JASMINE

JASMINE GRANDIFLORUM

The two main producers of Jasmine grandiflorum concrete are India and Egypt. Together they account for about 95% of the market share. In India, the estimated production of concrete in 2014 was 3.5 to 6 tons. While Egypt may have produced as many as 4.5 tons in 2014. In Egypt’s case, these figures have come down from 11 tons/year in the mid-1970s (Fakhry, 2014). Other contenders are Morocco and China. Trials have been attempted in South Africa without conclusive results. (Naidoo, 2010).

In India, although cultivated throughout peninsular India in varying degrees, the extracts are produced predominantly in the Coimbatore district of Tamil Nadu state where the flowers are grown under contract primarily for extraction purposes. Anecdotal records are produced for religious and wedding functions. 90% of grandiflorum flowers of the Coimbatore district are used for extraction purposes but only 10% - 15% of the total grandiflorum cultivation in the state of Tamil Nadu is estimated to be used for extraction and almost none from those of other states. Grandiflorum estimates of total grandiflorum acreage under cultivation in Tamil Nadu alone is about 7,000 acres. (Palaniswamy, 2009 and 2012)

In Egypt, 95% of jasmine plantations are located in the Nile delta around the village of Shoubra Beloula El-Sakhaweya ... flower harvest used to be the share of the perfumery industry when the demand was mostly domestic, but with increasingly global demand this share is now closer to 10%.

Social and Economic Characteristics

In India, picking activity of the flowers is done manually. On average 3 to 4 kg of flowers for extraction are picked a day in 5 hours, while for flower money it extended to 7 - 8 hours a day. Usually all family members work in this activity. Jasmine (both grandiflorum and sambac) are important commercial crops in their areas of cultivation. Being hardy and drought resistant crops, they are typically grown in the drier regions (Egypt is mostly limited to critical periods in the cultivation cycle).

In Egypt, picking activity of the flowers is also done manually, every day of the season, between 3.00 and 10.00 a.m. On average 3 to 4 kg of flowers per acre are picked. Some individuals are capable of collecting up to 12 kg in the same time. Usually all family members work for 12 - 15 hours a day with an emphasis on whom obtain a consequential revenue from this activity which they can spend on their future needs (Groomed), children’s education, housing spending. This revenue goes untaxed as per Egyptian law. The steady income over a 7 months period is much appreciated by farmers as it is unique when compared with traditional crops that procure revenue only upon a single (i.e. spot) harvest (e.g. wheat, rice, corn). Moreover, jasmine contracts involve in most cases different degrees of pre-financing for the farmers from the factories helping to strengthen a sustainable economic structure. Jasmine provides the highest consistent return of all crops in Egypt. Cost of cultivation/water is around US$6000 (including harvesting costs). In winter farmers intercrop lettuce, pears, or olives with jasmine plantations thus adding to their income. Jasmine is the second revenue entry of Egypt’s national crop. A flourishing flower with some US$65 million in value. 100% of the production is exported providing a hard currency source to the country and a unique opportunity for farmers to obtain directly the dividends of their efforts without governmental interference (i.e. in the form of regulated market, imposed market pathways, taxes, etc.).

JASMINE SAMBAC

Despit being relatively new to the international market, the demand for this product has grown rapidly to reach a substantial and reasonable market size. Sambac: Concretes and absolutes used to be produced and consumed before therefore much more popular in the global F&F industry. The estimated production in 2014 was about 3 to 3.5 tons per day. The estimated demand of sambac concrete is believed to be around three tons. While India is the primary producer-ups to 60% - 80% of the market - these flowers reduce risks that are otherwise inherent to such a perishable product.

In Egypt, the period of production is typically from June to October, but may be extended from end-March to early December. The period is considered short for the projected market demand. The plant has a productive life of over 25 years, but well-groomed farms generally replace a plant after 15 years because of drop-out bushes which impact the acreage productivity. I produce between 9.3 to 14.2 tons of blossoms per year (4.6 tons per feddan/year, i.e. 4,200 m²) depending on extension of picking season and weather hygrometry and/or waning of blossoms by farmers. Each ton of blossoms gives 2.6 kg of concrete (0.26% yield) as an average over a season. Dry blossoms (not wet by dew or intentionally by the picker) as much as 3.1 ligot concrete. Egyptian concrete yield between 53% and 61% of Jasmine in absolute.

The by-product of jasmine absolute - i.e. jasmine wax - has a market in the cosmetics, candles, and wood polishing/paints trade.

The processing of the jasmine grandiflorum takes place mainly at farm/district level.

Social and Economic Characteristics

In Egypt, the season lasts from March to October, or longer in case of a mild winter, while the flowering is in flushes. In practice, the plant has a productive life from the 3rd to the 8th year and can yield about 4 - 5 tons of flowers per hectare. The concrete flower yield from flowers is between 0.12% to 0.15%. About 35% of Tamil Nadu’s total flower harvest used to be the share of the perfumery industry when the demand was mostly domestic, but with increasingly global demand this share is now closer to 10%.

The same as with Jasmine grandiflorum, the processing of Jasmine sambac takes place mainly at farm/district level.

Social and Economic Characteristics

Defining an area of around 65,000 acres, production involves around 30,000 farmers, where each farmer has in average 0.5 - 1 acre. Usually the whole family works in the farm with an average of 4 to 5 people in the family. There are around 80,000 to 100,000 people involved in the picking activity. Harvest times could extend to more than 8 hours a day, and harvesting ability can vary from 0.25 - 1.25 kg per hour depending on flowering density and individual experience. A farmer produces around 6 metric tons of flowers per year. Cost of cultivation average could be around US$5,000 to US$6,500 per hectare (including harvesting costs, which are the biggest ones).

Jasmine sambac is cultivated throughout peninsular India and to a smaller extent in the Gangetic plains. However most of the cultivation and all the extraction is undertaken in the state of Tamil Nadu. Government regulates the area of the jasmine sambac concrete extraction by supercritical carbon dioxide extraction, the most common method of extraction. This method is performed more than 80 species of the genus Jasminum. Depending on the species of Jasminum, the jasmine sambac is cultivated throughout peninsular India and to a smaller extent in the Gangetic plains. However most of the cultivation and all the extraction is undertaken in the state of Tamil Nadu. Government estimates of total sambac acreage under cultivation in Tamil Nadu alone is almost 16,000 acres. (Palaniswamy 2009 and 2012)

It should be noted that in the districts of Madurai, Vzhudahuvan; Thiru-Noolagam and Sivagiri have been granted a Geographical Indication Mark for the jasmine sambac flowers “grown there.”

Egypt, though not a producer today of Jasmine sambac, used to be an important source in the 1970s. As the botanical is still present in the country Egypt could well reactivate its production at any time.

Production and Processing Characteristics

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CONCLUSIONS

Jasmine (both grandiflorum and sambac) are important commercial crops in their areas of cultivation. Being hardy and drought resistant crops, they are typically grown in the drier regions (Egypt is mostly limited to critical periods in the cultivation cycle). Over 20,000 farmers in India cultivate jasmine as it provides income (even if variable) over an extended period of time. Usually the whole family works in the farm with an average of 4 to 5 people in the family so there are around 80,000 to 100,000 people involved in the picking activity.

Jasmine plantations in Egypt cover an area varying between 100-150 hectares and are supporting approximately 5,000 flower pickers. Some other 30,000 people family workers, transporters cooperatives, middlemen, also are participating in the jasmine business. Usually all family members work in this activity with an emphasis on whom obtain a consequential revenue from this activity which they can spend on their future needs (if unwedded), children’s education house spending. This revenue goes untaxed as per Egyptian law. Jasmine provides the highest consistent return of all crops in Egypt and is the second revenue entry of Egypt’s national aromatic raw material turnover with some US$65,000,000. A part of the production is exported providing a hard currency source to the country.