



## ECOTOURISM POTENTIAL OF BIODIVERSITY CONSERVATION – A CASE STUDY OF SHIVARAMA KARANATH BALAVANA IN DAKSHINA KANNADA, KARNATAKA

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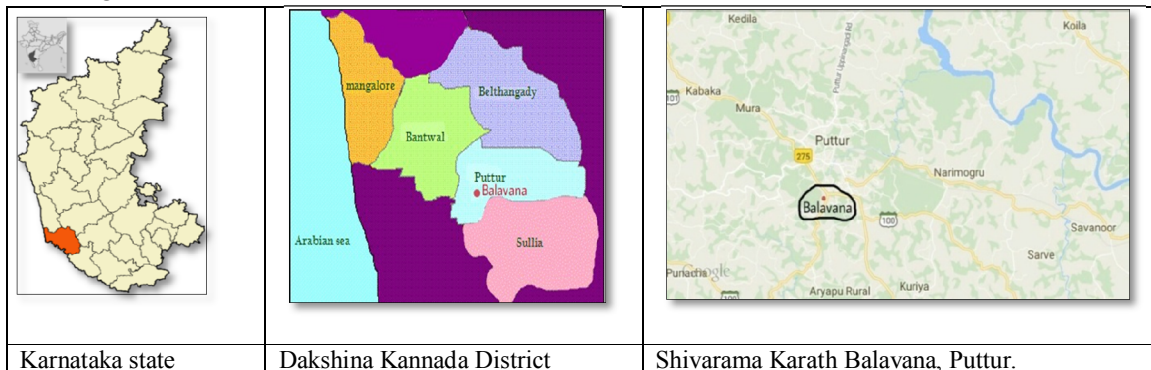
**Abstract**– Ecotourism is now defined as environmentally responsible travel to natural areas, in order to enjoy and appreciate nature that promoteS conservation (IUCN). This paper attempts to find out the significance of ecotourism in protection of biodiversity exist in the study site and also to provide the data to the concerned governing body of the study site for the conservation. The present study is confined to the biodiversity of the Shivarama Karanth Balavana, a cultural educational heritage site located in the Puttur taluk of Dakshina Kannada District. During the period May 2016 to Sept 2016, interview conducted with local peoples, members of the governing body and tourists to get the information on biodiversity and its conservation efforts. Present inventory accounted for a total of 83 species of angiosperm, 2 species of gymnosperm, 11 species of pteridophytes, 4 species of brvophyte, 17 species of mushrooms, 71 species of butterflies, 52 species of birds, 18 species of other invertebrates and 21 species of other vertebrates. This heritage site is very suitable for conducting nature camps. Since diverse species are found in this heritage site, a work plan must be drawn to conserve the biodiversity and also to introduce them to the tourists.

economic involvement of local peoples (IUCN). Moreover, ecotourism can increase the level of education and activism among travelers, making them more enthusiastic and effective agents of conservation. The basis for ecotourism is the biodiversity in a given area. Ecotourism provides the support for local conservation efforts, gives a sustainable benefits to local communities and supports local participation in decision-making. Tourists are attracted by natural landscapes which harbour significant biodiversity. Sustainable development stresses on economic development alone with the object of conservation of environment. The objective of this study is to document the biodiversity exist in the study site Shivarama Karanth Balavana, a cultural educational heritage site and also to provide the data to the concerned governing body of the study site for the conservation and also to highlight how the biodiversity and cultural base can be an attraction for tourists. This study area surrounded by trees had inspired Dr.Karant to write many of his works. Following his death, the whole area, including his house, was named Balavana. This park with its rich biodiversity resources is the favoured destination of domestic tourists. This heritage site is very suitable for conducting nature camps. This study mainly addressed to explore the rich floral and faunal diversity and also focused on the major problems for conservation of biodiversity of this heritage site

### INTRODUCTION:

Biodiversity is an asset to tourism and it varies greatly across the world. Ecotourism is now defined as environmentally responsible travel to natural areas, in order to enjoy and appreciate nature (and accompanying cultural features, both past and present) that promote conservation, have a low visitor impact and provide for beneficially active socio-

### METHOD





# Lake 2016: Conference on Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats [THE 10<sup>TH</sup> BIENNIAL LAKE CONFERENCE]

Date: 28-30<sup>th</sup> December 2016, <http://ces.iisc.ernet.in/energy>

Venue: V.S. Acharya Auditorium, Alva's Education Foundation, Sundari Ananda Alva Campus, Vidyagiri, Moodbidri, D.K. Dist., Karnataka, India – 574227

The present study is confined to the ecotourism place Shivarama Karanth Balavana, a cultural educational heritage site located in the Puttur taluk of Dakshina Kannada District Karnataka. There is a very good patch of evergreen forest in this site. The documentation of biodiversity and the survey were started in the month of May 2016 and completed in September 2016. Interview conducted with local peoples and leaders, members of management council, members of the elected bodies and tourists to get the information on biodiversity and its conservation efforts. All collected data have been classified and tabulated systematically.

It is observed that eco-tourists are found to appreciate the local traditions such as conservation of plants and animals, traditional practices and customs. The tourists gain experience and understanding of the flora and fauna and they enjoy the nature and obtain knowledge regarding biodiversity conservation. Present inventory accounted for a total of 83 species of angiosperm, 2 species of gymnosperm, 11 species of pteridophytes, 4 species of bryophyte, 71 species of butterflies, 52 species of birds, and 13 species of other animals. It is significant that many members of ever green forests are found in this unique heritage site. This heritage site is very suitable for conducting nature camps.

## RESULT

**Table-1: . Biodiversity species documented in the Shivarama Karanth Balavana**

Sl.No.	Name of the taxonomic group	No.of species
1	Angiosperms	83
2	Gymnosperms	02
3	Pteridophytes	11
4	Bryophytes	04
5	Fungi	17
6	Mammals	06
7	Birds	52
8	Reptiles	12
9	Amphibians	03
10	Butterflies	71
11	Ants	05
12	Spiders	06
13	Other invertebrates	07

**Table-2: List of angiosperm species documented in the Shivarama Karanth**

S. No.	Scientific Name	Common Name	Family	T/H/S/Climber/ Others	Others
1.	<i>Adenantha pavonia</i> L.	Chenne Kaai mara(Kan)	Fabaceae	Tree	medicinal
2	<i>Agave sisalana</i> Perr.	Dadpale(tulu)	Agavaceae	Stout shrub	Traditional use
3	<i>Aegle marmelos</i> (L.)	Bilva (Kan)	Rutaceae	Tree	medicinal
4	<i>Alstonia scholaris</i> (L.)	Hale mara (Kan)	Apocyanaceae	Tree	medicinal
5	<i>Amorphophallus paeoniifolius</i>	Kaadu kene/Kaadu suvarna gedde (Kan)	Araceae	Herb	Petiole and corm is edible
6	<i>Aporusa lindleyana</i> (Wright) Baill	Saroli mara(Kan)	Euphorbiaceae	Tree	medicinal
7	<i>Aristolochia indica</i> L.	Eeshwara balli (Kan)	Aristolochiaceae	climber	medicinal
8	<i>Artocarpus heterophyllus</i> Lam.	Halasu(Kan) Jack tree (Eng)	Moraceae	Tree	Fruit is edible.
9	<i>Artocarpus hirsutus</i> Lam.	Hebbalasu (Kan)	Moraceae	Tree	Edible fruits
10	<i>Asparagus</i>	Shathavari (Kan)	Liliaceae	Shrub	medicinal



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	<i>racemosus Willd.</i>				
11	<i>Bambusa arundinaceae</i> (Retz)Roxb.	Biduru(Kan) Bamboo (Eng)	Poaceae	Grass	Commercial use
12	<i>Buchanania lazan</i> (Spreng.)	Erpe (Tul)	Anacardiaceae	Tree	medicinal
13	<i>Butea monosperma</i> (Lam.)Taub.	Flame of the forest (Eng)	Fabaceae	Tree	medicinal
14	<i>Calophyllum apetalum Willd.</i>	Honne (Kan)	Clusiaceae	Tree	
15	<i>Calotropis gigantea</i> (L.) R.Br	Ekke (Kan)	Asclepiadaceae	Shrub	medicinal
16	<i>Carallia brachiata</i> (Lour.)Merr.	Andipunar (Tul)	Rhizophoraceae	Tree	medicinal
17	<i>Caryota urens</i> L.	Eendu mara (Kan) Fish tail palm (Eng)	Arecaceae	Tree	
18	<i>Chasallia curviflora</i>	Kaadu garuda pathala(Kan)	Rubiaceae	Shrub	
19	<i>Cinnamomum verum</i> J.S.Pressl	Daalcheeni (Kan) Cinnamon(E)	Lauraceae	Tree	Spices & condiments
20	<i>Clerodendrum viscosum</i> Vent	Thaggi (Kan)	Verbenaceae	Shrub	medicinal
21	<i>Colocasia esculenta</i> (L.) Schott.	Kesu (Kan)	Aracaceae	Herb	
22	<i>Costus speciosus</i> (Koenig)Smith	Narikabba (Kan)	Zingiberaceae	Herb	medicinal
23	<i>Cyamopsis tetragonoloba</i> (L.)	Chauli kai (Kan)	Fabaceae	Shrub	
24	<i>Cyanodon dactylon</i> (L.) Pers	Garike (Kan)	Poaceae	Grass	medicinal
25	<i>Cyclea peltata</i>	Haade balli (Kan)	Menispermaceae	Climbing herb	medicinal
26	<i>Dalbergia sissooides</i> Grah.	Beeti mara	Fabaceae	Tree	timber
27	<i>Ednodia rheedei</i> Spreng.	Palle kai (Kan)	Fabaceae	Tree	medicinal
28	<i>Emilia sonchifolia</i> (L.) DC	Ilikivi gida (Kan)	Asteraceae	Herb	medicinal
29	<i>Evolvulus alsinoides</i> L.	Vishnu kranthi (Kan)	Convolvulaceae	Herb	medicinal
30	<i>Ficus benghalensis</i> L.	Atti (Kan)	Moraceae	Tree	
31	<i>Flacourtia Montana</i> Grah.	Abluka (Kan)	Flacourtiaceae	Tree	Edible fruits
32	<i>Funaria sp.</i>	Funaria	Funariaceae	Moss	bryophyte
33	<i>Gloriosa superba</i>	Gauri hoo(Kan)	Liliaceae	Climbing herb	medicinal
34	<i>Gnetum alba</i>	Gnetum	Gnetaceae	Woody Climber	Gymnosperm
35	<i>Grewia serrulata</i> GC.	Kadpadenji (Tul)	Tiliaceae	Tree	medicinal
36	<i>Hemidesmus indicus</i> (L.)	Nannariberu/Nannali (Kan)	Asclepiadaceae	Shrub	medicinal
37	<i>Hibiscus sabdariffa</i> L.	Gonguru (Kan)	Malvaceae	Shrub	medicinal
38	<i>Holigarna arnotiana</i> Hook.f.	Chere/ Chera (Kan)	Anacardiaceae	Tree	medicinal
39	<i>Hopea parviflora</i> Bedd.	Chirpu mara (Kan) Bovu mara (Tul)	Dipterocarpaceae	Tree	timber



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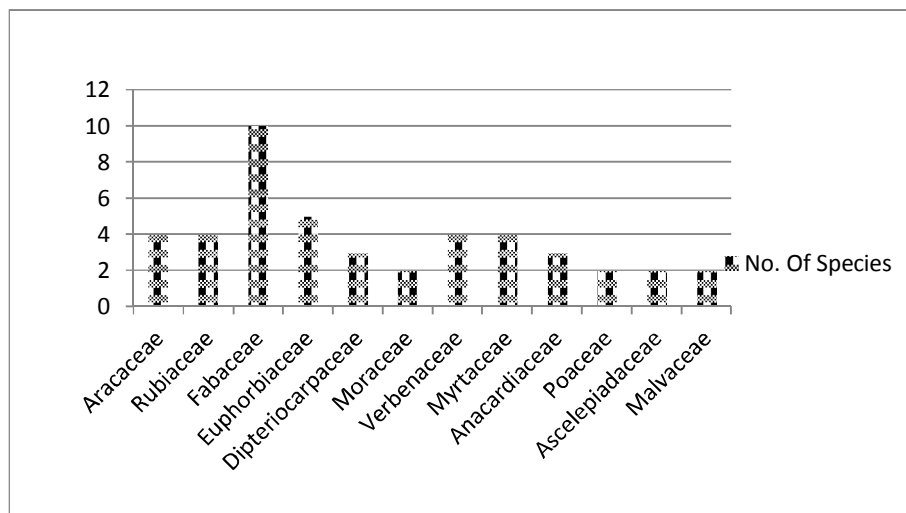
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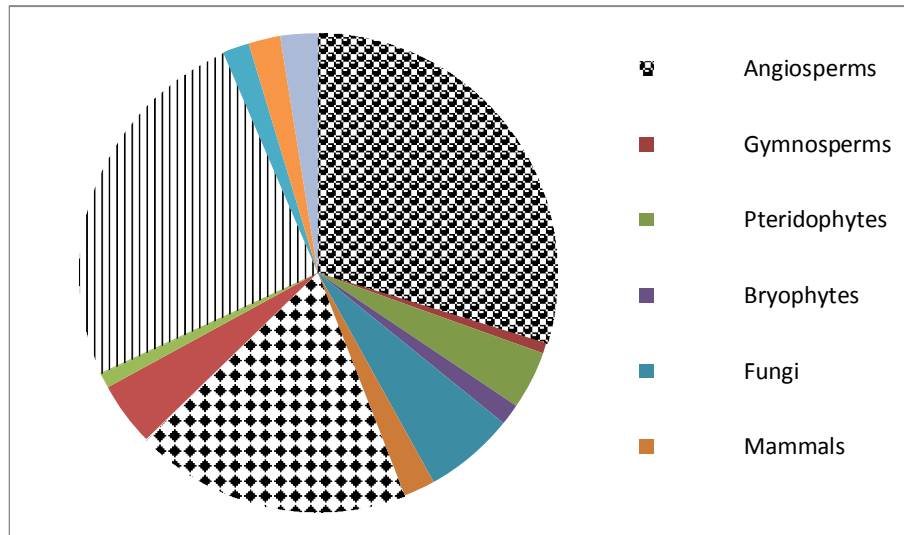
40	<i>Hopea ponga</i> Bedd.	Karimara(Tul)	Dipterocarpaceae	Tree	fuel
41	<i>Impatiens balsamina</i> L.	Neeru kaddi/gauri hoo (Kan)	Balsaminaceae	Herb	medicinal
42	<i>Ixora coccinea</i> L.	Kepula (Kan)	Rubiaceae	Shrub	medicinal
43	<i>Ixora brachiata</i> Roxb.	Kurejji (Kan)	Rubiaceae	Shrub	medicinal
44	<i>Lantana camara</i> L.	Kaadugulaabi(Kan)	Verbenaceae	Shrub	
45	<i>Laportea interrupta</i> (L.)	Aakire (Tul) Pancharangi (Kan)	Urticaceae	Herb	allergic to human skin.
46	<i>Loeseneriella arnottiana</i> A.C.Smith	Maaderi balli (Kan)	Rhamnaceae	Climbing shrub	medicinal
47	<i>Loranthus</i> sp.	Bandanike (Kan)	Loranthaceae	Partial stem parasite	
48	<i>Macaranga peltata</i>	Uppalige mara(Kan)	Euphorbiaceae	Tree	medicinal
49	<i>Mangifera indica</i> L.	Mango tree (Eng)	Anacardiaceae	Tree	Edible fruits
50	<i>Melastoma malabathricum</i> L.	Nekkarike (Kan)	Melastomataceae	shrub	medicinal
51	<i>Memecylon malabaricum</i> (Clarke)	Ollekodi	Melastomataceae	Shrub	medicinal
52	<i>Michelia chapaca</i> L.	Champak tree(Eng) Sampige (Kan)	Magnoliaceae	Tree	Ornamental
53	<i>Mimosa pudica</i> L.	Touch-me-not plant(Eng) Naachige mullu(Kan)	Fabaceae	Shrub	medicinal
54	<i>Mimusops elongi</i> L.	Renje (Kan)	Sapotaceae	Tree	medicinal
55	<i>Mussaenda bellila</i> Buch.-Ham.	Bellante gida (Kan)	Rubiaceae	Shrub	medicinal
56	<i>Oroxylum indicum</i> (L.)	Aane mungu (Tul)	Bignoniaceae	Tree	medicinal
57	<i>Phyllanthus amarus</i> Schum & Thonn	Nela nelli (Kan)	Euphorbiaceae	Herb	medicinal
58	<i>Phyllanthus emblica</i> L.	Nelli mara (Kan)	Euphorbiaceae	Tree	medicinal
59	<i>Piperomia pellucid</i> (L.) H.B & K.	Neeru kaddi gida (Kan)	Piperaceae	Herb	medicinal
60	<i>Polyalthia longifolia</i> (Sonn.)Thw.	Madras ashoka (Kan)	Annonaceae	Tree	cultivated
61	<i>Pothos Scandens</i> L.	Akki balli(Kan)	Araceae	Climber	medicine
62	<i>Psidium guajava</i> L.	Perale(Kan)	Myrtaceae	Shrub	medicinal
63	<i>Pterocarpus marsupium</i> Roxb.	Benga (Kan)	Fabaceae	Tree	medicinal
64	<i>Rhynchosytilis retusa</i> Blume.	Seethe dande (Kan)	Orchidaceae	Shrub	
65	<i>Samanea saman</i>	Devadaaru (Kan)	Fabaceae	Tree	cultivatd
67	<i>Santalum album</i> L.	Shree gandha (Kan)	Euphorbiaceae	Tree	medicinal
68	<i>Saraca asoca</i> (Roxb.)de Wilde	Ashoka (Kan)	Fabaceae	Tree	medicinal
69	<i>Sida cordata</i>	Peratthane soppu (Tul)	Malvaceae	Herb	medicinal
70	<i>Smilax zeylanica</i> L.	Chenne booru (Tul)	Pontederiaceae	Shrub	medicinal
71	<i>Solanum americanum</i> Mill.	Chavi gida (Kan)	Solanaceae	Shrub	medicinal
72	<i>Stachytarpheta urticaefolia</i> (salisb.)	Ubbasa gida (Kan)	Verbenaceae	Shrub	medicinal

73	<i>Strychnos nux-vomica L.</i>	Kaasaraka (Kan)	Loganiaceae	Tree	medicinal
74	<i>Syzygium caryophyllatum</i>	Kuntangila (Kan)	Myrtaceae	Small tree	Fruits are edible
75	<i>Syzygium cumini (L.)</i>	Nerale mara (Kan)	Myrtaceae	Tree	Edible fruits
76	<i>Tamarindus indica L.</i>	Hunase mara (Kan)	Fabaceae	Tree	
77	<i>Tectona grandis L.f.</i>	Teak(Eng) Saaguvaani mara (Kan)	Verbenaceae	Tree	timber
78	<i>Terminalia crenulata Roth.</i>	Kari mathi (Kan0)	Myrtaceae	Tree	medicinal
79	<i>Terminalia paniculata Roth.</i>	Maruva (Tul)	Myrtaceae	Tree	medicinal
80	<i>Vanda testacea</i>	Vanda	Orchidaceae	Shrub	
81	<i>Vateria indica L.</i>	Dhoopada mara (Kan)	Dipterocarpaceae	Tree	Forest product
82	<i>Ziziphus oenoplia Mill.</i>	Choorimillu (Kan)	Rhamnaceae	Shrub	medicinal
83	<i>Zizipus oenophila Mill</i>	Cheemullu(tul) Choori mullu (Kan)	Rhamnaceae	Shrub	edible fruits medicinal

**Graph-1: Familywise composition of Angiosperm species documented**



**Graph-2:Composition of biodiversity species documented in the Shivarama Karanth Balavana**



### CONCLUSION:

Eco-tourism provides opportunities to visitors to experience powerful manifestations of nature and culture. It focuses on the significance of conservation of biodiversity and local culture. At the same time it generates income for conservation and economic benefits. Since diverse species are found in this heritage site a work plan must be drawn to introduce them to the tourists who visit this place. Besides, the responsibility of protecting and conserving falls on the shoulders of the governing body and the local people.

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