

## OUR PRODUCTS

### Teak timber

Teak (*Tectona grandis*) is a close-grained hardwood with high natural oil and silica content. It is one of the hardest, strongest and most durable of all timbers, highly resistant to any rotting and almost impervious to the effects of hot sun, rain, frost or snow.

It is used in Ships and boatbuilding, Exterior construction, Exterior and interior flooring, Exterior and interior paneling, Turnings, Carving, Various small wooden objects, Durable outdoor furniture, Cutting boards, Countertops, Veneer, Indoor furnishings, Door and window frames, Indoor structural beams and columns, And more.

In Sagarnath, Teak timber grading and pricing (without vat) is done as:

S.N.	Grade	Girth Size (inch)	Tender Rate (per cft) (RS)	Household Rate (Per cft)(RS)
1.	A grade <i>Roundwood</i>	Above 48"	2111.86	1900.00
2.	B grade <i>Roundwood</i>	Between 36"- 47"	1871.00	1600.00
3.	A grade <i>Log</i>	Between 24"- 35"	1519.00	1250.00
4.	B grade <i>Log</i>	Between 16"- 23"	857.00	753.00



Figure 1 : Teak Timber

## **Eucalyptus Timber**

Eucalyptus (*Eucalyptus camaldulensis*) is durable, strong and sustainable. It is classified as a hardwood and can be used as structural support, beams for buildings and many other outdoor structures. Eucalyptus timber is a long-lasting choice for an outdoor structure; especially, if you want to protect the environment.

In Sagarnath, Eucalyptus timber grading and pricing (without vat) is done as:

S.N.	Grade	Girth Size(inch)	Tender Rate (per cft)(RS)	Household Rate (Per cft)(RS)
1.	A grade <i>Roundwood</i>	Above 48"	791.00	680.00
2.	B grade <i>Roundwood</i>	Between 36"- 47"	696.00	585.00
3.	A grade <i>Log</i>	Between 24"- 35"	461.00	400.00
4.	B grade <i>Log</i>	Between 16"- 23"	361.00	250.00



Figure 2 : Eucalyptus Timber

## **Sisso Timber**

Wood from the Sisso (*Dalbergia sissoo*) tree is durable and pliable, making it a great option for making long-lasting furniture in any design you prefer. In fact, Sisso wood beds last longer than beds made from other types of wood△

In Sagarnath, Sisso timber grading and pricing is done as:

S.N.	Grade	Girth Size(inch)	Household Rate (Per cft)(RS
1.	A grade <i>Roundwood</i>	Above 48"	1800.00
2.	B grade <i>Roundwood</i>	Between 36"- 47"	1250.00
3.	A grade <i>Log</i>	Between 24"- 35"	850.00
4.	B grade <i>Log</i>	Between 16"- 23"	450.00



Figure: Sisso Timber.

## **Firewood**

Any wooden material that is gathered and used for fuel is firewood. Especially, in Sagarnath, wood less than 16" girth and wood with defects and deformed are classified as firewood. Firewood is measured in the unit of Stacks as *Chatta*. We sell Full, Half and Quarter *Chatta* having dimension of 20'\*5'\*5'feet, 10'\*5'\*5'feet and 5'\*5'\*5'feet. Small twigs and branches of felled tree are collected by people which is used as firewood free of cost.



The price of quarter *Chatta* of different species are given in table:

S.N.	Species	Tender rate (RS) per <i>chatta</i>	Household rate (RS) per <i>chatta</i>
1.	Teak	71000.00	69000.00
2.	Sisso	71000.00	69000.00
3.	Sal	72000.00	70000.00
4.	Eucalyptus (Masala)	63000.00	50000.00
5.	Others	61000.00	59000.00



Figure 3 : Stacks of Firewood.



Figure 5: Stacks of Firewood.

### **Leaf Litter**

Leaves, twigs and pieces of bark that have naturally fallen to the ground make up leaf litter. Leaf litter is an important component of healthy soil. Decomposing leaf litter releases nutrients into the soil and also keeps it moist. It also serves as great nesting material, hiding places and protected spots for animals.

Due to the high scarcity of firewood, the people dwelling surrounding the SFDP area use dried and fallen teak leaves as firewood for cooking. Eucalyptus leaves are collected and used in distillation plant for extraction of its oil. The Aromatic oil of Eucalyptus has many uses. For details, please refer <https://www.healthline.com/health/9-ways-eucalyptus-oil-can-help>.



Figure 4: Eucalyptus Leaves.

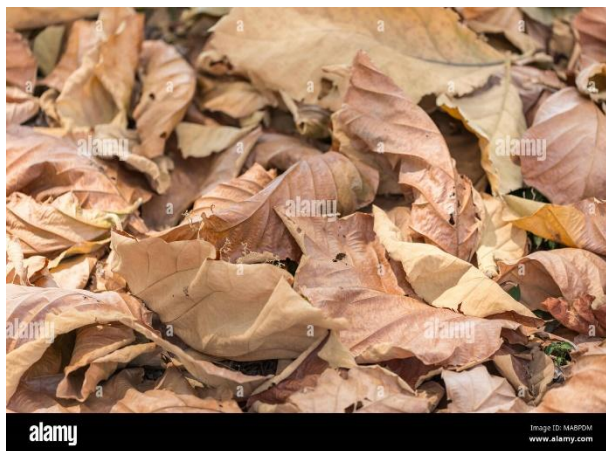


Figure 5 : Teak leaves.

## Grasses

Lemon grass (*Cymbopogon flexuosus*) has been planted in our field (in 00000 Hectares in 67 F 56 V and 54 D Plots) from which we can get raw material required for the production of lemon grass oil. Essential lemon grass oil is extraction by steam distillation of lemon grass herbs. Lemongrass oil is used as the essential aromatic oil is profoundly used in aromatherapy, cleaning, supporting the joint, immune and muscle system.

For details, please refer <http://www.agricultureinnepal.com/lemon-grass-oil>



Figure 6: Lemon grass



## **Seedling:**

We have our own permanent nursery, perhaps the oldest in Nepal. It was established in 1978, where we produce high quality seedlings in enough quantity for our own plantation and for sale to the local farmers and private plantation projects. Our seedlings are of high quality due to the use of high quality seed, standard soli treatment, care and regular monitoring during production. We use standard imported Eucalyptus seed from Australia. We sterilize the sand, soil and pebbles which also ensure high survival of seedlings. We produce seedlings of Teak, Eucalyptus, Sisso, Khair, Kadam and other species as per the requirement of the project and market demand.

Pricing of seedling produced in Sagarnath:

SN	Seedling	Price Rs per seedling.
1	Eucalyptus	8
2	Teak	10
3	Kadam	8
4	Ashoka	15
5	Paulownia	25
6	Simal	9
7	Satisal	9
8	Acacia spp	9



*Figure: Seedling of Teak.*



*Figure: Seedling of Eucalyptus.*

## **SILVICULTURAL PRACTICES**

Silviculture is the practice of controlling the growth, composition/structure, and quality of forests to meet values and needs, specifically timber production. Some of the silvicultural practices in SFDP:

### **Weeding**

The unwanted plants that grow in-between crops are called weeds. The process of removal of such unwanted plants is called weeding. Weeding is required because weeds are competitive plants as they reduce the useful crop yield by acquiring space, fertilizers and nutrients from the soil. Instrument used in weeding are spade, Khukuri, sickles.



*Figure 4: Weeding Program in Murtiya Section.*

## **Doubling**

Doubling is the process where only two superior coppice shoots are left by removing all other inferior coppice shoot. It is important for favoring the growth and development of superior coppice shoots. The removed coppice shoots are used as firewood. It is practiced after two years of coppicing. Instrument used in doubling are *Khukuri* and axe.



Figure 6: Before doubling.



Figure 5: After doubling.

## **Singling:**

singling is the process where only one superior coppice shoot is left by removing another inferior coppice shoot. It is important for favoring the growth of superior coppice shoots. The removed coppice shoots are used as firewood or used as *kora*. It is practiced after two years of doubling. Instrument used for singling is axe and *Khukuri*.



Figure 7: Singled stand.



### **Climber cutting**

Unwanted species that attaches itself to other plants or objects and grows as Climber. Sometimes it completely girdles the shoots and plants die of suffocation. The climber may ravel itself around the crown, so the victim is devoid of light and food so its removal is necessary for proper growth and development of the plant. Instrument used in climber cutting sickles, axe, *Khukuri*.



Figure 8: Cutting Climber with the help of khukuri.

### **Thinning:**

Thinning may be defined as a felling made in an immature stand for the purpose of improving the growth and form of the tree that remain without permanently breaking the canopy. Thinning is done in order to remove the 5D types tree species so that it will decrease the competition between the surrounding stands for nutrients, water, sunlight, space and soon so that tree stands can nourish themselves with their full potential.



*Figure 7: Dead tree being measured for thinning.*



*Figure 8: Making Blaze for marking.*