

REPORT OF “**PURVATALI RAI**”  
SACRED GROVE FOR  
DECLARING AS  
BIODIVERSITY HERITAGE SITE (BHS)



**“PURVATALI RAI”**  
Village Panchayat Surla, Bicholim- Goa

PREPARED BY 12 MEMBER BHS COMMITTEE APPOINTED BY SURLA BMC WITH  
SUPPORT OF EXPERTS DEPUTED BY GOA STATE BIODIVERSITY BOARD

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## 1. **INTRODUCTION**

The process of declaring BHS area in Surla is based on section 37 of Biodiversity Act 2002, which states that

(1) Without prejudice to any other law for the time being in force, the State Government may, from time to time in consultation with the local bodies, notify in the Official Gazette, areas of biodiversity importance as biodiversity heritage sites under this Act.

(2) The State Government, in consultation with the Central Government, may frame rules for the management and conservation of all the heritage sites.

(3) The State Government shall frame schemes for compensating or rehabilitating any person or section of people economically affected by such notification.

Hence after completion of State level validation of Surla Peoples Biodiversity Register the local Biodiversity Management Committee requested Goa state Biodiversity Board (GSBB) to guide and subsequent actions have led to creation of this report.

The sacred groves already represent heritage areas which are conserved since many decades due to protocols set by village ancestors and conservation efforts taken by age old generations. The bio-cultural protocols associated with sacred groves along with the deep sense of holistic and theological approach by local people has led to preservation of ecological intactness of these areas. The process of scientific documentation of flora and fauna by understanding their scientific importance is very interesting. GSBB has extended its technical support in preparing scientific report by involving its experts.

### **Sacred Groves for Conserving Biodiversity:**

“Sacred groves are tracts of virgin forest with rich floral & faunal diversity, which have been protected by the local people for centuries for their cultural and religious beliefs and taboos that the deities reside in them and protect the villagers from different calamities. Every sacred grove carries its own legends, lore, and myths which form the integral part of the sacred grove. An inextricable link between present society and past in terms of biodiversity, culture, religious and ethnic heritage exists in sacred groves.”<sup>1</sup>

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<sup>1</sup> - The Sacred Groves and Their Significance in Conserving Biodiversity An Overview M.L. KHAN\*, A SHALATA DEV I KHUMBONGMAYUM AND R.S. TRIPATHI 1



Sacred groves act as an ideal centre for biodiversity conservation. Several plants and animals that are threatened in the forest are still well conserved in some of the sacred groves. It has been observed that several medicinal plants that are not to be found in the forest are abundant in the sacred groves.

Further, rare, endangered, threatened and endemic species are often concentrated in sacred groves. The sacredness, religious beliefs and taboos play a significant role in promoting sustainable utilization and conservation of flora and fauna of the region. However, with the passage of time, considerable changes have taken place in the extent of the sacred groves, in their vegetation structure, peoples' perception towards them and the religious beliefs and taboos. Therefore, a holistic understanding of the current status, structure and function of sacred grove is essential for assessing their ecological role and formulating strategies for their conservation.

Goa since hoary past has been known as the tropical paradise, due to the favourable climatic condition and environment. The beaches of silvery sands and blue water of sea are source of attraction for the tourists and hence very few are aware that Goa has most imposing and pleasing green Sahyadri mountain ranges. Like other parts of India, Goa too has rich and varied Indian cultural heritage.

The Goans are nature worshippers par excellence, and extend protection to various forms of living nature like any



Matti (*Terminalia elliptica*)

other culture in India. Gavda, Kunbi, Velip and Dhangar – Gouly, the tribals of Goa have worshipped various forms of nature. They have a tradition of sacred cow, sacred goat, sacred banyan tree, sacred hill, sacred stone, sacred pond and also sacred grove. By considering them sacred, they have protected them, since many generations. Sacred groves are indeed very old nature sanctuaries where not only living but also non-living beings are afforded protection through the grace of any one deity or spirit from traditions. In Goa, there are instances in some sacred groves where the entire biological wealth receives total protection on account of their association with some deity. .”<sup>2</sup>

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<sup>2</sup> - The Sacred Grove of Goa, by Rajendra Kerkar, Published by Goa State Biodiversity Board, Saligao- Goa

## **2. Significance and objectives of Biodiversity Heritage Sites**

1. To strengthen the biodiversity conservation in traditionally managed areas and to stem the rapid loss of biodiversity in intensively managed areas, there is a need for identification of these areas of significance. These areas also represent a positive interface between nature, culture, society, and technologies, such that both conservation and livelihood security can be achieved, and positive links between wild and domesticated biodiversity are enhanced.
2. To have a BHS in and around a community should be a matter of pride and honour to that community and this virtuous act of community may work as an example to the entire nation apart from ensuring availability of the resources to their own future generation. The areas / sites that are like existing sacred groves in general and those existing in Eastern Ghats and in North East India and Western Ghats in particular can be straight away be declared and notified as BHS
3. It is also necessary to instill and nurture conservation ethics in all sections of the society. The creation of BHS will ensure bringing home these values in the society and thereby put an end to overexploitation of natural resources and avoid environmental degradation.



4. The creation of Biodiversity Heritage Site (BHS) may not put any restriction on the prevailing practices of and usages by the local communities, other than those voluntarily decided by them. The purpose is to enhance the quality of life of the local communities through this conservation measure.

### 3. Definition of Biodiversity Heritage Site:

Biodiversity Heritage Sites (BHSs) are well defined areas that are unique, ecologically fragile ecosystems. They are spread over terrestrial, coastal and inland and marine waters having rich biodiversity. The BHSs are endowed with richness of wild as well as domesticated species or intra-specific categories, high endemism, presence of rare and threatened species, keystone species, species of evolutionary significance, wild relatives /ancestors of domestic/cultivated species or their varieties. These areas are also represented by fossil beds and having significant cultural, ethical or aesthetic values and are important for the maintenance of cultural diversity, with or without a long history of human association with them.



*Purvatali Rai- Sacred Grove, Surla*

#### **4. PHYSICAL FEATURES OF SURLA VILLAGE**

The village is situated in the northern part of the Goa and have elevation of about 44 meters from MSL (confirmed with google earth). The eastern parts of the village is covered with mountains and the western part of the village is delimited by Mandovi river. Local people use ferry to cross the river. Mandovi river in the village area is lined with mangrove growth.

It was observed that no fishing in the river is being done by the villagers of Surla though few people enjoys fishing by hooks and lines in the area near Mosque. This kind of fishing is mainly for recreational and sometimes for consumption of local people. The web of seasonal nallahs and springs is spread all over the village.

The flow of the springs is higher in certain area due to the slopes of the mountain. Considerable are of the village is under cultivation of beatle nuts and coconut. These field are home to many mammals like Giant Squirrel, Palm civet, small Indian civet etc. Proofs of existence of these animals are recorded during the surveys for documentation of PBR.

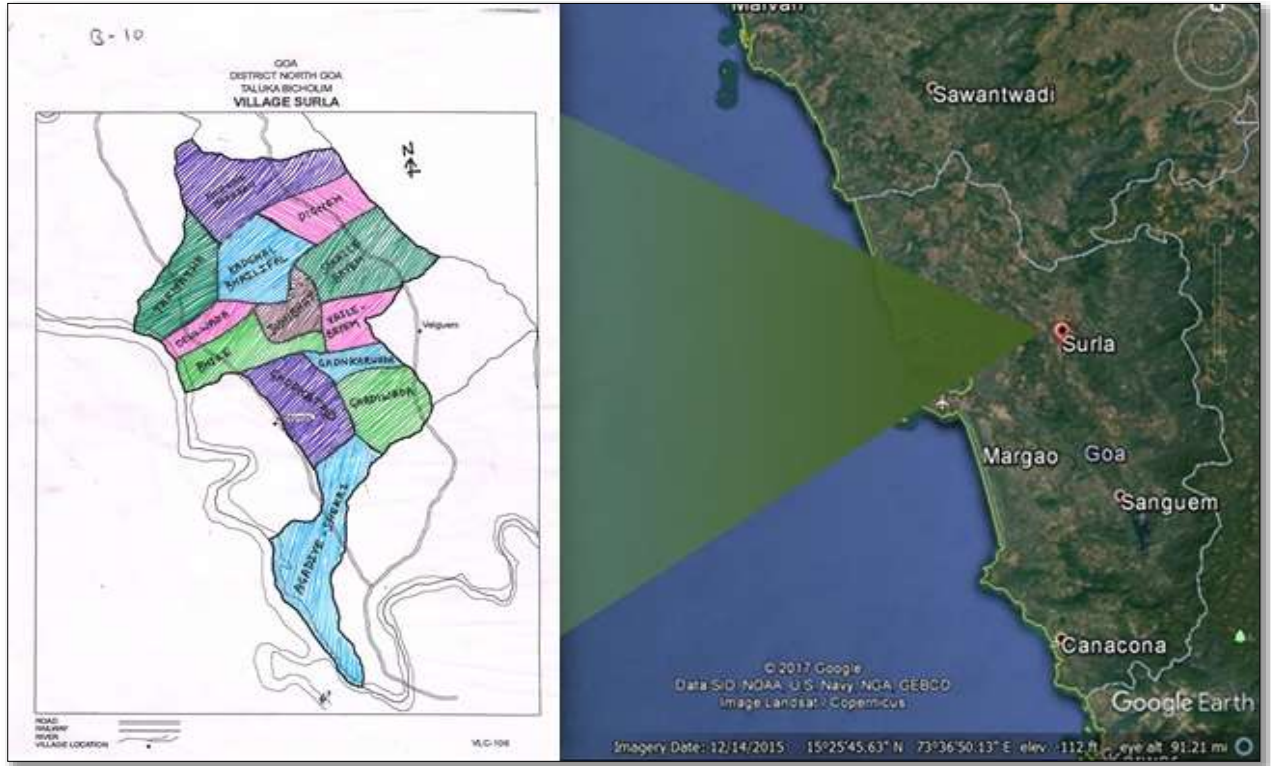
Forested area is spread over the elevated region and Devrai areas. Most of the large trees are present in the Devrai and are conserved due to the religious importance of that area. Forest area shows grassland which provides ideal habitat for stray cattle. South east part of the village is influenced by the mining activities and the heap of mined waste is now converted into the plantation of Australian acacia which shows distinct landscape from that of the other parts of the village.

Two ponds near this hillock are seasonal and provide shelter to the Marsh Crocodile. Hilly areas of the village have dense forest with sparse grassland openings. Grassland is present on the rocky areas of hills. These forested areas have provided ideal situation for the presence of Leopard in this area. Villagers have reported occassional sightings of the same and indirect signs obtained during the survey also prove the presence.<sup>3</sup>

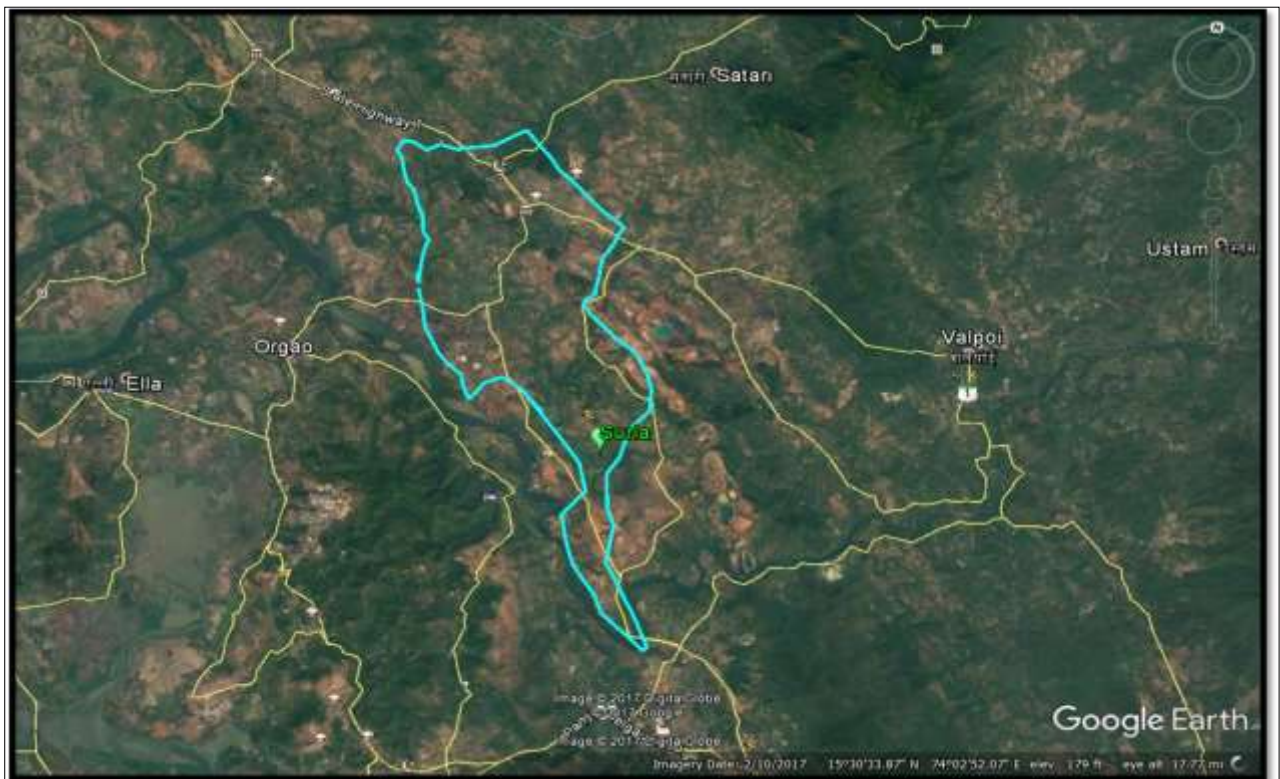
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<sup>3</sup> – Peoples Biodiversity Register of Surla, Village.





**Location of Surla village**








## 5. Temples and places of worship in the Village of Surla:

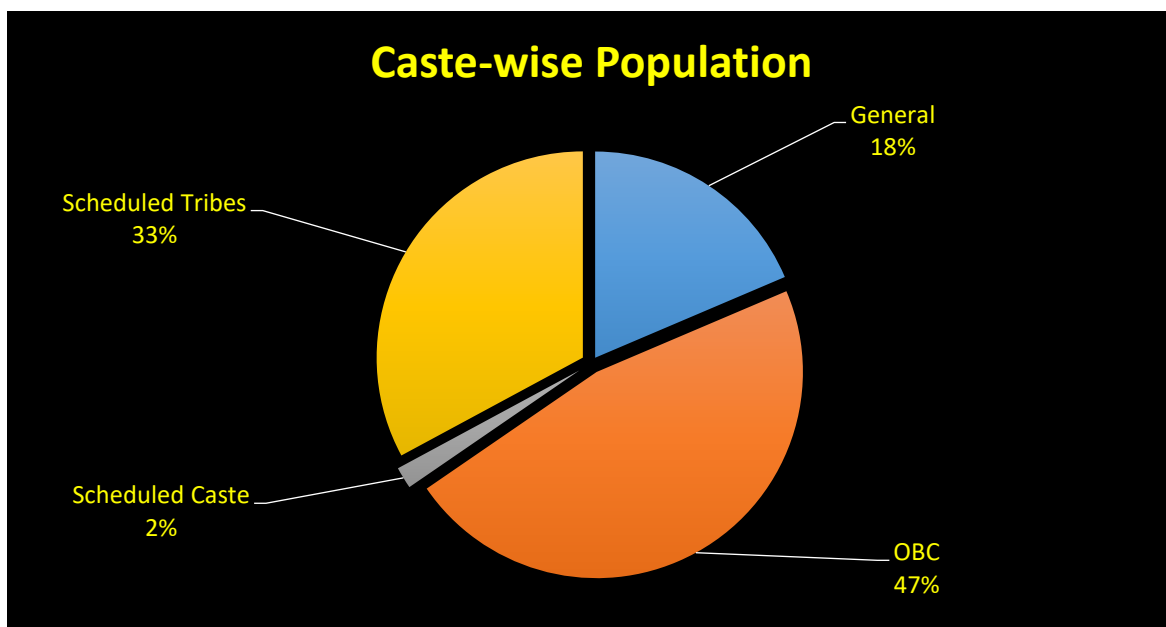
There are five sacred groves in Surla Village which are protected by villagers and provide ideal habitat for flora and fauna of that area. These areas are mostly undisturbed.

Sr. No.	Location	Lat	Long
<b>Sacred Groves</b>			
1	Sacred groves 1(Konti Rai)	15°30'15.55"N	74° 1'25.68"E
2	Sacred groves 2 (Purvatali Rai )	15°30'29.01"N	74° 1'31.94"E
3	Sacred groves 3 (Narayan Temple Rai)	15°29'45.43"N	74° 2'9.66"E
4	Sacred groves 4 (Malikarjun rai)	15°29'8.54"N	74° 2'47.01"E
5	Sacred groves 5 (Maldandeshwar Rai)	15°30'28.50"N	74° 3'3.47"E

Name of the Place	Photo
Siddheshwar Mandir	
Navdurga Mandir besides Siddheshwar Mandir	

Narayan Temple Rai	
Pir Durgah	

## 6. People Scape of Surla Village:



Caste-wise Population of Surla VP

An important component of the above depicted peoplescope, particular families of **“Ghadi”** community in the village of Surla have been traditionally carrying out the activities of performing rituals of sacrificial offering to the Vetar of “Purvatali Rai”. They are involved

in these practices even as on today. There is tradition to offer a buck – a male goat on a particular day every year as offering to “Vetal”.

The villagers of Surla village in Bicholim along with Surla Biodiversity Management Committee have taken the decision for declaring Purvatali Rai (15°30'29.01"N & 74° 1'31.94"E) as the Biodiversity Heritage Site (BHS). ***(Resolution of village panchayat attached at Annexure – I).***

**5. “PURVATALI RAI – SACRED GROVE” (15°30'29.01"N & 74° 1'31.94"E):**

On the receipt of proposal for the declaration of “Purvatali Rai”- Sacred Grove as Biodiversity Heritage Site from village panchayat Surla through its Biodiversity Management Committee (BMC) the office Goa State Biodiversity Board had conducted the site visit on 16.08.2019 along with Shri. Rajendra Kerkar, Expert Member, GSBB; Dr. Sangram Keshari Das, Member, TEC on PBR& its Validation; Dr. Varad Sabnis, Directorate of Archives & Archaeology; Mrs. Reshma Kerkar, Scientific Officer, GSBB Sarpanch & Village Panchayat Members; Members of Surla BMC & Villagers of Surla.



*Ghoting (Terminalia bellerica)*



**Surla** with the presiding deity Siddheshwar has rich and varied history and heritage. The man made rock cut cave known as Siddheshwarachi houry has the Linga with Shalunka installed in the laterite cave having the history of more than thousand years. Situated just 1 km away from the new building of Village Panchayat of Surla in Bhile hamlet, the Purvatali sacred grove has been protected and conserved by the locals with the intense degree of devotion and respect.

Though, the grove is just 100 meters away from the tar road going to Barazan from Bhile; Villagers sparingly visit the area.

However, a small shrine is constructed near the road to pay respect to the folk deity Betal or Vetral, the presiding deity of the grove. Village has the population of Brahmin, Non-Brahmin as well as tribal and other backward communities, who always express their gratitude to the grove. There are various taboos associated with this grove which eventually led to the protection and conservation of the grove.



*Termitomyces Sp.*

After Goa's liberation, the eco-cultural heritage inherited by Surla was threatened for very long time, as the excavation and transportation of the iron ore had badly affected environment, wildlife and ecology. As the mining activities in Goa, presently have been stopped, some of villagers although they have lost their livelihood are taking interest in protecting the ecological heritage.

Shri. Uday Natekar, horticulturist and a member of Surla Biodiversity Heritage Committee says, "During the hoary past, villagers who were living under the terror of Betal, requested the presiding deity Siddheshwar to provide protection from him. Siddheshwar directed Mallikarjun to help the villagers. The deity Mallikarjun kept the big bunch of ripe bananas into a well and told Betal to relish on bananas without using hands or legs. Betal, when entered into the well head first to fetch bananas, a huge boulder was kept to close the well along with Betal. Villagers were freed from the terror of Betal and since then, have protected this area as the sacred grove”.



Freshwater fish

During the Dasara festival when Tarangas or insignias of village deities are taken into procession from the road, they wait for a while to bless the sacred grove. When agriculture is done during the autumn season after the crop is reaped villagers assemble at the lower side of the grove and offer pan-cake prepared from newly rice without adding common salt. This annual ritual is known khal. Also a small cradle made from bamboo is tied to the creeper for the child of spirit residing in the grove.

As, Surla earlier had forested areas and sacred groves, there were perennial sources of water bodies flowing. Today, the nallah flows but it lost its old glory. The villagers also offer new fruit and even non-vegetarian item to the deity.



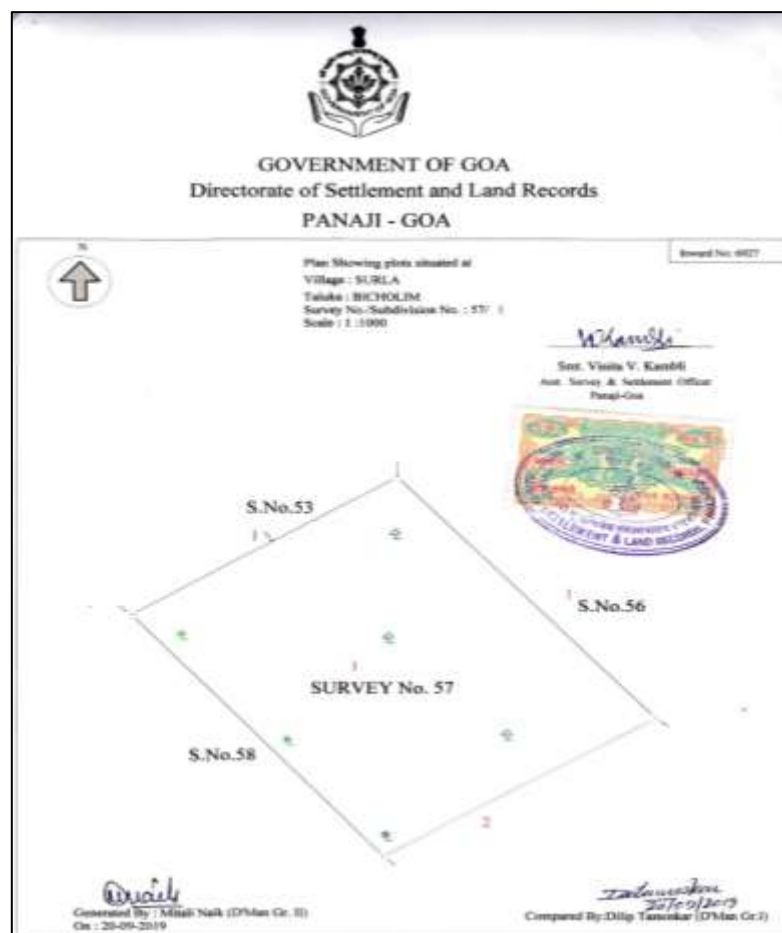
*Small cradle of bamboo is tied to the creeper for the Child of Spirit residing in the Grove*



Shri. Uttam Valvoikar, 62 years of age from Surla said, "Spitting, urinating are prohibited in the grove. Nobody dare to cut a tree or a twig. All forms of life have been offered protection. Villagers always pay respect when, they are entering the grove or passing from nearby road. Though, the fear of Betal has been eliminated, we express our gratitude."

Dr. Varad Sabnis, the archaeologist says, "The grove has seven steps carved in the laterite stone and also has a stone sculpture depicting carvings of two feet. The folklore associated throw light on the traditions and heritage of this grove." **(Report from Dr. Varad Sabnis attached at Annexure – II)**

The grove has the forested area of 7300 sq. mts and is owned by Vetat Devasthan of Surla and has medicinal herbs, trees, creepers, mushrooms, lichens and is the habitat for varied wild animals.



Site Survey Plan of “Purvatali Rai” by Department of Settlement and Land Records

Dr. Sangram Kesari Das, Professor and Doctorate of Gomantak Ayurved Mahavidyalaya in Shiroda has helped villagers in documenting the ethnobotanical heritage of the grove, he told, "This sacred grove has more than hundreds of trees with the potentiality of medicinal uses for human as well as other animals. As the villagers want to declare the grove as the biodiversity heritage site, I am helping them to document the floral wealth. The area has a variety of wild flowers, wild vegetables, orchids, herbal medicines and edible tubers."



Forest Ghost Flower (*Aeginetia indica*)

List of Medicinal Plants available at “Purvatali Rai”- Sacred Grove- Surla.

Name of Resource Person: Dr. Sangram Keshari Das, GAM & RC, Shiroda, Goa.

Sr. no	Local Name	English Name	Sanskrit Name	Botanical/Scientific Name	Type of Plant	Part used	Indication
1.	Gelphal	Emetic Nut	Madanphal	<i>Randia spinosa</i>	Shrub	Fruit	Vomiting, Poisoning.
2.	Siban , Shivan	Beech Wood	Gambhari	<i>Gmelina arborea</i>	Tree	Bark, Fruit	Analgesic, Anti-inflammatory
3.	Elephant Foot	Hastipadi	Hastipadi	<i>Elephanto pusscaber</i>	Herb	Rhizome	Rheumatism, Fever, Eczema.
4.	Gulvel	Chopchini	Chopchini	<i>Smilexglabra</i>	Climber	Root	Venereal diseases
5.	Karvanda	Bengal Currant	Karamarda	<i>Carissa congesta</i>	Shrub	Fruit	Acidity, Skin diseases, Urinary Disorder
6.	Suran	Elephant Yam	Suran	<i>Amorphophallus compalcinatus</i>	Herb	Corm	Haemorrhoids
7.	JungliDraksha	Fox Grapes		<i>Vitis indica</i>	Climber		
8.	Bhillmad	Fish Tail	Srital	<i>Caryota urens</i>	Tree	Seed	Gastric Ulcer, headache, Rheumatic Swelling
9.	Tirphal	Toothache tree	Tejowha	<i>Zanthoxylum rhetsa</i>	Tree		Toothache Joint Pain, menstrual cramps.



10.	Padvel		Rajpatha	<i>Cyclea peltata</i>	Climber	Leaf	Wound healing
11.	Amrtivel, Gulvel		Guduchi	<i>Tinospora malabaricum</i> <i>Menispermaceae</i>	Climber	Stem	Fever, Jaundice, Gout, etc.
12.	Shervad			<i>Mussaenda belilla</i>	Shrubby climber	Leaves	Fever
13.	Karo	Nuxvomica	Kupetu	<i>Strychnos nux-vomica</i> , <i>Loganiaceae</i>	Tree	Seed, Bark, Leaves	Pain, inflammation. fever
14.	Vavding		Vidange	<i>Embeliavrobusta</i>	Shrub	Fruit	Worm Infection
15.	Kewda	Kewda	Ketaki	<i>Pandanus odorifer</i>	Shrub	Root, flower	Painful Urination
16.	Ran bivo		VanaBhallatak NadiBhallatak	<i>Holagarna integrifolia</i>	Tree	Bark	Cancer
17.	Briddhadaruk Bhed			<i>Argyreia sp.</i>	Climber	Leaf, Root, Seed	Wound healing, Spermatogenic
18.	Khast,	Chalmogra	Tuvarak	<i>Hydnocarpus laurifolia</i>	Tree	Seed oil	Skin diseases
19.	Kumbiyo	Kumbhayo	Kumbhi	<i>Careya arborea</i>	Tree	Bark	Gum Swelling
20.	Ambado	Wild Mango Indian hogplum	Amratak	<i>Spondia spinnata</i>	Tree	Fruit	Hyperacidity

21.	Gudmar, Madhunasini		Meshasring	<i>Gymnema sylvestre</i>	Climber	Leaf	Diabetes
22.	Jino, Karkai		kukurajiwha	<i>Leea indica</i>	Shrub	Root	Diarrhoea,
23.	Ran patharphod		Kshudreakushta	<i>Bridelia scandens</i>	Semi climber	Bark	Joint pain, swelling
24.	Nagulkudo, Jangli Kudo			<i>Tabernaemontana alternifolia</i>	Shrub	Bark, latex	
25.	Matti			<i>Terminalia tomentosa</i>	Tree	Bark is substitute and adulterate for arjuna	
26.	Vadam		VakraVadam	<i>Sterculia balanghas</i>	Tree	Seed	As substitute for cashew nut for making curry
27.	Moi			<i>Lanneacoro mandelica</i>	Tree	Bark	Swelling gum
28.	Dudhshiri		Sarivabhed	<i>Ichnocarpus frutescens</i>	Climber	Root	Blood disorder, Skin diseases
29.	Jambupatras ariva			<i>Cryptolepis buechanani</i>	Climber	Root	
30.	Tinpan,		Triparni	<i>Naregami aalata</i>	Herb	Whole plant	Fever, Jaundice

31.	Bhandir		Bhandir	<i>Clerodendrum infortunatum</i>	Shrub	Root	Anti-cancer
32.	Goan Arjuna		Katira	<i>Sterculi aurens,</i> <i>Sterculiaceae</i>	Tree	Bark	Substitute for Arjuna
33.	Vaghati, vaghchapko, vaghchafo		Langali	<i>Gloriosa superba</i>	Climber	Root	Abortion, placental delivery
34.	Chireavilwa		Chireavilwa	<i>Holoptelea integrifolia</i>	Tree	Bark, seed	Fever
35.	Bhooyi kohlaa		Vidari	<i>Pueraria tuberosa</i>	Climber	Rhizome	Tonic, spermatogenicgalactago gue, breast milk
36.	Karando		Varahikanda	<i>Dioscorea bulbifera,</i> <i>dioscoreaceae</i>	Climber	Rhizome	Tonic
37.	Karandobhed		Varahikandabhed	<i>Dioscorea alata</i>	Climber	Rhizome	Tonic
38.	Nivdung	Cactus	Sruhi	<i>Euphorbia neriifolia,</i> <i>Euphorbiaceae</i>	Shrub	Latex	Laxative
39.	Pat phanas			<i>Artocarpus hirsutus,</i> <i>artocarpeae</i>	Tree	Fruit	Worm infestation, swelling
40.	Phanas		Panasa	<i>Artocarpus integrifolia</i>	Tree	Fruit	Enhance vision, prevent cancer



41.	Kudo		Kutaja	<i>Holarrhena antidysenterica</i> , <i>Apocynaceae</i>	Shrub	Bark, seed	Diarrhoea, dysentery, worm.
42.	Phalsa		Parusak	<i>Grewia indica</i> , <i>Tiliaceae</i>	Tree	Fruit	Fever
43.	Aghado		Apamarga	<i>Achyranthes aspera</i> , <i>Amaranthaceae</i>	Herb	Whole plant	Scorpion sting, source of alkali.
44.	Govind Plal		Tapasa	<i>Capparis zeylanica</i> , <i>Capparidaceae</i>	Climber	Stem/who le plant	Swelling, haemorrhoids, increase appetite
45.	Kanguni , Kangala	Climbing Staff tree	Jyotismati	<i>Celastrus paniculatus</i> , <i>calatraceae</i>	Shrubby climber	Seed	Insomnia, mental disorder
46.	Vatanbel			<i>Diploclisia glaucescens</i>	Climber	Seed, leaves	Syphilis, gonorrhoea
47.	Ran Halad,		Haridrabhed	<i>Curcuma pseudomontana</i>	herb	Rhizome	Skin diseases
48.	Jivantibhed		Jivantibhed	<i>Wattakaka volubilis</i> , <i>convolvulaceae</i>	Climber	Root	Substitute for jivanti, used for increase breast
49.	Kakmari		Kakmari	<i>Anamirta cocculus</i>	Climber	Seed	Toxic, kills crew.
50.	Anjan		Anjani	<i>Memecylon edule</i> ,	Shrub	Leaves	Herpes zoster infection

Amidst horticultural and agricultural field this grove is just like oasis. Though village is badly affected by iron ore mining and artificially created huge mining reject dumps, this grove is the hope and reflection of the age old practice of safeguarding the community conserved areas and thus this grove with the bewildering facets of floral and faunal wealth, qualifies to be declared as Biodiversity Heritage Site.

Goa State Biodiversity Board facilitating villagers of Surla and Surla Biodiversity Management Committee in the process of identifying and documenting this grove, as the Biodiversity Heritage Site.

The area is unique and has ecologically fragile eco-systems with significant cultural, ethical and aesthetical value with long history of human association."



Wagachi Ui (*Pilipede glomeris* sp.)

**List of Flora observed at “Purvatali Rai- Scared Grove” – Surla Village during site visit:**

Sr. No	Local Name	Scientific Name
<b>Type of Plant : Tree</b>		
1.	Hed (03 meter girth at 01 meter height)	<i>Haldina/ Adina cordifolia</i>
2.	Gelphal	<i>Randia spinosa</i>
3.	Shivan	<i>Gmelina arborea</i>
4.	Bhillmad	<i>Caryota urens</i>
5.	Chandado	<i>Macaranga peltata</i>
6.	Panashi	<i>Carallia brachiata</i>
7.	Kumyo	<i>Careya arborea</i>
8.	Karmal	<i>Dillenia indica</i>
9.	Triphala	<i>Zanthoxylum rhetsa</i>
10.	Panas – (3 meter girth at 1meter height)	<i>Artocarpus heterophyllus</i>
11.	Mango	<i>Mangifera indica</i>
12.	Bhekro (1.90 meter girth at 1 meter height)	<i>Sterculia guttata</i>
13.	Huro	<i>Sapium insigne</i>
14.	Dhaman	<i>Grewia tiliifolia</i>
15.	Kajro / karo (4.30 meter girth at 1 meter height)	<i>Strychnos nux-vomica</i>
16.	Ramphal	<i>Annona reticulata</i>
17.	Gurakhya	<i>Dalbergia sp.</i>
18.	Cashew	<i>Anacardium occidentale</i>
19.	Phatarphad	<i>Ficus arnottiana</i>
20.	Singapore Cherry	<i>Muntingia calabura</i>
21.	Ambado	<i>Spondia spinnata</i>

22.	Vavlo	<i>Holoptelea integrifolia</i>
23.	Madat/ Matti	<i>Terminalia tomentosa</i>
24.	Miryo	<i>Litsea glutinosa</i>
25.	Bhinda	<i>Garcinia indica</i>
26.	Cockra	<i>Anacardiea sp.</i>
27.	Chalmogra	<i>Hednocarpus wightian</i>
28.	Oval	<i>Mimusops elengi</i>
29.	Amti	<i>Macaranga gigantea</i>
30.	Kath/ Khair	<i>Acacia catechu</i>
31.	Path Panas	<i>Artocarpus sp.</i>
32.	Ghoting	<i>Terminalia bellerica</i>
33.	Bayo	<i>Cassia fistula</i>
<b>Type of Plant : Herb/ Vines</b>		
1.	Ransuran	<i>Amorphophallus commutatus</i>
2.	Hastipadi	<i>Elephantopus scaber</i>
3.	Shervad	<i>Mussaenda belilla</i>
4.	DraupadichiVeni	<i>Aerides maculosa</i>
5.	Chopchini / China Root	<i>Smilax china</i>
6.	Forest Ghost Flower	<i>Aeginetia indica</i>
7.	Kanna	<i>Carissa carandas</i>
8.	Kanera	<i>Ziziphus oenoplia</i>
9.	Kakmarivel	<i>Anamirta cocculus</i>
10.	Vavding	<i>Embelia ribes</i>
11.	Tapkadi	<i>Sida acuta</i> <i>Sida cordifolia</i>
12.	Fox grapes	<i>Vitis indica</i>
13.	Gulvel	<i>Smilax zeylanica</i>
14.	White bharangi	<i>Clerodendrum infortunatum</i>
15.	Anjan	<i>Memecylon umbellatum</i>
16.	Padvel / patha	<i>Cyclea peltata</i>



17.	Gudduchi/ Giloy	<i>Tinospora cordifolia</i>
18.	Pitkoli	<i>Ixora coccinea</i>
19.	Jino	<i>Leea indica</i>
20.	Tumbo	<i>Leucas aspera</i>
21.	Adulsa	<i>Adhatoda vasica</i>
22.	Vagacho Panjo	<i>Gloriosa superba</i>
23.	Khastvel	<i>Hydnocarpus laurifolia</i>
24.	Ran halad	<i>Curcuma pseudomontana</i>
25.	Lajki	<i>Mimosa pudica</i>
26.		<i>Dioscorea pentaphylla</i>
27.	Nagilkudo / Nagulkudo	<i>Tabernaemontana alternifolia</i>
28.	RanHalad	<i>Curcuma pseudomontana</i>
29.	Uski	<i>Calycopteris floribunda</i>
30.		<i>Argyreia</i> sps.
31.		<i>Utricularia purpurascens / reticulate</i>
32.	Gulvel	<i>Smilax zeylanica</i>
33.	Gulvel	<i>Smilax glabra</i>
34.		<i>Murdannia spirata</i>
35.	Kudo	<i>Holarrhena antidysenterica</i> <i>Holarrhena pubescens</i>
36.	Pithmadi	<i>Naregamia alata</i>
37.	Kevan	<i>Helicteres isora</i>
38.	Erand	<i>Ricinus communis</i>
39.	Damavel	<i>Tylophora indica</i>
40.	Kusdi	<i>Jasminum malabaricum</i>
41.	Dudhshiri	<i>Hemidesmus indicus</i>
42.	Taikilo	<i>Cassia tora</i>
43.	Gunji	<i>Abrus precatorius</i>

**List of Fungi**

Sr. No	Scientific Name
1.	<i>Scutellinia</i>
2.	<i>Microporus</i>
3.	<i>Termitomyces sp.</i>
4.	<i>Coprinus</i>
5.	<i>Hebeloma</i>

**List of Fauna found at “Purvatali Rai”- Sacred Grove” – Surla Village during site visit.**

Sr. no	Local Name	Scientific Name
1.	Wagachi Ui	<i>Pilipede glomeris sp.</i>
2.	Ghothyal	<i>Millipede</i>
3.	Crab (pink colour), Sayee Kurli	
4.	Crab small (Black colour)	
5.	Freshwater Crab (Sayee Kurli)	<i>Oziothelpus asena</i>
6.	Damselfly	
7.	Blue Mormon	<i>Papilio polymnestor</i>
8.	Malabar Raven	<i>Papilio dravidarnum</i>
9.	Grey Count	<i>Tanaecia lepidea</i>
10.	Common Crow	<i>Corvus splendens</i>
11.	Rackettail drongo	<i>Dicrurus paradiseus</i>
12.	Bazbaji, keki (Jungle Babbler)	<i>Turdoides striatus</i>
13.	Sal, Salundar (Indian Porcupine) Habitat found	<i>Hystrix indica</i>

## 6. Belief and Biocultural Protocols associated with Purvatali Rai- Surla

- Locals have respectful fear for this place. In the times when there were no administrative systems, legal frameworks and local bodies, the villagers were bound by certain protocols which are based on assurance of protection or fear of punishment from the deities in which locals believe and worship. It is believed that God Mallikarjun had confined “Vetal” by burying him upside down with a trick which involved a challenge to remove a banana bunch from bottom a pit or well. Hence it is believed that Mallikarjun is like overall caretaker of village and visits all prominent places of importance which include Bands, this sacred grove “Purvatali Rai” under consideration and other places. Hence it is out of respect and fear to this deity that these places are protected and preserved.
- Beliefs in this case have led to conservation and preservation of ecosystems. Hence the outlook towards the biocultural protocols is not whether they are blind beliefs, or what are the basis of beliefs but what is the end result of such beliefs? In this case it has resulted in preservation of important places in Surla even when the mining business was at its peak in this area.
- **Existing protocols** – Open defecation, urination, spitting and disposal of any kind of waste is prohibited in this area. No entry for menstruating women. Not allowed to take away any item, bio-resource or anything from sacred grove. Foot-wears not allowed inside the area. Even the surrounding areas are to be kept free of any type of pollution.
- The historic belief about presence of supernatural forces in this area are still prevailing amongst the locals and hence they have kept this place undisturbed and free from encroachment of any kind.
- Uniqueness of this Purvatali Rai is due to presence of beliefs, protocols, taboos, sacrificial offering of buck, non-interference of people in this sacred grove, protection of trees, herbs, shrubs, creepers, insects, butterflies, damselflies, dragonflies, fungi, spiders and other fauna.

## 7. Justification for Biodiversity Heritage Site

- Scientific study carried out by GSBB experts resembles presence of diverse species of medicinal plants within this small area of Puratali Rai (mentioned in

this report) is self-explanatory and sufficient enough to prove the significance of this place for declaring BHS

- The main reason for preserving this place with ecological outlook is well justified not only with the presence of varied species of flora and fauna but the belief which is connected to presence of bands and other important places of diversity in the area are protected by Mallikarjun, the God who is believed to protect village under his guardianship on behalf of God, Siddheshwar and Goddess Navadurga present in the village of Surla. Presence of species which are iconic of tropical forest ecosystem also prove that this ecosystem is untouched for many decades.
- Puratali Rai is a unique combination of eco-theological, socio-ecological and sacred beliefs leading to conservation even in force as on today in these modern times. This is exemplary not only to our State but to others.

#### 8. Precautions and protocols to be ensured at “Purvatali Rai” after Notification:

- The name of the Purvatali Rai area as per Department of Settlement and Land Records (DSLRL) form I and XIV occupant is “**Shri Dev Hirvat Vetal**” (The name means green (*Hirvat*) itself resembles presence of Greenary) hence it can be connected with conservation of green cover for posterity in as is where is form without even utilizing or accessing the resources from this area. Hence its existence value in its existing aesthetic form should be kept untouched and this area should not be interfered by beautification.
- Principle of conservation in this regard should be leave it to itself without management. Only outside areas near road could be provisioned with nominal arrangements for visitors without exceeding footfalls as per the resolution in local Gram Sabha. This area needs to be saved from the so called wave of development.
- Traditionally existing religious activities including sacrificial offerings performed by local communities shall remain unchanged.
- Entry only by permission. Not more than five persons shall be allowed to enter at a time in a group in this area. There is compulsory need of taking local recognized guide appointed by authorized local body.



- Mining or allied activity which interferes and alters ecological character of this area shall never be allowed in this area or its immediate vicinity.
- **Important consideration – It is proposed that goat keeping of local varieties may be promoted in Surla village so as to provide for offering every year.**

## 9. Chronology

Sr. No	Date	Particular
1.	07/07/2017	MoU signed for documenting Peoples Biodiversity Register (PBR).
2.	25/06/2018	Stage I Validation of Peoples Biodiversity Register of Surla
3.	12.07.2019	Proposal received from Surla BMC for Declaration of "Purvatali Rai- Sacred Grove as BHS".
4.	12.07.2019	12 Member Committee for Biodiversity Heritage Site in Surla.
5.	16.08.2019	Site Inspection for the Study of BHS Site.
6.		BHS Study Report (prepared under guidance of GSBB) submitted by 12 member committee to VP Surla and Gram Sabha
7.		Kept open for public inputs from Surla Villagers on website and published in local newspapers

**Photo plate**



Water body beyond the edge adjacent to proposed BHS site



Damselfly



Ghothyal



Ran halad





Smilex China



Malabar raven





Freshwater Crab (Sayee Kurli)



Fav (Beaten Rice) kante





*Scutellinia (Fungi)*



*Coprinus (Fungi)*



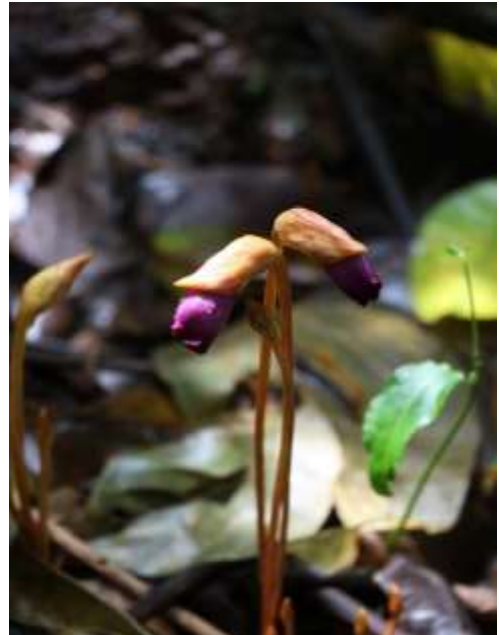


During Site visit





Hed (*Haldina/ Adina cordifolia*)



Forest Ghost Flower (*Aeginetia indica*)



Padvel (*Cyclea peltata*)



Gulvel (*Smilax glabra*)





Vavding (*Embelia ribes*)



Ran Suran (*Amorphophallus commutatus*)



Triphala (*Zanthoxylum rhetsa*)



Jino (*Leea Indica*)



Bharangi White (*Clerodendrum infortunatum*)



Shervad (*Mussaenda belilla*)



Kevan (*Helicteres isora*)



Lazki (*Mimosa pudica*)





Gulvel (*Smilax zeylanica*)



Karmal (*Dillenia indica*)



Ran Halad (*Curcuma pseudomontana*)



Anjan (*Memecylon umbellatum*)



Gulvel (*Smilax China*)



Path Panas



Pitkoli (*Ixora coccinea*)



Oval (*Mimusops elengi*)



Bhillmad (*Caryota urens*)



Fox Grapes (*Vitis indica*)



Phatarphad (*Ficus arnottiana*)



Ramphal (*Annona reticulata*)





Kanna (*Carissa carandas*)



Ambado (*Spondias pinnata*)



Nagilkudo (*Tabernaemontana alternifolia*)



Phanas (*Artocarpus heterophyllus*)



Amti (*Macaranga gigantea*)



Satri (*Biophytum sensitivum*)



Bhekro (*Sterculia guttata*)



Payari (*Ficus* sp.)







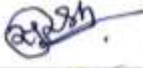



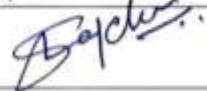

Vagacho Panjo (*Gloriosa superba*)

#### 10. Declaration from BHS committee Members and Villagers of Surla:

The above report has been prepared by 12 Members Biodiversity Heritage Site committee of Surla Village with technical assistance of Goa State Biodiversity Board (GSBB) along with the associated experts and staff of GSBB and has included the extract of PBR of Surla village and all the contents mentioned in the report are based on the inputs received from the villagers and all the members of the BHS Committee of Surla village and are unanimously submitting this report to local authority. After that for the approval of the State Government with request to notify the “Purvatali Rai – Sacred



Grove” as Biodiversity Heritage Site with admeasurement of area 7300 Sq. mrt presently shown as a land use type as garden in Form I & XIV under Section 37 of the Biological Diversity Act 2002. We all the member are unanimously proposing the above and hereby submit the report with the signature given below.

Sr. No	Name of the Member	Signature
1.	Shri. Subhash S. Fondekar	
2.	Shri. Pramod Narvekar	
3.	Shri. Uday Natekar	
4.	Smt. Anita Kundaikar	
5.	Shri. Suresh Bayekar	
6.	Shri. Vinod Palyekar	
7.	Shri. Manohar Volvoikar	
8.	Smt. Surekha Khodginkar	
9.	Shri. Vasudev Khedginkar Kolhapurkar	
10.	Shri. Bholo Khodginkar	
11.	Shri. Sagun bayekar	
12.	Smt. Vinita Ghadi	

And Supported by villagers of Surla.

Sr. No	Name of the Member	Signature
1.	Abhijit Shamba Sakhalakar	
2.	Dattaraj Parmesh Yarekar	
3.	Utkarsh Uday Shirodkar	
4.	Mangalkar S. Usgaonkar	
5.	पद्म पद्म जोशी	
6.	Shrinivas Usgaonkar	
7.	Nishnu m. Nalekar	
8.	Madhusudan K. Shirodkar	
9.	Sarika P. Sinari	
10.	Medha Mohan Phondekar	
11.	Saju Gajanan Ghadi	
12.	Mahendra Shirodkar	
13.	Prashant R. Gawarekar	
14.	Navit N. Kalangutkar	
15.	Mahesh R. Amankar	

- 16) Nehal Kalangutkar
- 17) Vishnu Bhondekar
- 18) Santosh Bayekar
- 19) Avisha Kalangutkar
- 20) Siddhesh S. Satharkar
- 21) Krishna K. Bayekar
- 22) Kashinath Narulkar
- 23) Sagun N. Ghadi



**Phone No 2353234**

Date: - 03 / 07 /2019

**Sub:- Submission of Surla Heritage Site.**

I, Shri Pramod Narvekar , Chairperson of Surla Biodiversity Management Committee Village Surla, Tal. Bicholim-Goa take an opportunity to inform and request to your Good office that there exists one Heritage Site (DEVRAYI) ,located in at Joshibhat Khadap wada , in ward No 2 Locally Known as Purva/ Boniya ,in Survey no 57/1 of Village Panchayat Surla,

Thanking, you,



**Enclosed : Copy of Meeting Resolution & Surla Heritage site Commitee**

~~Copy~~  
 15/2/19  
 1/50  
 15/2/19  
 1-2/19  
 Email sent to EE  
 on study proposal





## SURLA BIODIVERSITY MANAGEMENT COMMITTEE

SURLA, Tal. BICHOLIM, Dist.- NORTH-GOA, GOA  
Phone No 2353234

REF. NO.SBMC/BICH/2019-20/

Date: - 03/07/2019

EXTRACT OF THE RESOLUTION OF FORTNIGHTLY MEETING OF SURLA BIODIVERSITY COMMITTEE  
HELD ON 04/07/2019 IN V. P. OFFICE AT SURLA, TAL. BICHOLIM – GOA.

1. Subject :- Proposal for Heritage site of Village Panchayat Surla.
2. Name of the Proposer:- Shri Uday Natekar
3. Name of the Seconder :- Shri Pramod Narvekar
4. Proposal or Amendment:- Proposal

### RESOLUTION no.2

5. It is unanimously proposed to inform and suggest one Heritage site located at Khadapwada in ward No. 02 under Sy. No. 57/1 of Village Panchayat Surla, locally known as "PURVAN" / "BONYAAN" to the Office of Goa State Bio-diversity Board Saligao Bardez - Goa for necessary action.

Remarks:-



Sd/-

Chairman

CHAIRMAN

Surla, Goa State Biodiversity Board COMMITTEE  
SURLA, BICHOLIM - GOA



## SURLA BIODIVERSITY MANAGEMENT COMMITTEE

SURLA, Tal. BICHOLIM, Dist.- NORTH-GOA, GOA  
Phone No 2353234

REF. NO.SBMC/BICH/2019-20/

Date: - 03/07/2019

EXTRACT OF THE RESOLUTION OF FORTNIGHTLY MEETING OF SURLA BIODIVERSITY COMMITTEE  
HELD ON 04/07/2019 IN V. P. OFFICE AT SURLA, TAL. BICHOLIM – GOA.

1. Subject :- Constitution of 12 member committee for Heritage site of Village Panchayat Surla.
2. Name of the Proposer:- Shri Uday Natekar
3. Name of the Seconder :- Smt. Anita Kundaikar
4. Proposal or Amendment:- Proposal

### RESOLUTION no.1

5. It is unanimously resolved to constitute the below mention members for Heritage site of Village Panchayat Surla.
  1. Shri Subhash S. Fondekar ,Sarpanch
  2. Shri Pramod Narvekar
  3. Shri Uday Natekar
  4. Smt. Anita Kundaikar
  5. Shri Suresh Bayekar
  6. Shri Vinod Palyekar
  7. Shri Manohar Volvoikar
  8. Smt. Surekha Khodginkar
  9. Shri Vasudev Khodginkar
  10. Shri Bholo Khodginkar
  11. Shri Sagun Bayekar
  - 12.Smt. Vinita Ghadi

Remarks:-



CHAIRMAN

SURLA BIODIVERSITY MANAGEMENT COMMITTEE  
SURLA, BICHOLIM - GOA



BHS  
(Sule BHS part)  
in Sule BHS



Directorate of Archives & Archaeology  
Government of Goa  
Ourem Road, Mala, Panaji – Goa 403 001.

Goa State Biodiversity Board  
Inward No. 676 Date: 21/8/19  
Via post on 22/8/19

Annexure - II

(Signature)  
22/8/19  
For BHS

No. 8/366/2019/DAA- 997

Dated: 22<sup>nd</sup> August 2019

To,  
The Member Secretary,  
Goa State Biodiversity Board,  
C/o, Department of Science, Tech. & Env.  
Opp. Saligao Seminary, Saligao, Bardez-Goa.

Sub: Site inspection report/views of Directorate of Archives &  
Archaeology on the 'Purvanchi Rai' for consideration of B.H.S.

Sir,

Refer subject cited above.

Kindly find herewith views and recommendation of this Directorate as follows:

1. Inspection was carried out on 16<sup>th</sup> August 2019 along with officials of GSBB and other experts.
2. This sacred grove, located on slope of hillock consist of various trees and shrubs having medicinal importance and strong association with traditional knowledge of medicine, local ecology and eco-system.
3. This sacred grove consist of a 'Balipitha' (photo attached) carved out in squarish shape and in schist stone, this sculptural depiction has a local legend associated with it.
4. Rock cut structural remains in the form of steps, rock cut surfaces in rectangular alignment filled with debris can be seen along with remains of structural plinth covered with debris in this sacred grove.

Recommendation:

Directorate of Archives & Archaeology recommends Purvanchi Rai for notifying it as Biodiversity Heritage Site after taking into consideration the views of stakeholders and by following due procedures.

Yours faithfully,

(Signature)

(B. Medeira)

Director of Archives & Archaeology











**Purvatali sacred grove of Surla**

1 message

**Rajendra Kerkar** <rpkerkar65@gmail.com>

Wed, Aug 21, 2019 at 5:13 PM

To: Goa State Biodiversity Board &lt;goanbiodiversity@gmail.com&gt;, Pradip Sarmokadam &lt;pradipgsbb@gmail.com&gt;

The sacred grove of Purvatali in Surla of Bicholim

Rajendra P Kerkar

As the villagers of Surla village in Bicholim alongwith Biodiversity Management Committee have taken the decision for declaring Purvatali Rai as the Biodiversity Heritage Site (BHS), I alongwith other members on August 16, visited the sacred grove.

Surla with the presiding deity Sidhdeswar has rich and varied history and heritage. The man made rock cut cave known as Sidhdeswarachi houry has the Linga with Shalunka installed in the laterite cave having the history of more than thousand years. Situated just 1 km away from the new building of village Panchayat of Surla in Bhile hamlet, the Purvatali sacred grove has been protected and conserved by the locals with the intense degree of devotion and respect.

Though, the grove is just 100 meters away from the tar road going to Barazan from Bhile; Villagers sparingly visit the area. However, a small shrine is constructed near the road to pay respect to the folk deity Betal, the presiding deity of the grove. Village has the population of Brahmin, Non-Brahmin as well as tribal and other backward communities, who always express their gratitude to the grove. There are various taboos associated with this grove which eventually led to the protection and conservation of the grove.

After Goa's liberation, the eco-cultural heritage inherited by Surla was threatened for very long time, as the excavation and transportation of the iron ore had badly affected environment, wildlife and ecology. As the mining activities in Goa, presently have been stopped, some of villagers though, lossed their livelihood, they are taking interest in protecting the ecological heritage.

There are four sacred groves in Surla namely, Barazanachi Rai, Gaonkarwadyavayali Rai, Mhardanyavayali Rai, and Purvatali Rai. The Sarpanch of Surla Subhash Fondekar, said, "Our panchayat has passed a resolution for declaring the sacred grove of Purvatali Rai as the biodiversity heritage site in the survey no. 57/1, since the area has socio-cultural and archaeological assets related with it. It is also a treasure trove of biological wealth, we want to protect it for posterity."

Uday Natekar, the horticulturist and a member of Surla Biodiversity Heritage Committee says, "During the hoary past, villagers who were living under the terror of Betal, requested the presiding deity Sidhdeswar to provide protection from him. Sidhdeswar directed Mallikarjun to help the villagers. The deity Mallikarjun kept the big bunch of ripen bananas into a well and told Betal to relish on bananas without using hands or legs. Betal, when entered into the well to fetch bananas, a huge boulder was kept to close the well alongwith Betal. Villagers were freed from the terror of Betal and since then, have protected this area as the sacred grove."

Vikram Das, the Professor and doctorate of Gomantak Ayurved Mahavidyalaya in Shiroda who has been involved in helping villagers in documenting the ethnobotanical heritage of the grove, told, "This sacred grove has more than hundreds of trees with the potentiality of medicinal uses for human as well as other animals. As the villagers want to declare the grove as the biodiversity heritage site, I am helping them to document the floral wealth. The area has a variety of wild flowers, wild vegetables, orchids, herbal medicines and edible tubers."

Uttam Valvoikar, 62 years of age from Surla said, "Spitting, urinating are prohibited in the grove. Nobody dare to cut a tree or a twig. All forms of life have been offered protection. Villagers always pay respect when, they are entering the grove or passing from nearby road. Though, the fear of Betal has been eliminated, we express our gratitude."

Varad Sabnis, the archaeologist says, "The grove has seven steps carved in the laterite stone and also has a stone sculpture depicting carvings of two feet. The folklore associated throw light on the traditions and heritage of this grove."

Reshma Kerkar, the officer of Goa State Biodiversity Board told, "We are facilitating villagers of Surla in the process of identifying and documenting this grove, as the Biodiversity Heritage Site. The area is unique and has ecologically fragile eco-systems with significant cultural, ethical and aesthetical value with long history of human association."

During the Dasara festival when Tarangas or insignias of village deities are taken into procession from the road, it wait for a while to bless the sacred grove. Whenever during the autumn agriculture is cultivated the pan cakes without putting common salt are offered to the deity of the grove. And also small cradle is tied to the tree below the grove. As, Surla earlier had forested areas and sacred groves, there were perennial sources of water bodies flowing. Today, the nallah flows but it lost its old glory.

The villagers offer new fruit and even non-vegetarian item to the deity. When agriculture is done during the autumn season after the crop is reaped villagers assemble at the lower side of the grove and offer pan-cake prepared from newly rice without adding common salt. This annual ritual is known khal. Also a small cradle made from bamboo is tied to the creeper for the child of spirit residing in the grove.

The grove has the forested area of 7300 sq. mts and is owned by Vetal Devasthan of Surla and has medicinal herbs, trees, creepers, mushrooms, lichens and is the habitat for varied wild animals.



Amidst horticultural and agricultural field this grove is just like oasis. Though village is badly affected by iron ore mining and artificially created huge mining reject dumps, this grove is the hope and reflection of the age old practice of safeguarding the community conserved areas and thus this grove with the bewildering facets of floral and faunal wealth, qualifies to be declared as Biodiversity Heritage Site.