

TREES, PEOPLE AND ENVIRONMENT

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“American society could save itself by listening to tribble people. While this would take a radical reorientation of concepts and values, it would be well worth the effort. The land use philosophy of Indians is so utterly simple that it seems stupid to repeat it; man must live with other forms of life on the land and not destroy it”

(Vince Deloria Jr./We Talk You Listen)

The air still sings and the river laughs but not where they once did. When our forefathers walked the land alone, the balance of nature was intact. They tilled the soil, they gathered the products of the earth, they hunted the land guided by a few simple beliefs. They maintained the harmony of forces in the world. This traditional Sinhala legacy is immeasurable. Immediately we think of material benefits - paddy, kurakkan, meneri, - and not the intrinsic ethnic of behaviour in the physical and biological world. Ethnobotanists would study the interrelationship between man and tree populations.

My father always said never cut a tree that gave you shade. My mother always taught me the truth of Buddhism reflected through the beautiful Bo-tree (*Ficus religiosa* Linn) which we worship with great respect. We practice the custom of growing trees around the house. Trees of beauty but of value to birds, animal, man and environment. My children have come to love trees. That is why I always feel that the annual tree planting campaign is close to our tradition, culture and our religion. Lord Buddha attained Nibbana under the Sri Maha Bodhi, Siddartha as a prince was boan under a Sal Tree (*Couroupita guianesia* Aubi). Reverend Mahinda met Devanampiyatissa, Sinhala first Buddhist king, near a mango tree. Sri Lankan economy revolves around the destiny of produce from tree crops - tea, rubber, coconut, cloves, cinnamon, nutmeg, coffee, cocoa, jak and breadfruit are tree crops with many uses in food of our people. The Hindu Tamils adhere there homes with Neem leaves and mango leaves. The Christians annually have a Christians tree in their

homes on the X'mas day. In every human settlement, occupants plant some economic trees. So there is a oneness; a recognition that the land possesses the power to benefit humans if proper devotion is followed and the spirit of the plant is mollified when proper respect is extended.

Every planner, landscape architect, or human ecologist should read Martin Krieger's "What's wrong with plastic trees?" (*Science* 179, 466-455 February, 1973) if he wishes to catch a glimpse of the nightmare future that Technology is preparing for man and nature. His article discusses the titanic events of the environmental crisis of man Vs. nature, totally outside the framework of biological reference; hence, one of his conclusions - that plastic trees and all sorts of nature substitutes have a valid place in planning - reads like a bad fairy tale. If he had only contemplated Hans Christian Anderson's "*The Emperor's Nightingale*", in which a mechanical nightingale is given the emperor to substitute for the real one whose song the emperor had loved. Eventually, of course, the clockwork breaks. Death comes and sits on the emperor's bed. But the real nightingale reappears and sings so sweetly that the emperor recovers. It is an old moral - you cannot make a real nightingale out of wheels and diamonds.

Do plastic trees have mycorrhizae? Produce oxygen? Transpire and cool the air? Have fragrant flowers visited by bees and produce fruits that feed the birds? Do they have leaves that decomposes into a rich humus? But further, in contemplating plastic trees as economically inexpensive nature substitutes, one may well ask: Can one love a plastic tree? Or the sound of wind in a plastic pine? Is the love of a living tree or flower truly taught only by culture, or is it due to interaction of culture and evolution?

The French sociologist and lay theologian Jacques Ellul puts in *The Technological Society* (1964, p. 325)

“The milieu in which man lives is no longer his. He must adapt - himself, as though the world were

new, into a universe for which he was not created He was made to have contact with living things, and he lives in a world of stone”

It cannot be, then, that our affection, our apparently overwhelming need for flowers, trees and wild life is fortuitous, a mere accidental cultural fixation. We may expect, as a matter of fact, that science will furnish the objective proofs of suppositions about man's needs for a living environment which we, at present can only guess at through timid intuition; that one of these days we shall find the intricate neotological bases of why a leaf or a lovely flower affects us so very differently from a broken beer bottle (*Wisconsin Academy Review* 13 (2) 16 - 23).

Meanwhile, modern technological civilization continues in its accelerated growth and with unprecedented speed, magnitude, and complexity, which are so great that most people, in fact, do not have the faintest notion what is good for them, for their families, for their society or for humanity as a whole. The problems are simple, too complex, involved, and removed for anyone but an occasional highly sophisticated specialist to understand. And that in itself is fraught with danger. Behind and within every concrete jungle lies empty and an ugly life without trees. Thus, a national tree planting campaign is non-partisan and takes the national role of building a closer relationship between man and nature—thorough urban forestry, tree planting along highways, tree planting in school/office gardens, tree planting in home gardens and rural community forestry/agroforestry programmes. To plant, nature, water and bring up a tree is giving life to a new life.

Trees have been adorning planet earth long before the advent of man for over 400 million years; first it was the conifers which reached their zenith around 250 million years ago and later joined by the Angiosperms or higher plants around 170 million years in the distant past. Plants may have been living on earth during the past 120 million years. In comparison, primitive man appeared on earth around 3-4 million years ago while modern man has had a relatively short existence probably from 10,000 - 35,000 years. It was a changing landscape all the way due to various upheavals and climatic changes which took place in geological history. Along with the

dwindling of conifers, the spread of higher plants and forests occurred around 100 million years ago.

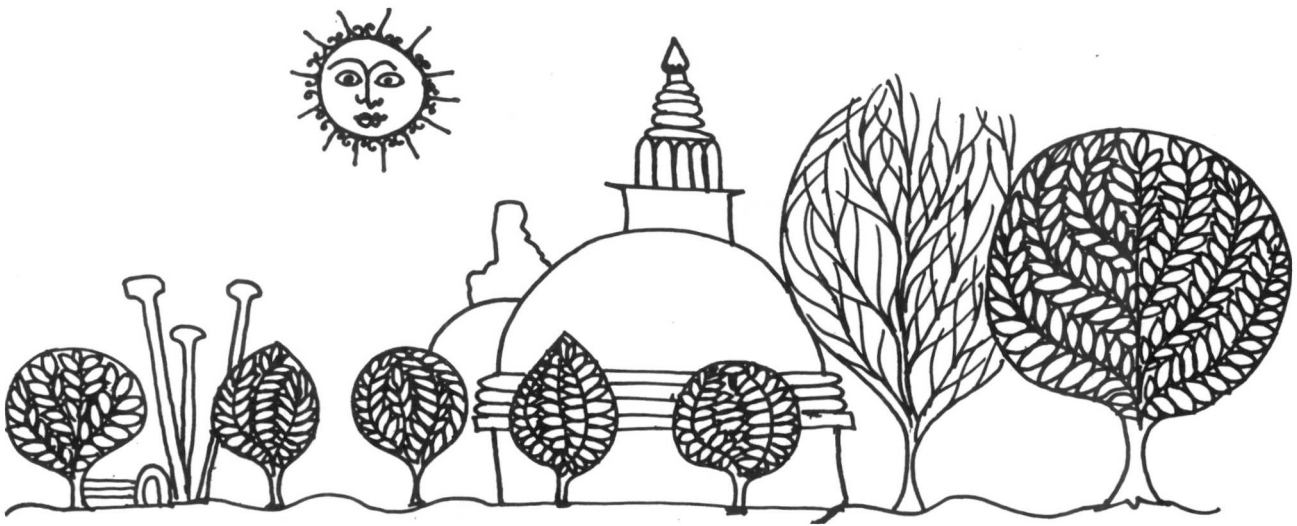
Since the extension of ice caps and glacial conditions there has been a wane of forest which continued into the recent or postglacial times. Today, in higher latitudes or temperate lands, woodlands vegetation consists of few trees dominated by herbaceous plants; while there is a dominance of trees in the tropical rain forest.

Trees are the largest of all living plants and the largest trees in the world are the Giant Redwood Trees of California, which are conifers of the genus *Sequoia* growing upto 340 feet. The most venerated plant / tree in the world is the Bo sapling.

In recent times, dwindling of trees and landscape changes have been caused by man's activities such as farming, logging, and urbanization. Environmentalists have repeatedly warned us on the consequences of environmental degradation such as global warming, living of sea levels, green house effect, ozone holes, extinct species and millions of more acres of land turning into deserts through gradual desertification. These were the subjects of the “Green debate” at the Earth Summit in Rio de Janeiro recently (UNCED). That is why **Maximo Kalaw** of the **Philippines Green Forum** said “the real issue is no longer *national* security but *natural* security but *natural* security”. The 800 - odd - page Agenda 21 plan listed priority measures to implement this doctrine of “sustainable development”. Meanwhile Indonesia has launched *Prajopo* (*Far Eastern Economic Review*, March 12, 1992) to prove that money grows on trees.

Amidst this destruction, there have been changes in the natural landscape due to the removal of the original vegetation and replacement with monocultures of trees, herbaceous and cereal crops. Landscape is basically what we see around us; mountains and plains, hills and valleys, rivers and lakes, sea and the land, grasslands and forests and so on. In summary, it is the visual relationships between the various objects in the environment.

Vegetation and trees in particular offer the necessary depth, scale and balance to the landscape. A flat or monotonous landscape will result in the absence



of trees and one can almost predict the type of environment by the farm, variety and composition of trees. Conifers with their landscape whilst palms with their tall trunks and feathery foliage invoke visions of the tropics.

Trees are the most conspicuous objects in the environment and are undoubtedly some of nature's architectural marvels. One is fascinated by their array of shapes and forms which transform the landscape into a dynamic entity, varying in composition, character and beauty. Trees with their soothing colour and pleasing contours contribute largely in neutralize a conceal sharp or rugged terrain in the environment, A poliferation of trees, on the other hand, can transform the landscape into a dynamic entity. The growth of Na (*Mesua Ferrea*), Murutha trees are egg shaped, those of Mara, Mal Mara, Flamboyant, Wormic Triquetra (*Diva Para*), are distinctly arching, and others like Munamal, Tamarind, Margosa, are domed shaped while most conifers have conical crowns. Palms are quite different from trees. The Indian Willoe tree or Polyalthica have distinctly conical crown. Common Jak - (*Arthocarpus heterophyllus Lam*), have no regular shape. The Jara Willow (*Ficus benjamina*) has a tremendous, almost circular, low spreading umbrella shaped canopy. The large Mara tree along the Thurstan road and parts of Reid Avenue, Bullers Road and Rajakeeya Mawatha along the roadside are beauties that should be preserved. There are unique wharied or tiered branced kottan tree (*Terminalia catappa Lina*), Pihimbiya, Munamal, Mango, Domba,

Ehela, Madera, Araliya, Cashew, Amberella, Murunga, Breadfruit, Beli, Arecanut, Sapu, Wal Sapu, Wana Sapu, Nelli, Goraka, Weralu, Kanaranga, Gammalu, Ranawara, Jambu, Pini Jambu, that can give life to landscape and yet be economic and food trees to the people. That is why in Portugal a notice appears in all woodlands and parks in poetry in the following form.

To the way farer

"Ye who pass by and would raise your hands against me,
 bearken eye you harm me
 I am the heat of your health on the cold winter nights.
 The friendly shade shielding you from the summer sun,
 and
 my fruits are refreshing draughts, quenching your thirst as
 you journey on.
 I am the beam that holds your house, the board on your
 table,
 the bed on which you lie, and the timber builds your boat.
 I am the handle of your hoe, the door of your homestead,
 the wood of your cradle and the shell of your coffin.
 Ye who pass by, listen to my prayer and harm not me."

Luis Vaz de Cameons

(Notice in Portugal in woodlands and parks)

Many of the trees species grown and sustained by farmers in Sri Lanka have been known to them for generations. They have selected and tendered them for generations. In their effort to domesticate the

species found in their neighbourhood or in their natural habitat consideration was paid to the environments in which the selected species could survive. The species which have been domesticated and intentionally grown are the ones which are able to provide them with a number of products of services. In Sri Lanka, most of the well known tree species are jak, breadfruit, mango, tamarind, mi, nedun, tuna, sapu, margosa, are selected and sustained by farmers. The increasing pressure on land, degradation, reduced supply of timber, increasing demand for food and fruits makes it inevitable to develop agricultural systems, integrating trees as a component in it. Such strategies as tree based production systems, social forestry, community forestry, agro-forestry and fuel wood programmes have been adopted to integrate trees in agro-systems. The Tree Planting Campaign held nationally annually is state recognition of the importance of trees in our social systems. This year, it is recommended that greater attention be drawn to the need for promoting trees that can provide food to the people. Such plants as jak, kitul, breadfruit, cashew, tamarind, avacodo, guava, durian, rambuttan, mango, coconut and fuel wood, fodder trees, species such as nedun, godapara, kumbuk, margosa, hora, modera, ambarella, murunga, beli, arecanut, diyapara,

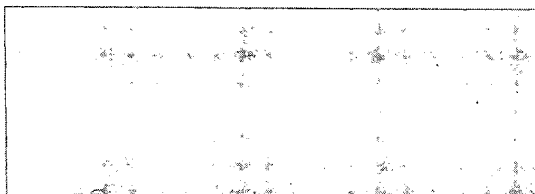
honda para, godapara, sapu, wal sapu, maha sapu, nelli, na, goraka, veralu, gammalu, ranawara, could be grown in suitable areas.

The National Tree Planting Week must be taken seriously by the society and the trees planted must be sustained for the common good. In 1939, **Heather Hamer** writing in a book titled **Garden in Ceylon** wrote quoting Edwin Arnold from **the Light of Asia** on the Bodhi tree as follows:

“The Bodhi Tree-beneath whose leaves
It was acclaimed the Truth should come to Buddha
Which now the mali know
Therefore he wants
With measured peace, steadfast majestic
Unto the Tree of Wisdom, Oh, ye
Worlds!
Rejoice! Our Lord Wended unto the tree”

REFERENCES

- Trimca - Flora
Alexander Moon - *Catalogue of the Indigenous and Exotic Plants growing in Ceylon*, 1824.
Heather Hamer - *Garden in Ceylon*, 1939.



SPARE THE TREES

The grandeur of those gracious trees
Reach out to the sky; nestling
Twixt it's foliage, the chirping birds
Who have made these trees their homes.
These green edifices, standing lazily o'er the river,
Sways in the breeze and appears to declare,
"Woodmen, spare me from your cruel axe,
Why torture me, wrenching my foliage
To desecrate me and the environment on which I thrive
Then making me to crash, with a loud splash
On the turbulent waters that once nursed me
Our tortured tribe in unison we say
Spare us, save us, for yet another day".

- Dudley B. Von Hagt