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Orissa's Fragrant Floral King –Kewda Is in Doldrums

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Abstract:

Kewda or 'Ketaki Viphala' (Pandanus odoratissimus) is an extract from the male flowers of a screw-pine tree. This is used to flavor foods and for Ayurveda healing. Although Ganjam district of Orissa produces around 90 per cent of the kewra of the country, Orissa is yet to tap the economic prospect. There are no units to produce the higher-end products derived from the Kewda flower extracts in Ganjam district. Kewda flower producers in Ganjam district are worried over the continuous decrease in the demand of the kewda extract while the kewda flower production is on the rise. This paper is an effort to find out the amount of kewda production and the major causes of decrease in kewda extract and suggest some steps to enrich the traditional occupation of floriculture prevalent in Ganjam district.

Keywords: Extract, floriculture, kewara, pandanus odoratissimus

1. Introduction

In Sanskrit, the plant is called Ketaki. The male plants are called 'Ketaki Viphala', and the female plants are called 'Swarana Ketaki'. Only the flowers of the male plant are harvested to extract the floral bouquet to produce Kewda. The Kewda plant grows up to 18 feet tall. The plants flower three times a year, i.e. summer, Monsoon, and winter. 60% of the flowers grow during monsoon season and possess the best floral bouquet. 30% of the flowers grow during summer and remaining 10% grow during winter. The creamy white color flowers are sheathed in long spikes about one foot long. Averagely, one mature plant can produce about 35 flower spikes, each weighing about 5 to 6 ounces. Ganjam district of Orissa produces around 90 per cent of the kewda of the country. Kewda flowers mostly collected from Ganjam district are very famous for extraction of essential oil. This aromatic plant is commercially grown in Chhatrapur, Rangeilunda, Ganjam and Chikiti blocks of this district. It is a major source of livelihood for a sizeable number of families in three blocks of Ganjam district. The state gets more than Rs.5.00 crores out of this crop annually from 3-4 blocks of Ganjam (Directorate of Agriculture, Odisha). About 80-85% of Kewda canopy is concentrated within 10 kms radius from the sea coast. It is estimated that about 5,000 hectares of land constituting 6% of total land area in Ganjam district are covered under Kewda canopy. In the Ganjam district the two blocks, i.e. Chatrapur and Rangeilunda covers 79% of the kewda plantation area and the rest by the Ganjam and Chikiti blocks. In the Ganjam district, it was estimated that 3, 00,000 to 4, 00,000 trees produce approximately 1, 00, 000, 00 number of flowers per day. Now there are 140 numbers of distillery units and each having 7-8 numbers of still / degs / bhatti. The total number of stills or degs is around 1200 out of which 51% is present in the Rangeilunda block.

The extract of kewda is used as a perfume in the cosmetic industry and used as a flavour of food materials. But most of it is used in the pan masala and gutka making and flavouring of tobacco. There are no units to produce the higher-end products derived from the Kewda flower extracts in Ganjam district. The flower extracts, distilled out at crude distilleries in Ganjam district are sent outside the State especially to Kannauj for refining and extraction of higher-end products. Production of higher-end products near the region of kewda flower production can lead to better market price for the producers of kewda flowers. The price of kewda flowers had plunged as several distilleries disagreed to run their units by buying flowers at higher cost. The distillers have the excuse that they are unable to pay more to the kewda growers as the price depends on the price of kewda extract fixed by the traders from Uttar Pradesh, especially the ones from Kannauj.

2. Objectives

- To identify the areas farming kewda.
- To identify constraints and difficulties faced by the kewda farmers.
- To identify the steps adopted by the government.
- To analyze different uses of kewada.
- To suggest some measures in improving the existing market of kewada.

3. Methodology

The study is based on both primary and secondary data collected from various sources. Various information regarding production, marketing and export of kewda are collected from different magazines and government publications. Survey was carried out in the field with a pretested questionnaire. This field visit gave enough information regarding collection, plantation area and number of flowers collected in a particular season, number of persons engaged in collection and processing of flowers, average per head income etc.

Views of 80 kewda farmers are taken to find out the different causes of problems in this industry.

3.1. Diverse Use of Kewda Plant

Each and every part of the floral king, kewda plant, has different uses.

- The inflorescence (male flowers) is used for Production of kewda oil / attar / Water.
- Leaves from Pandanus amaryllifolius are used as a spice in South East Asia to flavour curries and desserts.
- The tender buds are sometimes eaten raw or in a cooked form.
- Leaves are used for covering huts, for making mats, cardage, hats and baskets.
- The fibres present in the leaves can be utilised for papermaking.
- Leaves are used in Southeast Asian countries to provide special aroma to rice, curry etc. In case of desserts it is used for making pandoma cake. It is also used as a supplement to chocolate. It is also used in the cooking utensils to use the Aroma.
- Anthers of male flowers are considered for curing diseases of blood.
- The juice or the inflorescence is useful in rheumatic arthritis in animals.
- Therapeutically the leaves are very much valuable in the treatment of leprosy, smallpox, scabies, leucoderma, fever, diabetes etc.
- The tender leaves are valuable in curing diseases of the heart and brain.
- These leaves have been used to treat chest pains, reduce fevers, and inflammation from arthritis. Chewing the leaf helps oral health and stops bleeding gums. The leaves are also used to ease stomach cramps and spasms, and are given to women recovering after childbirth. It is thought that they might have anti-cancer properties too, and trials are being carried out to see if they are effective against cancer. Extracts of these leaves may be added to bath water for skin problems and relief from sunburn.
- The leaves contain a natural insecticide which has been effective in killing mosquitoes.
- Seeds from the plant are used to strengthen the liver and heart, and the oil. It has antiseptic qualities similar to eucalyptus oil and the roots are diuretic, and used as a tonic and a purifier, so the whole of the tree is beneficial to our health.
- Flowers are used to cure scalp and skin ailments. Epilepsy, sour throat can be treated with this. The spike is used to treat rheumatic arthritis in animals.
- In traditional medicine the powdered anthers and tops of the flower bracts are used to cure headaches and to treat rheumatism and epilepsy. The powder obtained from inside the anthers is inhaled or smoked like a cigarette as a cure for sore throats.
- Roots are good soil binder.
- Long aerial roots contain very strong fibers, which are mostly used for making ropes and baskets. The fibers are also useful for making high quality handmade paper.
- It is believed that the root boiled in milk can cure female sterility and can prevent a miscarriage.
- Fibrous roots of kewda are used to make coarse paint brushes.
- Kewda oil is used as a stimulant, Antispasmodic, Anti Rheumatic, medicine for headache.
- In the Asian subcontinent, it is thought that the oil is an aphrodisiac, and a decoction of the bark is said to help wounds heal quickly.
- It is also used for is used for relieving ear ache.
- Kewda attar blends with all types of perfumes.
- It is used for scenting clothes, bouquets, lotions, cosmetics, soaps, hair oils, tobacco, pan masala, agarbathi etc.
- Kewda water is used for flavouring of sweets, syrups, soft drinks etc.
- It cures many skin diseases.

3.2. Problems Faced by the Kewda Industries

- Unfortunately, in absence of quality standard malpractices have reached threatening proportions as no standard other than aroma is known for determining the quality of Attar or other products of kewra.
- Generally the evaluation of quality of Attar and Rooh of kewra is being done on the basis by smelling by the experience persons in the trade .
- Major use of the kewada oil is for perfoume and flavouring pan masala or gutka.The other uses of the plant have not been undertaken in a massive manner.
- No governmental organization is there to promote alternative uses of the kewada plant.
- Banks are not interested to finance such cultivation.

- The growers do not get remunerative prices for their produce due to lack of market linkage.
- In some parts of the country floriculture is covered under insurance. Since Ganjam is vulnerable to natural calamities and there are high chances of crop loss flower growers demand insurance for damage like other crops.
- Floriculture in Ganjam district received a setback after last October Phailin. The flower-growing area shrunk to 300 acre from 700 acre in the aftermath of the disaster. According to Natabar Sahu, secretary of 'Ganjam zilla kia chasi surakhya samiti', kewda growers, most of the kewda bushes were either uprooted or had their upper ends blown away by the cyclonic storm due to which they could not flower in the next flowering season.
- According to B Venkatramana of Kanamana, a villager of Chhatrapur block, Production of kewda flowers fell by 80% this year. He viewed that whereas kewra flower worth Rs 15,000 to Rs 20,000 used to grow annually from an acre. This year only Rs 1,000 to Rs 2,000 can be earned from the same patch of land.
- Although the horticulture department made loss assessment for coconut and cashew plants during Phailin, no official assessment was done for the kewra cultivation, farmers alleged.
- According to another kewda grower Duryadhana Behera, due to the absence of any organized society rates of the flowers are also decided by the traders and the middlemen are taking benefit of the situation.
- Almost all kewda plants were damaged in 1999 super cyclone. Over the years, new trees were being planted. But Phailin and Huhhud again devastated everything. Kewra bushes, which were planted last year, would take another five years to produce flowers, said growers.



Figure 1

3.3. Efforts Undertaken by Government

- Efforts has been made by O/o DC(MSME), M/o MSME, Govt. of India and MSME-DI, Cuttack to setup a quality control facility at Behrampur and a centre is setup under Cluster Development Programme in the year 2001-02. This centre is now functioning as Extension Centre of FFDC Kannauj providing training and quality control services to the enterprises engaged in this field.
- A training programme was undertaken by FFDC, Kanauj to enable their participants to access the basic quality of their essential oils/aroma chemical products.
- A Sugandhi Mela is being undertaken every year since 2010 by DTTDC through the technical assistance with Fragrance & Flavour Development Centre (FFDC), Kannauj under Ministry of Micro, Small & Medium Enterprises (MSME). The aim is to create awareness about the traditional Itra and importance of essential oil for health care and highlight the ancient and rich heritage of India in the field of natural perfumes and essential oils in this festival. A demonstration on Aroma Therapy and essential oil is also highlighted apart from the sale of products related to Itra and Sugandhi. This year this mela was held on 10-12 October 2014 at delhi haat Janak Puri.
- Various other association like : The Attar & Perfumers Association, Kannauj, Essential Oil association of India, New Delhi , Fragrance & Flavour Association of India, Mumbai are working to Sale and display of perfumes, itra and natural essential oils, Competition of preparing varios handmade products like Itra, Sugandhi, wooden boxes and velvet boxes used for Itra and Sugandhi and Presentation of perfumes in traditional bottles, Sale & display of product related to it such as herbal products, agrabatti, room freshners, vapourisers. Sprays, herbal cosmetic, Sale and practical, demonstration of "Kuppi"(handmade leatherbottle) making.
- A flower market and training centre has been established to boost the Floriculture in southern Odisha. The Rs 2.55 crore centre sprawls upon an acre and was jointly set up by the agriculture department and regional marketing cooperative society (RMCS), Digaphandi. The centre has facilities like cold storage, packing, a resting room for flower growers and a conference hall for them. This may be helpful to the Kewda farmers.

3.4. International & National Market Potential

The attars do have a good market potential in Middle East countries where they are using it due to absence of alcohol. Simultaneously, if properly packaged and marketed in the name of natural fragrance there does exist a market potential in other countries as well. The attars can have a good market potential in international market if consistency in quality and supply is ensured. They can found a good use in high class fragrances, cosmetics and even for aromatherapy as far as National market potential is concern, the prevailing one is in Tobacco, Pan masala & Gutkha industry but, its horizon of market can be widen if surety about quality and assurance about consistency in supply could be made. It could found a lot of use in herbal products and in aromatherapy. There also exists a good potential if they are packaged in small packing in marketed in attractive manner. If, there national & international potential are properly harnessed there, exists a good future for Indian natural fragrance & attars.

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