**Cultivation Process for Mango**

Mango, or *Mangifera indica* is a tree native to India. It grows from seeds and the trees can grow upto 10-40 meters in height. Mango trees are evergreen with rounded canopy. The roots are long and unbranched and measure up to 8 meter in length. The leaves have a set of interesting features to notice. Colour of young leaves vary between varieties. They are generally tan-red, yellowish brown or pink in color when young. They undergo a series of different shades as they grow and finally are dark green when mature. The fruits are fleshy, fibrous, and have a characteristic ‘beak’ which is a small conical projection- special feature of mangoes. The prominence of the projection varies between varieties.

**Ideal Conditions for Mango Cultivation**

Mango is a subtropical fruit and grows at 600 meter above sea level. The two factors that play the most important role in mango cultivation are climate and soil. These two dominate the quality of mango fruits and the future of a mango farm.

**Climate for Mango Cultivation**

Although mangoes can grow in a wide variety of climates, it can grow best in tropical and subtropical climatic conditions. They need a good amount of rain during their growth period and a dry spell during the flowering period. In other words, it needs a good amount of rainfall from June to October and dry spell from November. Rainfall, high level of humidity or frost during flowering period may hinder the flower formation process.

**Season for Mango Tree Plantation**

Usually, the timing for planting mango seeds vary although it depends on the amount of rainfall the particular area receives. They are planted at the end of the rainy season in places where there is ample rainfall. Planting is done during the months of February and March in irrigated areas. Lastly, in rain-fed area, the planting is done in July- August period.

**Soil for Mango Tree Cultivation**

Mangoes grow well in all types of soils. However, the primary soil requirement is that they must be well-drained and deep. Red, loamy soil is the most ideal for mango cultivation. However, in India, they can grow in alluvial, clayey or laterite soil. The soil must have rich organic content and must have a good water retaining capacity. Soils that do not have good draining facility are not ideal for mango plantation. They grow on plains rather than hills. Cultivation in hilly areas can lead to very low yields as the drainage and climatic conditions are not best suited for mango cultivation. Soils with good amount of iron peroxide and 5-10% lime are ideal for producing the best quality mango fruits. Fruits produced in such soil conditions have a bright red tinge.

**pH Required for Mango Cultivation**

Mangoes cannot tolerate alkalinity while it can grow in light acidic soil. Hence, a pH between 4.5 and 7.0 is preferred for mango cultivation. The soil is sometimes mixed with peat moss a year before mango tree plantation to improve the acidity of the soils.

**Water for Mango Cultivation**

The irrigation requirement of mango plant depends on the climate and soil of the area of cultivation. Soil with good water retention capacity needs lesser irrigation while clayey soils need no irrigation at all. Mango saplings need frequent watering till they establish themselves properly. This also helps promote vigorous plant growth. Once established which is after a period of 6 months, they are irrigated once in every 10-15 days. It must be increased in case of soil with good drainage capacity. Irrigation should also be followed during winter to avoid the saplings from getting affected by frost. It is generally stopped 2-3 months before flowering because it might promote vegetative growth during the flowering period indirectly affecting the yield of the fruits.

**Intercropping in Mango Farm**

Mango farm follows intercropping system in which short-duration crops like vegetables, legumes, groundnut etc. are grown. This is typically one during the pre-bearing age. Fruits and vegetable crops local to the area of cultivation are generally grown. Some farmers also practice apiculture or beekeeping in mango orchards.

**Mango Tree Planting Material**

Mangoes can be grown from seed or propagated by the vegetative method using various grafting technique.

***Seed Propagation***

This is perhaps the easiest method of mango planting. The seeds or mango stones are collected from the market places, local trees and sometimes even at domestic level during mango season. They are then sown in nursery beds specially raised for this purpose (1 X 5 meter). This sowing is done in July. The seeds germinate after 20 days of sowing. The leaves are initially coppery red. When their color changes to green, the seedlings are transplanted to the permanent beds.

***Vegetative Propagation***

Mangoes raised from seeds are inferior in quality when they hit the market. Therefore, asexual methods of propagation such as layering, grafting, cutting, etc. are practiced. This ensures better fruit yield and higher quality of mangoes that have a good market value. In addition, they are also suitable for export.