Whole Process Of Growing & Processing Cashews Will Explain Why Cashew Nuts Are So Expensive

Cashews are particularly rich in heart-healthy monounsaturated fats, which can help lower bad cholesterol levels and reduce the risk of heart disease. Additionally, they contain antioxidants like vitamin E, which protect the body from oxidative stress and promote skin health. India stands as the largest producer, contributing around 700,000 metric tons annually, closely followed by Vietnam with approximately 400,000 metric tons. The United States, the European Union, and China rank among the largest consumers of cashew nuts.

Seedling Germination and Transplanting

The seeds are soaked in water for about 24 hours to soften the hard seed coat, enabling water and nutrients to penetrate and stimulate germination. Subsequently, they are placed in a warm and moist environment to foster germination. Once they have sprouted, and developed visible roots and shoots, they are carefully transplanted into individual pots filled with a well-prepared soil mixture. Post-transplanting, the seedlings require regular watering to maintain consistently moist soil, avoiding saturation. Inadequate watering can hinder growth, while excessive watering may lead to root rot. As the seedlings grow, they should be protected from extreme weather conditions, pests, and diseases, potentially using shade netting to shield them from intense sunlight. Timely intervention is crucial to address pests and diseases and prevent damage to the young seedlings.

Grafting

When the seedlings attain a suitable size, grafting can be performed to create new cashew trees with desired characteristics. Grafting plays a vital role in cashew tree cultivation, ensuring the propagation of desirable traits and improved yields. The grafting process typically occurs when cashew trees are flowering and actively growing. First, the rootstock is prepared by proper pruning and the selection of the appropriate variety for grafting. The selected cyan, representing the shoot or bud of the desired cashew variety, is carefully cut to fit precisely into the prepared rootstock. The cuts on both the cyan and rootstock are made at matching angles to ensure a snug fit and a successful union. Subsequently, the cyan is firmly attached to the rootstock using grafting tape or rubber bands to secure the connection and promote effective healing. This fusion ensures the transfer of nutrients and water between the two parts.

Planting the Grafts

The initial step involves preparing the land for cashew cultivation by clearing wild growth, including forest cover and weeds, from the selected site. This ensures that the cashew plants have ample space and resources to grow without competition. When planting the grafts, it’s important to ensure that the graft joint is at least five centimeters above the ground level. Regular aftercare, training, and pruning are essential to maintain healthy and productive cashew trees. After the field establishment of grafts, the grafting tape or rubber band at the graft joint can be removed to develop a clear trunk. Lower branches are pruned up to a height of 75 centimeters to 1 meter after four or five years of planting.

Pest Management

Two major pests that can significantly impact cashew

production are the tea mosquito bug (TMB) and cashew stem and root borer (CSRB). Timely spraying of appropriate pesticides is essential to control TMB, which damages tender shoots, panicles, and immature nuts. Phytosanitation practices, such as removing infested trees, help reduce the CSRB population and prevent further damage. In addition to these major pests, minor pests like leaf miners, leaf beetles, apple and nut borers can also affect cashew production. The use of UAVs for spraying offers several advantages, including precision and accuracy in the application along defined routes and predetermined coordinates, the use of fine mist spray for effective pest detection and control, and significant savings in pesticide usage due to its efficient and uniform distribution.