

## Endangered Car Timber species and its management in Odisha

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**Abstract:** Car festival of lord Jagannatha, an worldwide acclaimed festival observed by Hindus is interwoven with not only the culture but also the religious sentiment of the mass. Celebration of this festival requires construction of three new chariots every year. An estimated 400 cubic meter wood from different specified species is required. Once upon a time these wood species were abundantly available in different forest divisions of Odisha. Regular cutting and due other climatic factors the availability of these species become endangered year by year. Even certain species like Phasi become extinct in the nearby divisions. Considering the future demand the state administration developed a plan for protection and just management of existing species and also to plant more species for future use. This management plan was not only to increase no. of species but also it extended area of collection also. Now after One and half decade of intervention the endeavour has stated bearing fruits. There has been a substantial availability of required species and certain species have been saved from extinction.

### I. Introduction

Odisha, a state in the Indian subcontinent, is the abode of many ancient temples as sign of great sculpture. The temple of lord-Jagannatha in Puri and lord Lingaraja in Bhubaneswar depicts the rich tradition of Odishan culture. As per the rituals of these two deities, numerous festivals are observed annually with pump and ceremony. Car festival of lord Jagannatha and lord Lingaraj is one among these festivals which attracts pilgrims from all over the globe and celebrated with grandeur. The Car festival, observed annually, is symbol a socio-cultural attachment of the people. The festival has been interwoven with the sentiment of a large populace within and outside the country.

Traditionally, the chariots (*Rathas*) for the Car Festival are made of wood. One car is being made for the car festival of lord Lingaraj, while three cars are being made for three deities i.e. lord Jagannatha, Balabhadra and Subhadra for the car festival of Jagannatha. Different parts of the Chariot (*Chaka*- wheel, *Akha*- axil and other body parts) are made from different types of timber.

#### Availability of Species

Species wise requirement of Car Timber				
Sl.No.	Purpose	Species	Dimensions (girthx length)	Logs (Nos.)
1	Tumba	Phasi	6'x09'	022
2	Pai	Phasi	6'x12'	050
3	Gayal	Asan	3'x40'	312
4	Aramundi	Asan & Dhaura	3'x12'	428
5	Danda/Akha	Dhaura	3'x40''	050
6		Debadaru	5'x10'	004
7		Debadaru/mai	5'x15'	042
8		Moi	5'x15'	005
9		Moi	3'x10'	015
10		Kansa, Simili Planks	3'x10'	046
11		Kansa, simili planks	5'x15'	005
12		Paldhua	3'x10'	085
13		Mahalimba	4'x10'	020
14		Gambhari	5'x12'	001
15		Kadamba	3'x10'	004
16		Kalchua ballahs	3'x7'	060
17		Sal	4'x10'- 5'x10'	013

planned to extend the supply of car timber to five additional divisions. So that, car timber of different species and desired dimensions would hence forth be available from seven forest divisions to address the immediate need. The additional divisions were Angul, Athagarh, Boudh, Dhenkanal and Athamallik. It was also proposed to incorporate car timber working plan in the working circles of each of the additional divisions. Decision was made to plant seedling of at least one year old, good quality and the field work to be commenced in the year zero. The plantation was to be maintained for a period of six years including the first year of formation.

This led to design some salient aspects of intensive plantations through a scheme for the purpose. The special scheme '*Sri Jagannatha Banaprakala*' was launched by the Forest and Environment Department,

Government of Odisha in the year 1999.

The Project *Sri Jagannatha Banaprakala* was designed to cover an area of about 2,686 hectares in the aforesaid six forest divisions except Athamallik division. These forest divisions are spread over 7 districts of Odisha. The project area includes temple lands (i.e. lands belonging to the Jagannatha Temple Administration), Govt. Revenue Wastelands and Reserve Forests. Land earmarked for intensive plantation purpose was identified in consultation with the temple Administrations/Revenue authorities. These lands have been considered suitable for raising plantations of the desired species. The identified lands actually available for the proposed plantations were free from any encroachment / encumbrance. **Jagannatha Banprakalpa under VSS in Nayagarh District**

Villages	Land kism	Khata no.	Plot no.	Area(acre)	Suitability (Ha.)	Remarks
Pathara	Patra jungle	-	1178, 1180,1190	16.50,18.90,9.62	12.00	Revenue Dept.
Rathakhandi	-do-	-	214, 212	52.74, 2.32	20.00	do
Kendupalli	-do-	-	14,24,21,25, 90	133.87	28.00	do
Ramachandra Prasad	Jungle	172	166,164,252	19.03	6.00	do
Pokhari gochha	-do-	-	-	45.00	18.00	do
Banigochha	-do-	-	-	100.00	34.00	do
Kalsakhman	-do-	-	-	60.00	20.00	do
Phalpaju Nuagaon	Jungle Mela/Village forest	-	78.52,51,47,50	125.81	50.00	do
Krushnapalli	Patra jungle	-	1,2,4,5,7,8,9,27,29,50,51,53,54,146,147,148	155.26	42.40	do
Haripur	Jungle	105	728,735	94.62	20.00	do
Wallipur	-do-	-	-	25.00	10.00	do
Manivadra	-do-	-	-	5.00	2.00	do
Mahipur	Gramya Jungle	1239	2050,2051	31.63	12.00	do

Source: Scheme on plantation for making the timber requirement of chariots for car festival , Puri

Land under Sri Jagannatha Banaprakalpa						
SL.No.	Division	District	Temple Area(Ha)	Revenue Area(Ha)	Forest area(Ha)	Total area(Ha)
1	Angul	Angul	-	015.00	385.00	400.00
2	Atagarh	Cuttack	-	500.00	-	500.00
3	Boudh	Boudh	-	113.00	250.00	363.00
4	Dhenkanal	Dhenkanal	-	140.00	100.00	240.00
5	Nayagarh	Nayagarh	-	335.00	065.00	400.00
6	Puri	Khurda	283.00	-	100.00	383.00
7	Puri	Puri	N.A	-	-	400.00
Total			283.00	1103.00	900.00	2686.00

*Gambhari (Gnelinab arboria), Moi (Lannea grandis), Kadamba (Anthocephalus kadamba), and Debadaru (Polyaithia longifolia).* An estimated 400 cubic meters of various species are required annually to construct these cars of lord Jagannatha. Section 4(1) of the Puri Car festival code 1983, entrusts upon the Government of Odisha, Forest and Environment Department to supply these required timber for construction of chariots free of cost every year. The said code also mandates the Divisional Forest Officers (DFOs) of Puri & Nayagarh forest divisions to supply timber of desired dimensions and species to Puri temple Administrations & Lingaraj temple Administration.

Given the socio-cultural importance of these car festivals in Odisha & its celebration as the "state festivals", Forest and Environment Department, Government of Odisha is required to fulfill the need of timber for the car festivals. In past, the supply of these timber was very much unplanned and mostly adhoc in nature. Forest officials of Puri and Nayagarh forest divisions were indentifying trees of desired dimensions and species from all over the forest. Then the marked trees were culled. In past, hardly any attention was given for regeneration of species. There was no scientific estimation of the availability of suitable species to meet the future demand. Gradually, the scarcity of the timber was felt as the species required for car timber was subjected to endangered in these forest divisions. The major reasons were intense biotic interference (i.e. illicit felling, grazing and fires), increasing urbanization of the regions & other climatic factors.

Consequently, the Divisional Forest Officers of Nayagarh and Puri faced considerable difficulties in supplying timbers of desired dimensions ,quality and species due to continued degradation of these forests. In particular, certain species like *Phasi* , which occur in specific sites in riparian zones got considerably reduced.

In these circumstances, it was felt that sustained supply of car timbers might suffer unless systematic efforts are made to address this problem.

### ***Strategy adopted***

Regular cutting down of timber for construction of Chariot for Car Festival resulted in endangering these species. The availability of required trees dwindled gradually. It was also decided that the concerned Divisional Forest Officers will be responsible for the successful formation, establishment and management of these endangered species. To address these problems, a two pronged strategy was conceptualized. One is an intensive plantation scheme for all species, except Sal. However, it was also considered that the proposed intensive plantations would not be able to meet the immediate requirements of car timber. Hence, as a second option, it was

### ***Role of Community***

Over a period of time, local community played a vital role in protecting and managing this forest. Vana Samrakhyana Samities (VSSs) were formed and guided under the principles of Joint Forest Management. These samities are active in maintaining such species. VSS members are guarding the plantation site round the clock. As a religious sentiment is attached to it, the people are taking special interest to make this project successful. Though the project was initially conceived and designed by the government, now it has been more recognised as a peoples' project.

### ***Concluding remark***

As car festival of lord Jagannatha is deeply connected with the religious feelings of the people and requires a fixed amount of wood of diversified species every year, a detailed planning for sustainable availability of the same was of utmost priority. Sri Jagannatha Bana Prakalpa is a step in time considering the continuous need and endangered species. Local people have also come forward to protect, manage and conserve the species planted in the project in order to satisfy the future need. This would undoubtedly be a march in time.

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