



Agroforestry Facts  
Tamarind



<b>Botanical Name</b>	<b><i>Tamarindus indica</i> L.</b>
Name in English	Tamarind
Name in Kannada	Hunase
Family	Fabaceae
Seeds Collection	Seeds to be collected during end of May or early June. They can be collected either by the beating the mature pod or from the fallen fruits.
Seeds Processing & Treatment	No pre-treatment required for germination.
Nursery	Fresh seeds are sown in nursery beds in March – April. Soaking of seeds in 10 per cent cow urine or in cow dung solution (500 g in 10 l of water) for 24 hours. Two year old seedlings are transplanted to the main field.



	Vegetative propagation: Softwood grafting: March- April. Air Layering: Shoots treated with IBA 4000 ppm
Plantation Management	<p>Grown on variety of soils ranging from poor degraded, eroded, gravelly, saline and alkaline soils. Productivity is higher in red loamy, deep well drained soils. The absolute maximum temperature varies from 36-47.50 C and the absolute minimum temperature varies from 0-17.50 C. Rainfall requirement – 750-1900 mm. Altitude – up to 100 m above MSL.</p> <p>Planting season of June – December is found to be optimum. The grafts should be planted in the pits of 1 m x 1 m x 1 m filled with FYM and top soil. Add 50 g of Methyl parathion 1.3% dust in the pit. Immediately after planting, support the graft with stakes. Regular watering should be given once in seven days.</p> <p>Fertiliser dose: 200:150:250 g of NPK per tree per year along with 25 kg of FYM and 2 kg of Neem cake.</p> <p>Regularly remove the rootstock sprouts. Also remove the dried and diseased parts.</p> <p>Growth is generally slow; seedling height increasing by about 60 cm annually.</p> <p>Tamarind is a dry land (rainfed) crop and hence it is normally not irrigated. But young orchards needs to be irrigated, especially during dry spells and summer months. One year old plants be given 10 litres water at an interval of 6-8 days during summer which may be doubled during 2nd and 3rd year. There after irrigation may not be necessary. However if it is provided growth will be faster and better.</p>
Model/Spacing	8 - 10 m x 8 – 10 m is ideal.
Pests, diseases and Management	<p>Pests: Leaf caterpillar (<i>Achaea janata</i>): It can be controlled by spraying Quinalphos 25 EC 2 ml/lit or Monocrotophos 36 WSC 2 ml/lit.</p> <p>Storage beetle (<i>Pachymeres gonagra</i>): It can be controlled by spraying Quinalphos 25 EC 1 ml/lit at the time of fruiting season.</p> <p>Diseases - Powdery mildew: It can be controlled by spraying Dinocap 1 g/lit.</p>
Plant Rotation	Trees can continue yielding for 200 years
Yield	Average yield being 25 tonne of pods per hectare (180-225 kg/fully grown tree). The budded/grafted plants yield 100 kg per tree per year.
Uses	Fruits as spice. Mature seeds are dried then toasted or boiled. It can also be ground into flour or roasted as substitute to coffee. Young leaves and flowers are also edible raw or cooked.



	<p>Tamarind also functions as a medicinal plant. It is used for sores, ulcers, boils, rashes, asthma, amenorrhea, rheumatism, wounds, throat infection, cough, fevers, intestinal worms, conjunctivitis, sprains, measles, urinary problems, scurvy, diarrhoea, and dysentery. The seeds are sources of pectin that can be used for sizing textiles. When ground, boiled, and mixed with gum, the seeds produce a strong wood cement.</p> <p>Seed oil is used for paints and varnishes. It can be used in polishing idols. Fruit pulp, on the other hand, when mixed with sea salt, is used to polish silver, copper, and brass. The leaves yield a red dye.</p> <p>The wood is used for general carpentry, sugar mills, wheels, hubs, wooden utensils, agricultural tools, furniture, etc. It is also ideal for fuel and charcoal.</p>
Buyers /Industries	General market for fruits and wood industries.
Harvesting	The seedling plants start yielding in 8-12 years whereas, budded/grafted plants in 4-5 years after planting. Harvesting is done during January-April.
Economic Returns	5.5 lakh per Acre
Current Market Rate	Rs 55 per Kg / 55,000 per Ton