

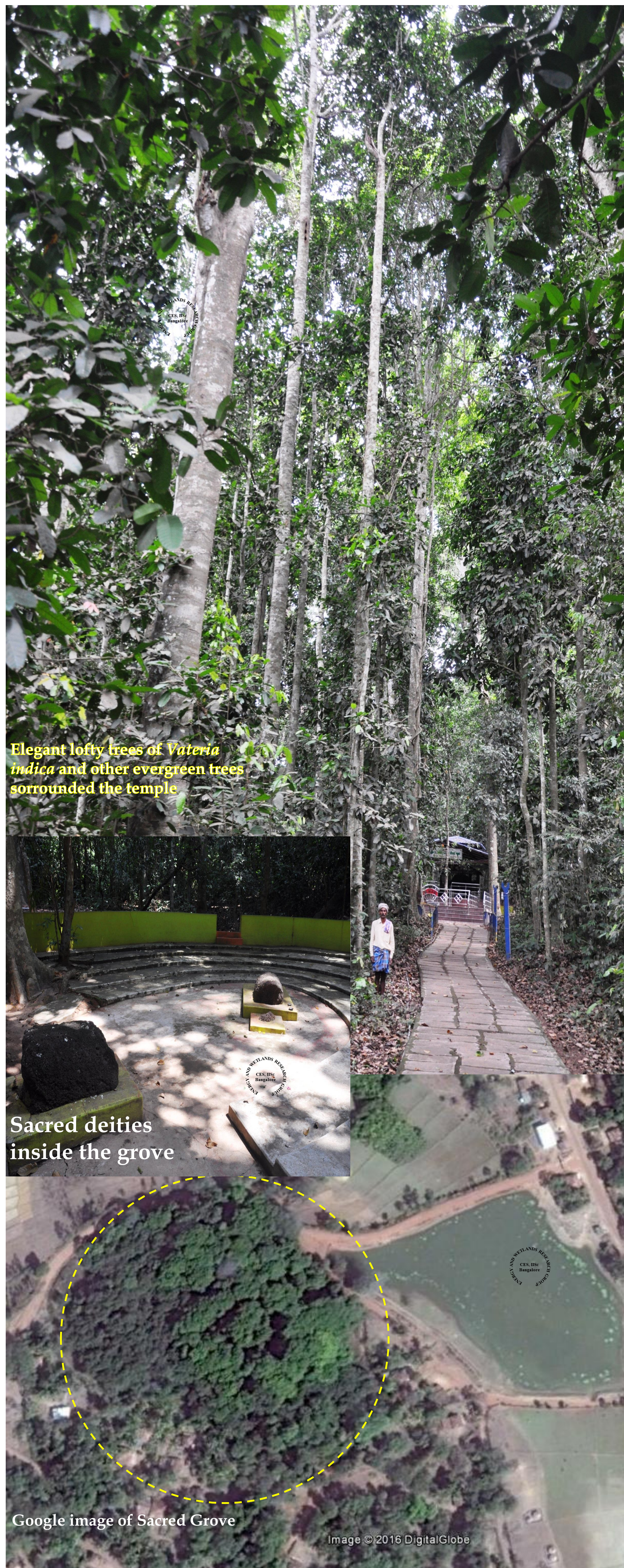
Yelakundli sacred grove

The Success story of Community Participation in Conservation and Management
Energy and Wetland Research Group, Centre for Ecological Sciences, Indian Institute of Science, Bangalore;
Url: <http://wgbis.ces.iisc.ernet.in/energy/>, <http://ces.iisc.ernet.in/biodiversity>



Introduction: The Marvel of Sacred grove - Yelakundli

Sacred groves are relict forests which have been protected by the local communities since time immemorial owing to the cultural traditions and taboos associated with them. One such sacred grove is Yelakundli (Sagar taluk, Karnataka, Central Western Ghats) which behold a bewildering array of magnificent trees with astounding girth and height dominated by IUCN endangered Dipterocarp tree *Vateria indica*. These endemic trees which are more or less absent in most of the other sacred grove in Uttara Kannada district have a special reason to have survived here until now. Miles and miles outside, we find only large areas of dusty agricultural croplands without a single forest patch. What is the marvel behind this piece of land harboring giant trees unlike the surrounding non-forested landscapes. A glimpse into the past reveal the extraordinary lesson of how people driven conservation effort has preserved an antique primary forest patch as a chunk of evolutionary history.



Elegant lofty trees of *Vateria indica* and other evergreen trees surrounded the temple



Sacred deities inside the grove



Google image of Sacred Grove

Image © 2016 DigitalGlobe



Mahin temple Rachamma surrounded by thick forest

Importance of Yelakundli sacred grove:

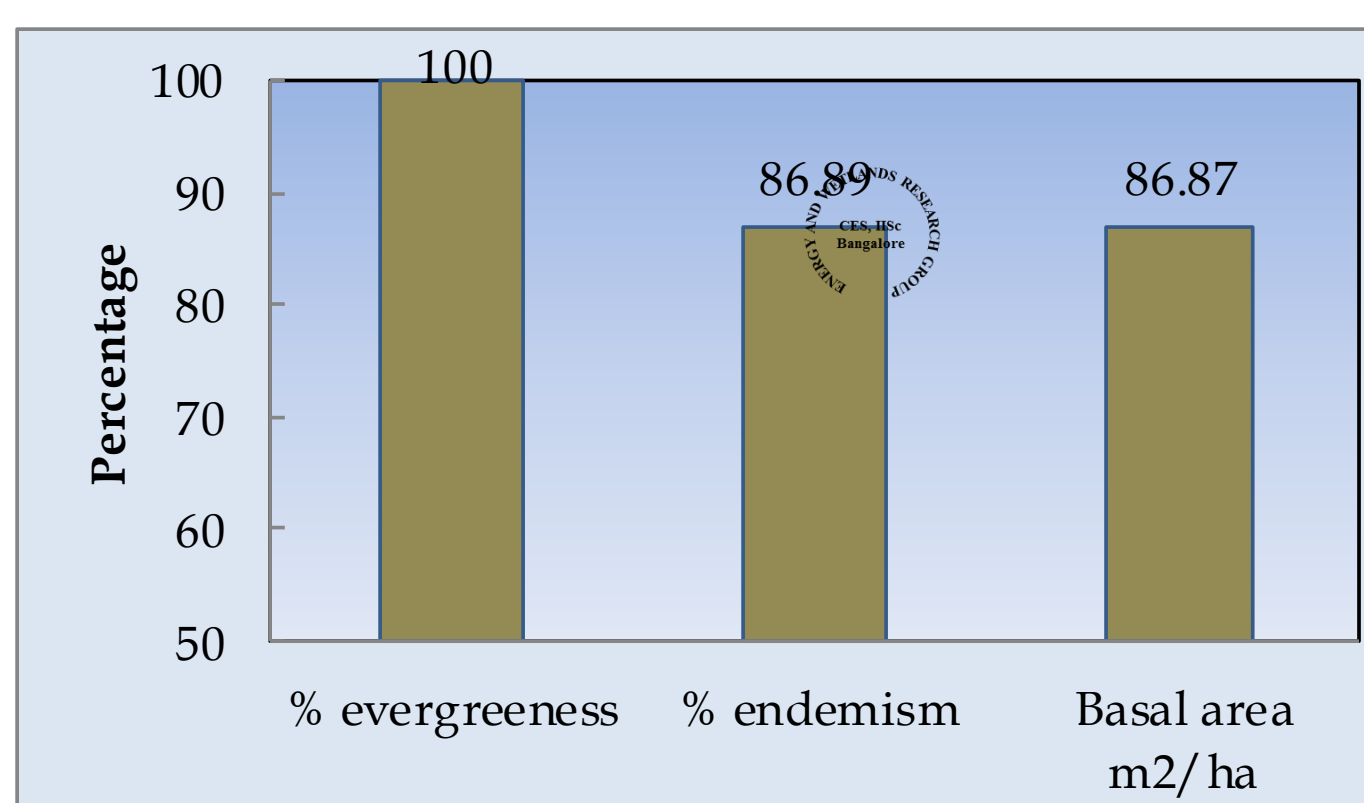
Human impacts in the form of slashing and burning of vegetation (shifting vegetation) through millennia, would have been one of the major reasons for the decline of primary forests. With the British colonization from early 19th century saw wholesale alterations of natural ecosystems for commercial crops, timber extraction and tree monocultures. Even the sacred groves were brought under forest working plans, heralding the downfall of people driven community forestry which until now safe guarded the sacred groves. Developmental pressures intensified during the post-independence period. Hence endemic biodiversity was preserved mostly in strictly protected Kans such as Yelakundli which escaped major human interventions.

Conclusion:

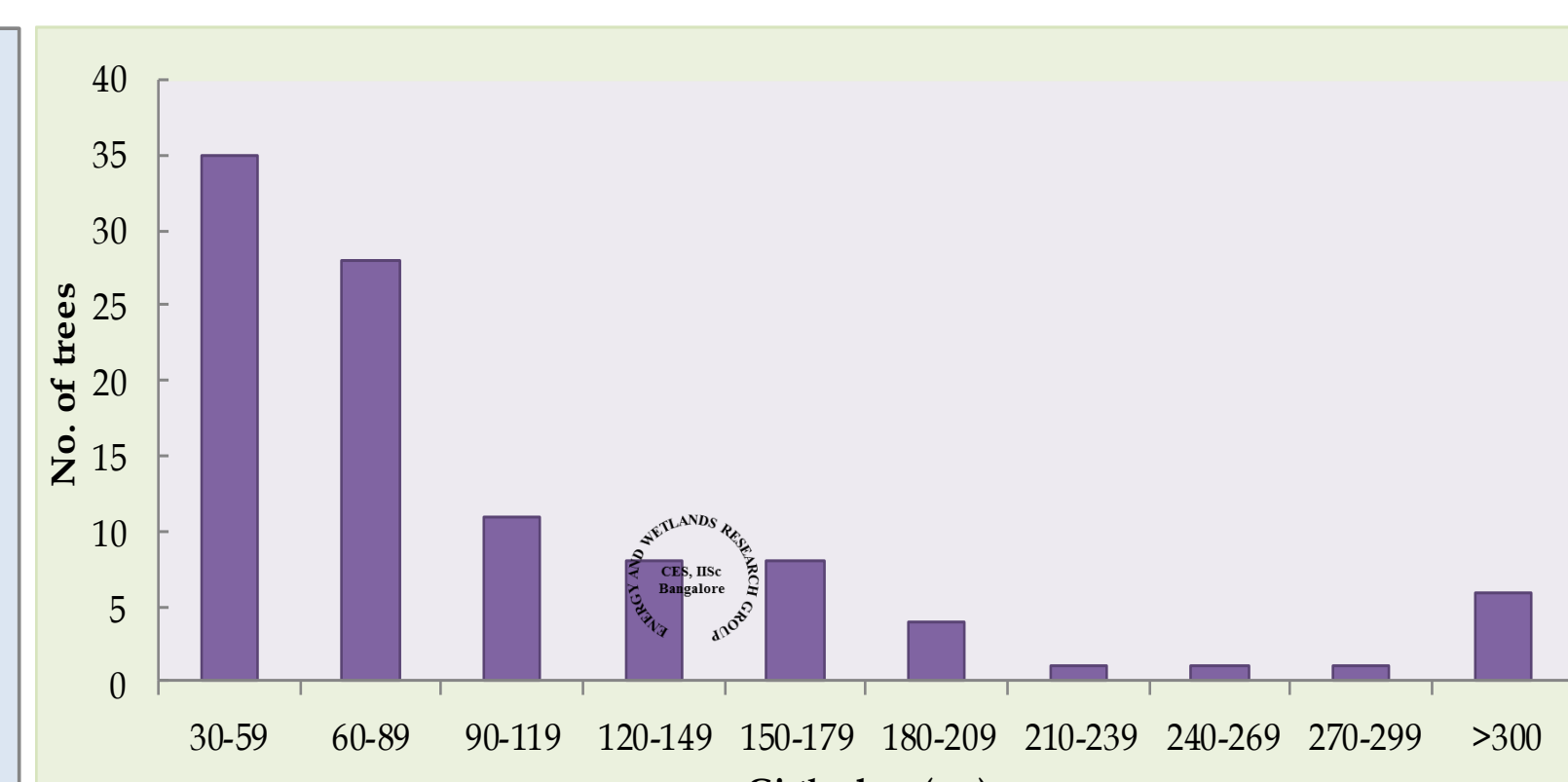
This sacred grove with all its evolutionary significance and cultural importance highly merits to be declared as Biodiversity heritage site. These are some of the areas where we discover the missing links of tropical forest evolution which would have been highly impossible if it had not been protected with such rigorous austerity.



Yelakundli sacred grove forest patch-entrance



% Evergreenness, % endemism and basal area/ha of Yelakundli sacred grove



Girth class distribution of endangered dipterocarp *Vateria indica* tree in 2000 m²



Lake near the sacred grove



Mesua ferrea - A rare tree



Mesua ferrea- fruits and seeds



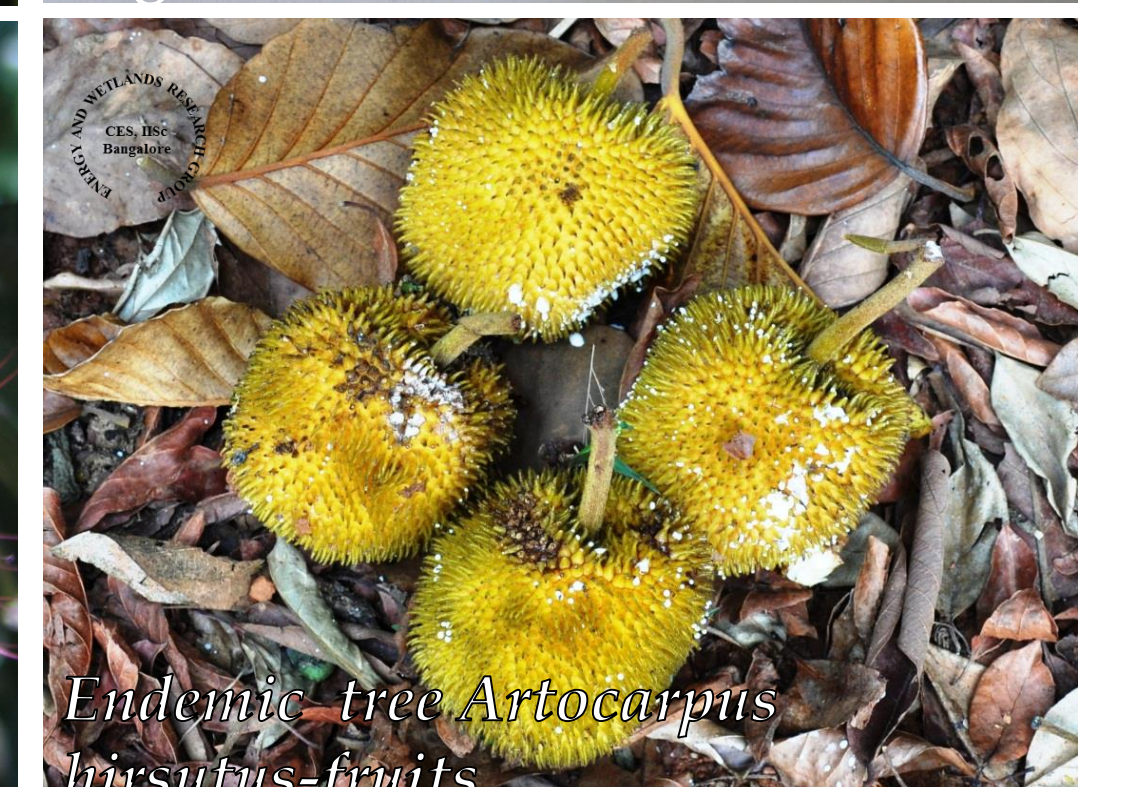
Vateria indica-endangered tree flowering



Vateria indica-large fruits



Saraca asoka tree in full bloom



Endemic tree *Artocarpus hirsutus*-fruits

Cultural heritage:

This sacred grove is dedicated to mother goddess 'Rachamma' along with other deities which include Chowdamma and Rameshwar. Outside the kan is a deity of Anegundi Bhutappa worshipped during the commencement of early monsoon rains.

Sacred grove diversity and structure:

Apart from endangered dipterocarp *Vateria indica*, other important trees includes *Mesua ferrea*, *Saraca asoka*, *Holigarna sp.*, *Artocarpus hirsutus* etc. Forest is 100% evergreen relic of a climax forest abounding in one of the highest levels of tree endemism (87%). This island of evergreen climax of about 4 ha, is high biomass reserve with exceptional basal area of 86.9 m²/ha.



G. R. Rao, M. D. Subash Chandran, and T. V. Ramachandra

Energy and Wetland Research Group, Centre for Ecological Sciences,
Indian Institute of Science, Bangalore 560012

Email: grrao1@gmail.com, Phone: 080 22933099

Web: <http://ces.iisc.ernet.in/energy/>, <http://ces.iisc.ernet.in/biodiversity>