

## ***Ringal* (a dwarf bamboo): Resource Use Pattern**

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**ABSTRACT:** In this article the resource use pattern of *Ringal* (a dwarf bamboo) in district Rudraprayag (Garhwal Himalaya) has been discussed. Out of five species of *ringal*, only two species *Drepanostachyum falcatum* and *Thamnocalamus pathiflorus* are commonly used for making baskets, mats, flowerpots and other products. [Report and Opinion. 2009;1(4):1-5]. (ISSN 1553-9873).

**Keywords:** Ringal, natural resource, use of ringal, Rudraprayag

### **INTRODUCTION**

The natural resources form the major livelihood base for the downtrodden communities in the remote villages of hilly state Uttarakhand. Forests are the most important natural resources in Uttarakhand providing fuel wood, fodder, biomass and other major and minor forest produces. *Ringal* (a dwarf bamboo) and natural fiber, medicinal & aromatic plants are one among the potential resources available in different villages and adjoining forests in state Uttarakhand. A number of communities are involved in dwarf bamboo (*ringal*) and natural fiber crafts work for their survival.

*Ringal* (dwarf bamboo) in India is harvested traditionally from the temperate regions of Himalayas and used indigenously for preparation of baskets, mats, brooms etc. In the local language *ringal* is known as *Ningaw*. In the district Rudraprayag (Garhwal) *ringal* is part of life of the local tribal population. Although *ringal* has played a vital role in the day-to-day activities of the inhabitants, it has never achieved a status of commercially used resource due to lack of knowledge and awareness among the local people.

*Ringal* provides livelihood requirements to a considerable number of forest fringe communities, especially socially backward communities. There is such a sustainable demand for dwarf bamboo resources from traditional artisans (*Rudhiya*) that in

the years to come, the requirement would outscore the stock and the pressure on the resources might deplete the existing patches of *ringal*. The indiscriminate extraction from natural populations coupled with large-scale habitats loss has seriously endangered the dwarf bamboo (*ringal*) genetic resource.

In this article the author has described the resource use pattern of some *ringal* species in the Rudraprayag district Garhwal (Uttarakhand).

### **MATERIALS AND METHODS**

*Study area:* District Rudraprayag (Garhwal) of Uttarakhand state is the remote area in terms of lifestyle and is also rich in botanical resources like *ringal* resource. All three blocks (Ukhimath, Jakholi & Agustamuni) of the district has been covered in the present study. From three blocks total seven villages were selected for conducting the *ringal* study on the basis of availability of *ringal* resource, weavers and remoteness. All the selected areas were similar in *ringal* diversity and its biomass, but different in its resource use pattern.

A. *Reconnaissance Survey:* The reconnaissance survey was conducted for knowing the traditional method of *ringal* harvesting and

involvement of *ringal* stakeholders (called *ringal bunkers*) of different rivals of the area. In Rudraprayag district, *ringal* is traditionally harvested by the *ringal* weavers of Mansuna, Khod, Karandhar, Bhanaj, Sari, Makhanda and Makku villages. These areas come under the Kedarnath forest division. These areas falls within the Garhwal Himalaya region and the forests are dominated with *Quercus semecarpifolia* (brown oak), *Q. floribunda* (green oak) and *Q. leucotrichophora* (white oak) and lies between 1300m to 3000m altitudes of Mandakini valley of district Rudraprayag. Oak forests of the area are rich in *ringal* diversity and biomass.

The traditional weavers harvest *ringal* from the oak forests and prepare the *ringal* products like Kanda, Solta, Supa and Changra for collecting fodder, fuel, grains and manure. Weavers also sell the *ringal* products at local market like Ukhimath, Agustamuni and Rudraprayag. Some small villagers also sell the products at Rishikesh market of the state. Similarly some weavers also sell the *ringal* products in neighbouring villages of the area.

During the field visit author have interviewed with some *ringal* harvesters and weavers to assess the information about species wise resource use pattern of *ringal*.

**B. Questionnaire Design:** The questionnaire was designed keeping in mind some tasks related to species wise use of *ringal* and type of products and ecological impacts of *ringal*, which is always ignored by various workers.

**C. Questionnaire Sampling and Selection of the Respondent:** The survey was carried out during August 2007. The questionnaire was used to gather information on species wise use of *ringal* and also use of different products of *ringal*. The respondents from the area were selected randomly on the basis of their involvement in the *ringal* activity as traditional harvester; trackers (transpiring *ringal* from forest to weaving point/store house), local traders etc. and they were the respondents of the ideal questionnaire.

**D. Process of Questionnaire Filling:** All questionnaires were filled throughout a long discussion along with the respondent.

## RESULTS

Total five species of *ringal* viz. *Drepanostachyum falcatum* (Golu/ Garh/ Garila ringal), *Thamnocalamus pathiflorus* (Dev ringal), *T. jonsarensis* (Tham ringal), *Arundineria falcate* (Sararu ringal) and Bhatputra (locally identified) has been recorded from the study area (district Rudraprayag). Table 1 represents the investigated villages according to availability of *ringal* species and table 2 represents the species wise use of *ringal* and also use of *ringal* products and their description.

Table 1. List of investigated villages according to availability of ringal species

Sl. No.	Name of Village	Altitudes (m) a.m.s.l.	Ringal species used
1.	Mansuna	1000-2000	<i>Drepanostachyum falcatum</i> (Golu ringal)
2.	Karandhar	1000-2000	
3.	Maikhanda	1000-2000	
4.	Makku	2000- >	<i>Thamnocalamus pathiflorus</i> (Dev ringal)
5.	Bhanaj	2000- >	
6.	Khod	2000- >	
7.	Sari	2000- >	

Table 1: Species wise use of Ringal in the study area district Rudraprayag

Sl. No.	Local name of product	English name of products	Product description	Local uses	Type of Ringal species used				
					<i>Drepanostachyum falcatum</i> (Golu)	<i>Thamnocalamus pathiflorus</i> (Dev)	<i>T. jonsarensis</i> (Tham)	<i>Arundineria falcate</i> (Sararu)	Bhatputra (Locally identified)
1.	Kandi/Odagi	A big basket	Large netted, cylindrical bucket shaped prepared by ringal sticks	Used for crop residue and manure collection	+	+	-	-	-
2.	Solta/Malkhna	A big basket	Large netted, cylindrical bucket shaped prepared by ringal sticks	Used for fodder and litter collection	+	+	+	+	+
3.	Tokari	Basket	A round shaped vessel made of ringal fibril.	For keeping Chapati, fruits and flowers etc.	+	+	+	+	-
4.	Dalia	Porridge	A round shaped big basket made by ringal fibril	Used for fodder, fuel & crop residue and manure collection	+	+	-	-	-
5.	Supa	Winnower	A basket used for winnowing grains at home or in a paddy field	Winnowing grains	+	+	+	+	+
6.	Changera/Bisala/Dabolla	Basket	Dome shaped bucket basket like product made by ringal fibril	For storage of grains.	+	+	-	+	+
7.	Pastedan	Toothpaste stand	Glass shaped products prepared by ringal fibril	Keeping tooth brush, tooth paste etc.	+	+	-	+	+
8.	Fooldan	Flowerpot	A flowerpot made by ringal fibril	For decorating rooms and keeping flowers	+	+	-	+	+
10.	Thaali	Plate	A shallow round plate made by ringal fibril	Used in temples for keeping flowers, fruits, etc for offering to God and Goddess mostly in the Char Dham Yatra.	+	+	-	+	+
11.	Kalamdan	Pen-rack	Glass shaped products prepared by	Keeping pens etc.	+	+	-	+	+

			ringal fibril						
12.	Kudadan	Dustbin	A dome shaped basket like product prepared by ringal fibril	A container for keeping household rubbish	+	+	-	+	+
13.	Jild/Chittha	File cover	Made by ringal fibril	Used for office file cover etc.	+	+	-	+	+
14.	Mothi/Dan Chatai	Mat	A piece of woven or plaited floor material for wiping the shoes on or used primarily to cover floor.	Used for drying grains like paddy, wheat etc in the sun	+	+	+	+	+
15.	Tray	Tray	A flat, shallow, rimmed vessel	For keeping tea, snacks, papers and files etc.	+	-	-	-	-
16.	Hathkandi	Hand basket	A vessel for carrying goods	For shopping goods	+	+	-	-	+
17.	Balti	Bucket	A vessel used for collecting and carrying flowers	Decoration	-	+	-	-	-
18.	Baksa	Suitcase	A box prepared by ringal sticks	For keeping goods while travelling	-	+	-	-	-
19.	Jhaaru	Broom	A large brush made by ringal branches	For sweeping and cleaning floors	-	-	+	+	-
20.	Awan/Jhatka	Log	A stick of ringal	For supporting climbers (vegetables)	+	-	+	+	+
21.	Chawai	Roofing	Ringal sticks with branches	Roofing of temporary houses at meadows	+	-	+	+	-
21.	Chaara	Fodder	Green leaves	Leaves are used as fodder for browsing animals	+	+	+	+	+
22.	Gherbar	Fencing	Old sticks	Used as fencing, mulching and covering material for nurseries.	+	+	-	+	+
23.	Idhan	Fuel	Dry sticks	For cooking	+	+	-	-	-
Percentage wise use of <i>Ringal</i> species					87	83	35	70	61

## DISCUSSION

Ringal has commercial application and offer development opportunity for marginalized communities and provide off needed income and equitable distribution of income for livelihood. All five species of *ringal* *Drepanostachyum falcatum*, *Thamnocalamus pathiflorus*, *T. jonsarensis*, *Arundineria falcate* and Bhatputra (locally identified) are used by the villagers or weavers. First two *Drepanostachyum falcatum*, *Thamnocalamus pathiflorus* are popularly considered species of ringal for making various articles like table lamp, flowerpot and other products. Due to easy availability of *Drepanostachyum falcatum* (Golu ringal) in lower altitudes (1000-2000m) it is used maximally (87%) and on high altitudinal regions (above 2000m) *Thamnocalamus pathiflorus* (Dev ringal) is used maximally (83%), however *Arundineria falcate* (Sararu ringal) and Bhatputra (locally identified) are also used 70% and 61%). Due to less availability of *T. jonsarensis* (Tham ringal) it is used minimum (35%) in high altitudes.

The weavers of district Rudraprayag is state that the high altitudinal *ringal* is considered as very strong and durable. Therefore *T. jonsarensis* (sticks

of Tham ringal) are used for supporting the climbers of some pulses crop and some time for fencing and mulching of nurseries and roofing of temporary huts at meadows.

Training and awareness programs should be conducted for *Ringal* weavers for making fancy and modern articles of *Ringal* like flowerpots, small baskets, pen stands, file covers, fancy bags etc. and production of traditional products like Kanda, Solta, Changra etc. should be stopped. Since too much quantity of *Ringal* (20-40 sticks) is used to prepare traditional products (Kanda, Solta, Changra etc.) that too at low cost and through long time taking process therefore the *Ringal* weavers should prepare modern products in which less quantity of *Ringal* (about 2-3 sticks) is used and they can earn too much money in very short time.

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