

**Commissioner of Industries
Hyderabad
Andhra Pradesh**

Project Title	Integrated Citrus Fruit Processing Unit (ICPU)
Project Description	<p>The Citrus fruit processing in Andhra Pradesh is having more potential presently than previous period, due to several new parameters affecting this project. In present project we are exploring possibilities of main citrus fruits processing only, i.e. Lime, Orange, Malta, and Sweet Lime. Since we are proposing for an integrated unit we will also examine possibilities for Pectin production as well as getting essential oils from their skin processing. Thus, we are exploring viability for an Integrated Citrus Fruit processing unit.</p> <p>Sweet orange and Acidlime are the two chief commercial citrus fruits growth in A.P. ranks second second in production of acid lime. The major citrus growing districts of A.P. are Nellore, Prakasam, West Godavari, Guntur, Cuddapah, Anantpur, Nalgonda, Karimnagar etc. Total production in the state is 154504 tonnes out of the yield area 755049 hectares</p>
Market Scenario	<p>As mentioned earlier presently there are no large unit to do integrated Citrus Fruit processing commercially. However, there is good potential for such unit presently. In this unit of Citrus fruit processing main products for marketing will be Citrus Fruit Juice, Pectin and Essential oils extracted from the skin of Fruits. As regards this proposed unit we are proposing to process mainly Lime, hence we will explore market potential for its products. Apart from this we are also proposing for processing Orange and Sweet lime. Though, these raw-materials are seasonal there is good market potential for their end products namely Juice, Pectin and essential oils.</p> <p>Market for juice from this project will be that of food processing industry as well as hotels and restaurants which are having regular consumption of these juices. In food processing industry several items are being prepared from juices, like Fruit Squashes, Lime cordial, juice concentrates for use with softy ice-creams or slush etc;. Latter date the unit can start producing juice concentrates and juice concentrate powders there is further market for it. Like Fruit juice concentrates are being used by Ice-cream and Slush parlors on regular basis. Dehydrated Juice powders are used for manufacturing natural juice softdrink powder concentrates.</p> <p>As observed from above table there are several possibilities for marketing end products from this project. There is fast growth of ready to eat food products as well as fast food industry in recent time and hence there is growing market of these products in Andhra Pradesh as well as outside Andhra Pradesh. Looking to above possibilities it can be safely assumed that there is sufficient market for proposed unit in Andhra Pradesh.</p>
Suggested Locations	nellore, Prakasam, West Godavari, Guntur, Cuddapah, Anantpur, Nalgonda, Karimnagar Presently there is no unit in the state and there fore there is a good market potential for the product in the state
Technology	<p>Technology for Citrus Fruit processing for commercial production is available indigenously. Complete Fruit processing line is available on turn-key supply basis from well known Indian companies in foreign collaboration. Such plants are already working in other states successfully. Apart from this there are several consultants who can design the total process line and arrange for turn-key supply of equipment's for processing. Hence, availability of technology is not a concern.</p> <p>In this integrated Citrus fruit processing mainly following steps are involved:</p> <ol style="list-style-type: none"> Washing, cleaning, grading and peeling of fruits. Juice extraction and filtration for removal of seeds & fibbers Juice processing including brix (sweetness) adjusting , sterilization and adding preservatives Juice packing in aseptic package or Lacquered tins. Essential oil extraction from peel Peel processing for Pectin extraction
Estimated Capacity	3000 MT per annum
Estimated Cost	INR 32.5 million (US\$ 0.72 million)