowers that grow in a cluster and are yellowish-orange in colour. The fruit pods are long, curved with a hard brown shell and indehiscent (does not break when matured). Each pods contain 10 seeds which are embedded in a fleshy outer covering that is sour in taste.

The fruit of the tamarind is nutritious, rich in vitamin C and edible, and used extensively in cooking. It is an important ingredient in many dishes primarily in South Indian states, and used for making sambhar, chutneys and other relishes. The leaves are sour in taste and used for spicing up soups. The leaves and root have medicinal value, while the pulp is used to cure fevers, sore throat, rheumatism, inflammation, and sunstroke. Oil is extracted from tamarind seeds, and the seed can be used as pulses which have a high starch content.

The wood is used in wood work and carpentry whereas the twigs of this tree are used as chewing sticks and processed to make ink. The fruit pulp is used to clean brass and copper. Tamarind tree supports livelihoods of rural communities who collect and sell the fruit.

According to some traditional beliefs, the tamarind is considered as a mediator between the living and their deceased ancestors, though having a tree in front of the house is usually considered a bad omen. The spirits of the ancestors are believed to reside in tamarind trees and people use the tree in traditional ceremonies in which ancestral benediction is requested. Tamarind seeds are also used in a variety of games.

The tree has multiple ecological benefits such as controlling soil erosion and mudslides, conservation of water and carbon sequestration. It also acts as a wind break, provides shade and is a leguminous tree that helps fix nitrogen in the soil. The tree with its wide, spreading branches provides habitation for small animals and birds. The shade of the tree is an ideal site for people to gather. It is sometimes grown and planted as an ornamental to provide shade and aesthetic beauty for its yellow flowers.



Scientific name: *Tectona grandis*

Common name: Teak

Kannada name: Thega, Saguvani

Teak is a deciduous tree that can grow to a height of 30 m. The leaves of the teak are large in size, similar to that of a tobacco leaf. These trees can be found in all parts of the country but grow well in dry and hilly regions. They require the right content of moisture and soil with humus for nourishment. It has small white fragrant flowers. Nilambur in Kerala holds the oldest teak plantation in the world.

The tree is valued for its timber. Its wood has a leather-like smell and is durable and water resistant. The wood has been used to make boats and furniture as it is resistant to termites. Moreover, it is really expensive to purchase for its wood. Its bark has been used in home remedies to treat fever and stomach problems such as indigestion and acidity. The bark of the tree is also used to extract oil, which is a natural mosquito repellent and used in fragrances. Teak is the food source for the larvae of moths of genus *Endoclyta*.

Scientific name: *Terminalia catappa*

Common name: Indian almond

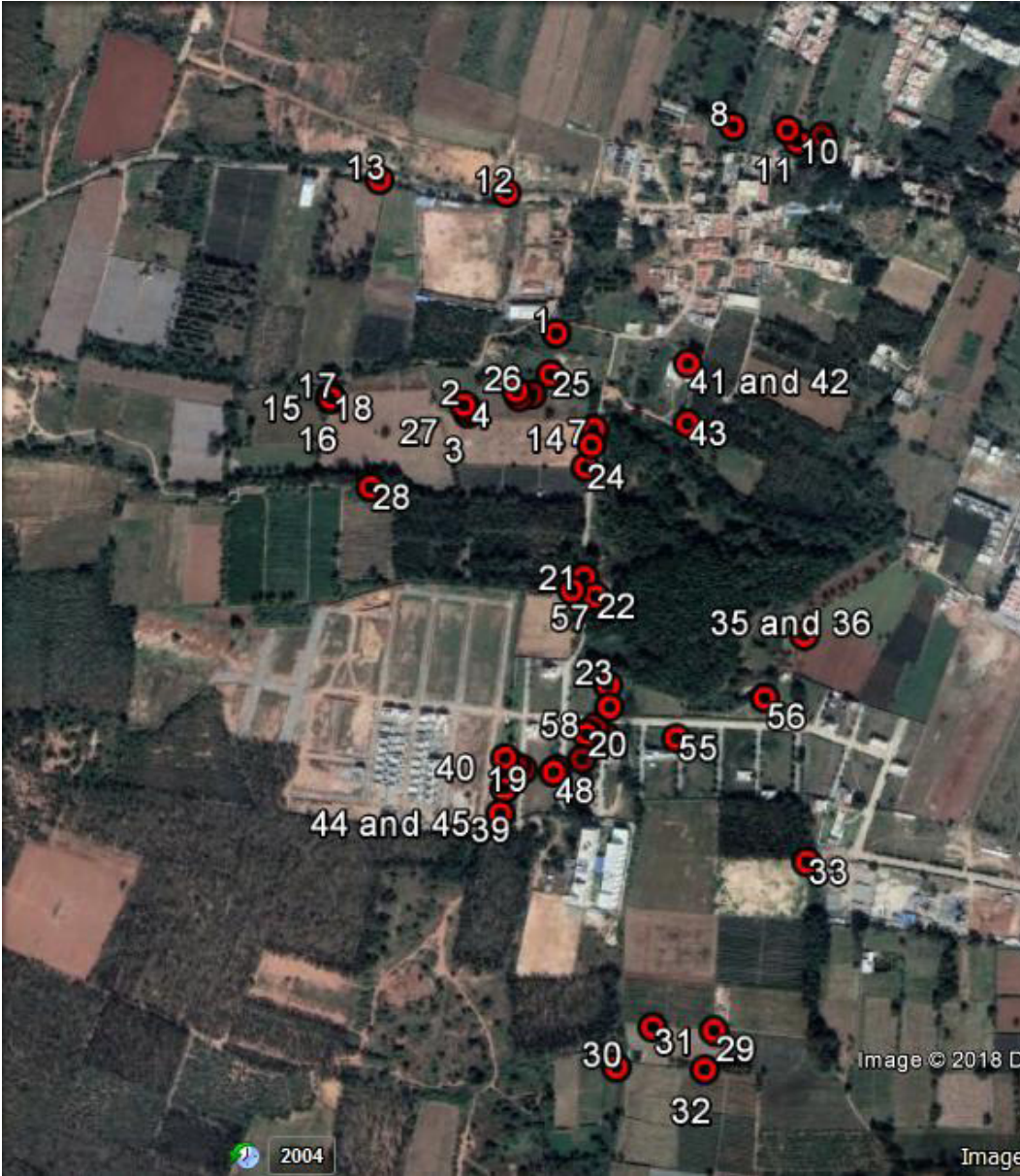
Kannada name: Kadubadami

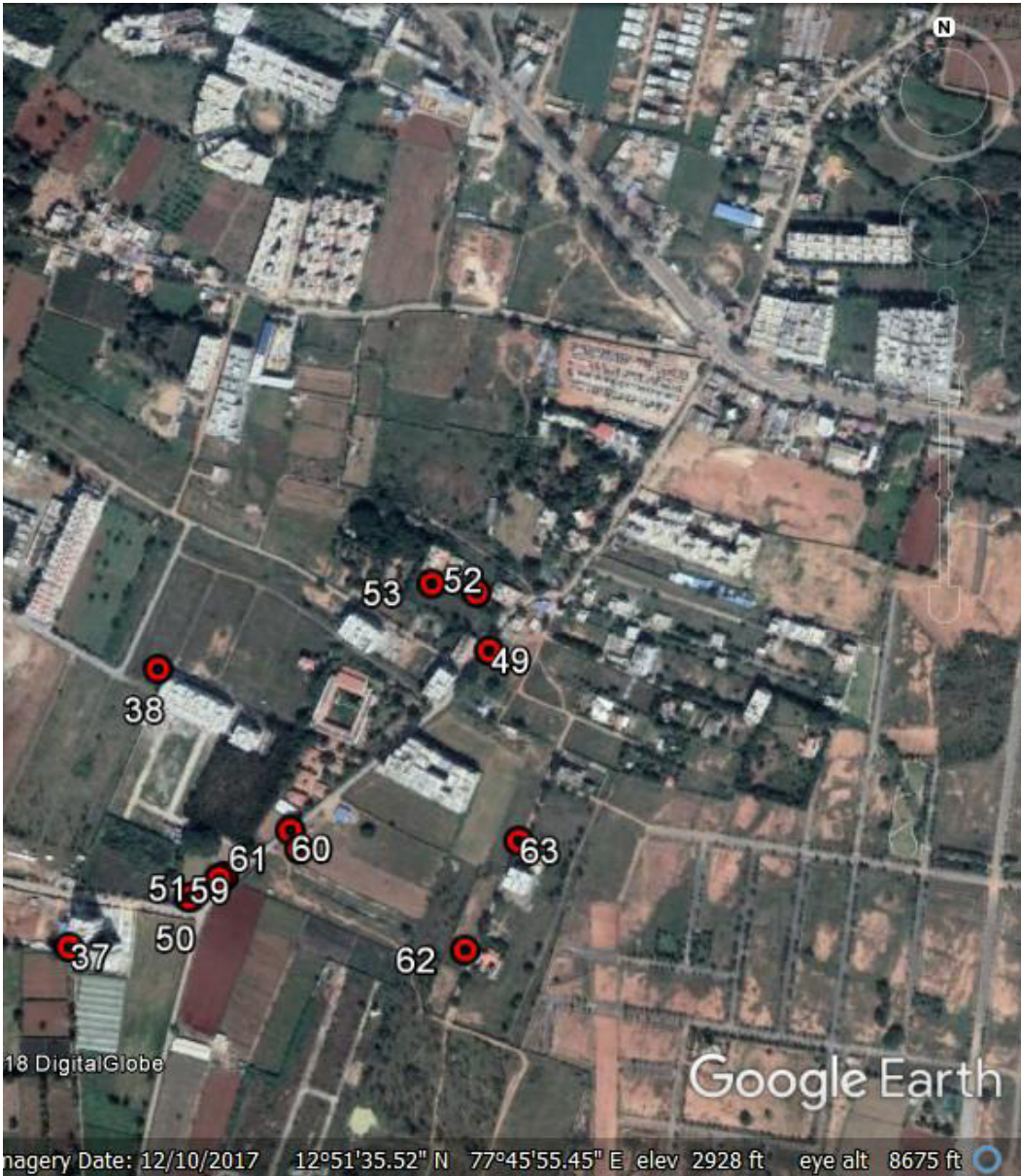
The Indian almond has a dark trunk that is slightly fissured. It has large, leathery oval shaped leaves which turn red before falling off the tree. It can grow upto 40 m in height, and has flowers that are small and white or whitish with a green tinge. The fruits are green when unripe and turn red as they ripen, and have a stone core. They are roughly egg shaped.



The fruits of the almond are edible, and parts of the tree have medicinal uses as an active agent against some parasites and bacterial pathogens. The leaves of the tree and the bark are used in tanning and dyeing. The tree can be planted for soil and coastline stabilization.

Google Earth image of trees around APU SLS campus





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Imagery Date: 12/10/2017 12°51'35.52" N 77°45'55.45" E elev 2928 ft eye alt 8675 ft

