

Central Institute of Medicinal and Aromatik

VETIVER - THE "KATARAGHAS" COULD EMERGE AS A MULTIFARIOUS TOOL FOR RURAL DEVELOPMENT IN FLOOD PRONE AREAS OF NORTH BIHAR, INDIA.

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 - Keywords:- Kataraghas, Sikki handicraft, Land conservation, Rural upliftment

ABSTRACT

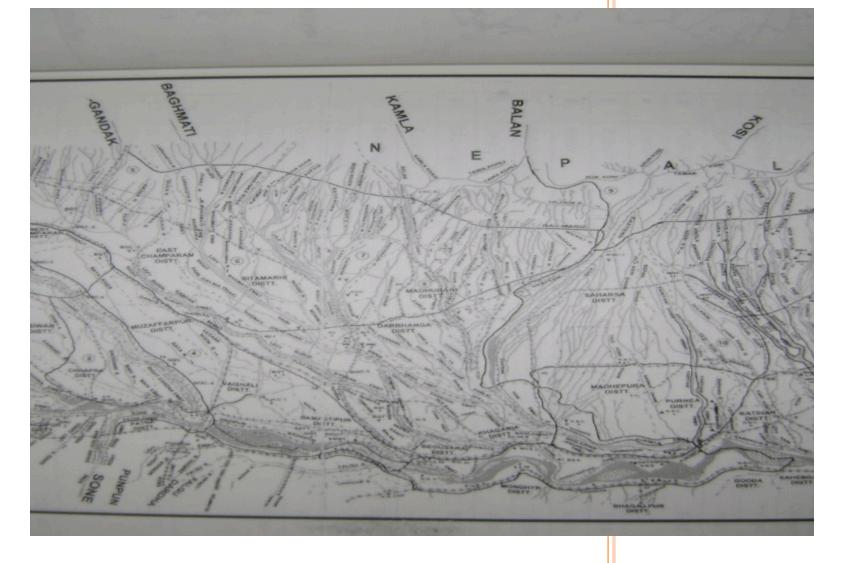
Mithila area in north Bihar is known as the land of high floods, perennial rivers and a good no. of natural and man-made water bodies. "Kataraghas" (Vetiveria zizanioides) growing luxuriantly in these flood plains acts as a major carbon sink on account of its extensive growth through seed propagation.

This grass is intimately associated with the cultural practices in the area. An old practice related with vetiver is its use as point of demarcation of local plots and serves as a tool of arbitration in case of land feuds. The grass is formally revered along with cow dung and mud casts as a sequel to the worship of Sun God and also an ancient land conservation practice. It is also associated with Sama-Chakeba festival held during the Kartik month.

Fine vetiver stalks form a basis of *Sikki* cottage industry which has since emerged as a tool of women's empowerment. *Sikki* handicraft symbolizes the folk art in Mithila and women *Sikki* artists have been honored with national awards. A no. of modern gadgets are prepared to suit the present day market demands. *Sikki* art has now transcended to the lower echelons of society. Brides win high accolades from the groom's side when they carry masticatories and other items beautifully adorned inside the traditional *Sikki* gadgets.

The grass finds a place in the five centuries old poems of the great literary bard Vidyapati. It provides shelter to small birds. Its leaves are transformed into mats & stalks cast into fishery appliances for capture of small fishes. Young leaves are used as fodder. Mature plants are used as thatching material. Roots are used for making hand fans.

The grass could be utilized to fight the menace of arsenic contamination of drinking water, recently reported from certain parts of north Bihar as well. Farmers plant *Katraghas* on the four sides of low lying plot to prevent the fierce flood water from damaging the standing paddy crop. Of late, farmers have started its commercial cultivation as a medicinal/ aromatic plant. This paper takes into account the potentials of vetiver emerging as a tool for rural development in north Bihar.



- Mithila area in north Bihar is rich in water bodies has a fine network of rivers.
- □ Abounds in natural & man made water bodies like Chaurs, Moins (Ox-bow lakes), Ponds etc.

Vetiver is a model plant having a link with rural development in North Bihar It has three dimensions:-

- 1. Land Conservation.
- 2. Cultivation as aromatic plant.
- 3. Handicraft (Sikki art).

- A good no. of farmers have improved their lot by adopting Khus cultivation in the chronically water logged areas.
- ➤ Poor and destitute women ended their penury by adopting Sikki art.
- > Organized Katara cultivation could provide raw material for paper industry
- ➤ It could also mitigate arsenic contamination which has become more rampant in North Bihar districts in recent years.
- ➤ It is widely used as fodder in extreme flood inundations along with other fodders

Kataraghas grows abundantly in Mithila floodplains. It is used as line of demarcation between two plots.





Ancient Vetiver References

- Vetiver finds mention in ancient Sanskrit texts written by Kalidas, Vidyapati, etc.
- Texts like Shakuntal, Bhagwat Puran, Bhavisya Puran, Shaiva Sarvaswa Sar etc. bear accounts of this grass
- Synonyms:-Usheer, Nalada, Jalavas, Veeran, Amrinal





Rural women worshipping vetiver grass in a Darbhanga village.

- ➤ This grass is formally worshipped in the rural Mithila on the first and last Sundays in the bright fortnights of Agrahayan (Nov.-Dec.) and Baisakh (April-May).
- ➤ Womenfolk take holy bath in the nearby river/pond and move in a procession to the site of Vetiver plants where they offer flowers, fruits & vegetables etc.
- This practice is observed as a sequel to SUN worship coupled with a symbolism for soil conservation.
- As a corollary to the practice, Cowdung & Clayblocks are also worshipped.
- ➤ Women also tie 'KNOTS' on the leaves for fulfillment of desires



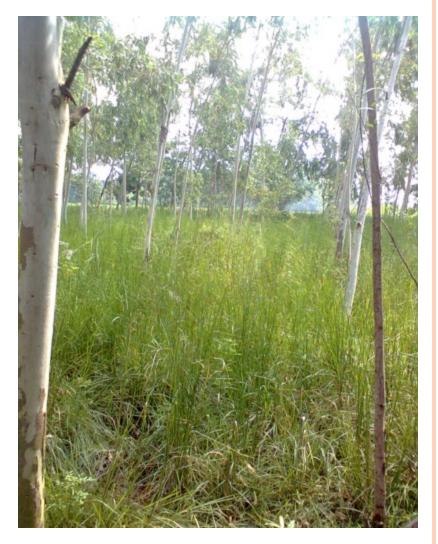












An innovative farmer Lal Bihari Singh of Yogiya village near Jayanagar (Madhubani) making experiment with integrated agro forestry of Khus with Eucalyptus.









Profile of Khus cultivation in Madhubani Dist. of North Bihar, India

Sl. Location Associated farmers Area

No. (Village & C.D. Pleek)

SI. No.	Location (Village & C.D. Block)	Associated farmers	Area
1	Yogiya	Sri Lal Bahadur Singh (Kishan Sri Awardee – 2008)	3 acres (own)
2	Jaynagar	Sri Lal Bahadur Singh (Kishan Sri Awardee – 2008)	2.5 acres (on lease)
3	Selara (Jaynagar block)	Sri Lal Bahadur Singh with Sri Rajiv Gupta	3 acres
4	Kumar Khat (Ladania block)	Sri Arvind Mishra	1 acre
5	Manharba (Ladania block)	Sri Ram Prasad Singh	1 acre
6	Ekhari (Ladania block)	Sri Chandra Veer Singh	1 acre
7	Phulparas	Sri Sukhi Mahto	
8	Narahiya	Md. Ziaullah Payami	40 acres
9	Pakariya (Phulparas)	Sri Yogendra Sah	6 acres
10	Pakariya (Phulparas)	Sri Ashok Sah	2 acres



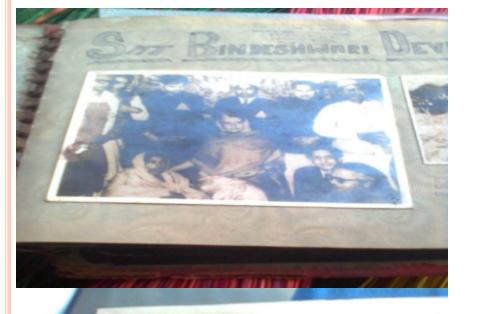




Vetiver as base material for Sikki Handicraft
Major Centres of Sikki Art in North Bihar
Sursand in Sitamarhi Dist.
Raiyam in Madhubani Dist.
Tharuhat in Champaran

Rampur (Sarisab-Pahi) in Madhubani Dist.

- Late Bindeswari Devi(Raiyam) & Kumudini Devi(Sursand) got National Awards for their performances in Sikki handicraft.
- Rachna Sikki Hasta Kala Kendra Rampur (Madhubani) provides training & employment to rural women in Sikki Handicraft.
- Nuna Khatoon of Darji Tol of Sarisab-Pahi & Gulesha Khatoon of Sapta (Madhubani) have changed their fortunes with this vocation.
- NGOs like Sewa Mithila, Adithi, Gramin Vikash Samiti etc have popularized Sikki art in resent years



Women's page by Suntra and Varsha

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Adres Exhibition

Now that you are returning to India, I would like to thank you for your contribution, as a performer, to the success of Aditi during the display at the Barbican Art Callery.

The exhibition has, without doubt, been a huge success. The thousands of people who you have seen going round the exhibition attest to it. However, this success would never have been achieved without the performers, the live exhibit that made Aditi so exciting for its London visitors. The musicians, dancers, painters and artists, potters, puppeteers, acrobats, magicians, jugglers and inpersonators, all made this exhibition an experience that this country has never know.

Besides my thanks, I hope you will take back to India not just the knowledge that you have contributed to such a picneering exhibition but also the memory of making so many British people excited and thrilled by the India of Aditi.

Yours sincerely

John Hoole .

John Hoole Curator, Barbican Art Gallery

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Kumudini Devi of Sursand (Sitamarhi), Bihar, India

Received National Award in 1971 for Sikki arts. She was initiated into the craft by her mother and grand-mother. She was the organizer of Sikki Procurement Centre in Sursand. Kumudini Devi brought name and fame to Mithila for Sikki arts. The feminist film-maker Nalini Singh had documented Kumudini Devi's work. Sursand had been a Sikki centre of excellence during 1970s. However Sikki handicraft at Sursand failed late because of the severe weakness of production and marketing.



An innovative process of Sikki Wall Hangings has been carved by Rachana. Sikki Hastkala Kendra, Rampur Dist. Madhubani, Bihar, India.

It is based on Tantric depictions as mentioned in religious scriptures.

Sri Dhirendra Kumar has initiated and established this form of Sikki art.

It is catching the fancy of National and International art lovers. Exhibitions have been organised in Chennai, Gurgaon, Bangalore, Delhi Haat etc..









Conventional Uses

Sikki gadgets are used as containers for storing grains and other eatables (spices, masticatories etc..)

These items are resistant to attack of pests and as such rice, more particularly in flood affected areas, used to be stored in Kothis made up of Katara stalks.

Earlier Katara roots were used for washing hairs, this provided lustre and fragrance to the hairs.

A Component of Deepawali Rituals – Offered to the Goddess of Wealth



Ancient References of Vetiver in Indian Texts

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Other Folk Practices



Kataraghas is planted for stabilization of slopes along side railway lines & roads



Process of Weaving

Rural women collect mature inflorescence stalks from the wild mostly during and soon after the rainy season.

Exquisite domestic items of both conventional and modern hues are carved from these stalks. These stalks get dried after rainy season and are softened by pre treatment with warm water. The circular stalks with 2 to 3.5 mm diameter are cleaved into 2, 4, 8 or even 16 pieces depending upon the artist's capacity to use the fineness.

The partitioned strands are intricately woven around a grassy base made of other poaceous grasses with the help of a needle.



SIKKI GADGETS

Traditional

Modern

- PAUTI
- CHANGERI
- PHULDALI
- VIRAHARA
- DALA
- PANBATTA

- TABLE MATTRESS
- TELEPHONE BOX
- COASTER
- CASSEROLE
- TRAY
- SOAP CASE
- PEN HOLDER
- KNIFE HOLDER etc.

DESIGNS ADOPTED

- Korhi
- Chhanjhitaki
- Darahiya
- Porhiya
- Laheriya
- Patmasiya
- Kataral paan
- Kharauaa etc..

- Following over two dozen designs the Sikki artists make hundreds of items.
- Some plant based designs include –

Singharaphar (like the fruit of *Trapa natans*), Kumharaphul (like the flower of *Benincasa hispida*), Karmilatti (like the leaf of *Ipomoea aquatica*)

Social scientists are of the view that some of these designs resemble those found in the clay potteries and coins obtained in Harappa excavations.







Thanks