

## **Future of Grapes at Cumbam**

*This is case which focusses on the intent to revive the quality of grapes and the grower's life in the region which is blessed with all its requirement to be the best nationally and internationally. This is the only region which can harvest grapes through the year. However neither the growers nor the customers benefit by it .It is only the middlemen who benefits the most from the highly poisoned fruit because of pesticides. Hence the interest among the farmers and growers are dying and the customers are not aware of the ill effects of consuming these grapes .It may not be too late to see this region and growers giving up on this great fruit.*

### **Introduction to cumbum valley and grapes**

Cumbum is located between the Thekkady Hills, Varusanadu Hills and Kodaikanal. The region of Cumbum in Tamil Nadu is one of South India's most fertile lands. The soil is blessed with rich nutrients and the climate is aptly suited for the cultivation of Grapes. The valley consists of large areas of farmland and includes crops like paddy, vegetables, grape vineyards, banana and guava farms. Cumbum is referred as 'Green Valley of South India' and is rightly called as the Grapes City. It is one of the few regions in Tamil Nadu that has a thriving grape cultivation. The climatic condition in Cumbum is purely tropical. The mean annual rainfall is 825 mm.

Grapes are a non-climacteric type of fruit, generally occurring in clusters. They grow in clusters of 15 to 300, and can be crimson, black, dark blue, yellow, green, orange, and pink. Grapes occupies the fifth position among the fruit crops grown in India. In TamilNadu grape is cultivated in the districts of Theni, Coimbatore, Dindugal, Dharmapuri and Krishnagiri. Nearly 90 percent of the grape growing area in TamilNadu is present in Theni district dominated by cultivar Muscat Hamburg (Paneer Grapes).A unique type of staggered pruning in the Muscat Hamburg is practiced in the Cumbum valley of Theni district which together with the congenial climatic conditions prevailing in this tract favours harvesting of five crops in two years. The unique feature here is that grapes are harvested throughout the year while in many grape growing places elsewhere the season ends with summer. Approximately 85 % of the total production of Tamil Nadu irrespective of the variety is consumed afresh. Grapes are known for their medicinal values also. Historically 'grape therapy' was used to treat cancer. In 1996, scientists discovered the chemical constituent, resveratrol in grapes that shows anti - carcinogenic activity and it has been proved to inhibit tumours by stopping DNA damage and slowing cell transformation from normal to cancerous state which in turn slows tumour growth. Resveratrol has anti - inflammatory properties and is very useful for colon cancer prevention and a wide variety of other tumours. Red wine consumption is associated with lower LDL (bad cholesterol) and higher HDL (good cholesterol).

The intent is to convert excess of grape production into a value added product through dehydration and channel the surplus production into a new avenue so that the grapes fetch better prices in the market.

It was found that the dehydration technique cannot be deployed in the varieties that is being cultivated in this locality. The composition of grapes in this region is high in moisture content and the climatic conditions do not support natural dehydration process. The cost of setting up dehydration unit is high that it is also been found that dehydration is more feasible in arid weather conditions like Maharashtra and Rajasthan as the natural environment aids the process. The dehydrated grapes from Rajasthan have more demand in the market as it is available at better competitive prices. Hence the focus is in addressing the core problem i.e. producing better quality grapes and finding new avenues in market.

### **Requirement for betterment**

Inculcating ethical behaviour among the farmers over the usage of harmful pesticides and fertilizers and make them understand that quality is far more important than the quantity produced. Producing grapes with permissible amount of pesticides to make them healthier than before which in turn increase the domestic market and leads to export of grapes to other countries at higher profit. Further the market can be expanded by diversifying the usage in the health drinks, confectioneries, medicines and cosmetics may help in stable utilisation across all venues. To make consumption across different segments uniform by adding value for grapes, so that proper rate for the product is obtained all through the year.

### **Unique qualities**

Geographically located in the western Ghats and topographically suited for cultivation of grapes all throughout the year This region is the only area which has more than 80% of agricultural area suitable for grape cultivation. One of the main region in Tamil Nadu that is highly suitable for Muscat Hamburg grape cultivation. More number of large scale farmers can go for new variety on risk basis. Grape research centre helps famers by guiding them on using new technologies and grape growing methods; This is the 2nd grape research centre in South-India after Pune. Dependency on grape cultivation is high among the local community. Labours also have high knowledge on grape cultivation .The farmers in the Cumbum Valley are able to harvest the fruits for 5 times in 2 years. Approximately, 85 percent of the total production of Tamil Nadu, irrespective of the variety is consumed afresh.The major competitive advantage is that there is cultivation and production of grapes even in the world's grape off-season period (i.e.)from July to September.

### **Concerns**

The small scale farmers who are in lease for 2-3 years at the cost of 4 -7 lakhs per acre tend to produce more amount of yield about 10 tons per acre compare to other three categories. Large scale farmer's results in producing lesser yield as they have no direct intervention in the field.

Small scale famers depend completely on this income and they use more amount of pesticides to get high yield which reduces the soil fertility, which in turn makes the farmers to use additional amount of pesticides and fertilizers in the future. Greed of the farmers for high yields, small market size, low price low margin, marketing intermediaries, attitude and mind-set of the farmers. Help extended by the Research centre is not able to reach the small farmers. Brokers / Intermediators are often procuring grapes at lower prices from the farmers and there exists no unity among growers. Farmers are avaricious cutting the fruits from the plant before it attains maximum sugar content, which makes it unsuitable for wine preparation. To increase yield, the high amount of fertilizers used, will make grapes from this region completely black listed in the Export market. Increasing labour costs will make the farmers to stop cultivating grapes in future. High possibilities of extinction of grapes in the region. Growers are shifting to other crops like banana and vegetables.

After many visits to the farmers and the growers it is understood that there is no unity among the farmers themselves. The attitude exhibited by them towards other farmers is not healthy. There is no co-operation and any decision taken for the overall welfare of the community is not adhered to. The mind-set of the farmers is to be changed as they do not focus on a holistic development. Hence the prices are determined by intermediaries. Theoretically there could be a lot of benefits which could be envisaged when the farmers and growers have better mind sets and work collectively.. They will also have a better bargaining power in determining the price of the grapes. The prices of the pesticides and fertilizers can also be availed at one price when everyone join hands as one. Most of the farmers follow traditional practices in cultivation and the pesticides are sprayed based on their experience rather than the requirement and schedule given by the research centre. Farmers harvest grapes five times in two years. If this region and farmers have to continue with harvesting grapes it is important to identify options and venues which could create interest to continue.