

LOTUS PLANTATION & PRODUCTS: BOOST FOR AGRO ECONOMY

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ABSTRACT:

*The present study emphasizes the products of lotus and the plantation as a boost for the agro-economy to explore how to add income to the Agro-industry by using lotus various parts of Lotus (Padma) for boosting the economy. Lotus (Padma) is offered to lord Vishnu, in Hindu mythology, also it is our national flower. Lotus plant comes under the Nelumbonaceae family and *N. nucifera* species; considered the most beautiful and exotic plants in the world. Lotus has historical cultural and spiritual significance. It is a sacred flower in both Hinduism and Buddhism and in other religions, the market for products will be easily available not only in India but on the globe because almost religions believe in Lotus being sacred. The Lotus plant is believed to have healing abilities. since India has huge water resources the lotus product can be a profitable business if tapped to the best.*

KEY WORDS: Agro-Economy, Lotus, Integrated Farming, Processing Industry, Vegan, Organic Food.

INTRODUCTION:

Lotus (PADMA) is offered to lord Vishnu, in Hindu mythology, also it is our national flower. Lotus plant comes under the Nelumbonaceae family and *N. nucifera* species; considered the most beautiful and exotic plants in the world. It is a perennial, rhizomatous, and aquatic herb which usually grows to the height of 15cm and has a horizontal spread of 3 meters. Lotus farming is mostly done to fulfil food and medicinal requirements by using seeds, rhizomes/roots, and flowers. The entire aquatic herb has nutritional value. This business of lotus products is still untapped. It can provide a livelihood for millions. In India temples of the north serve Makhana as prasada in the temple and lotus products are consumed during the fast. The largest producer of lotus seeds in the world is China, lotus seeds are widely utilized in food and medicine in many south-east Asian countries including Indonesia, Thailand, Nepal, Sri Lanka, and India. The most flourishing business is lotus fibre cloth making in Myanmar which is 100 percent vegan fibre like cotton.

AIM AND OBJECTIVE:

The present study emphasizes the products as a boost for the agro-economy to explore how to add income to the Agro-industry by using various parts of Lotus (Padma) for boosting the economy. Lotus fibre for making clothes, dried slices of rhizomes /stem are fried and used as a snack or side dish, flower jam, and lotus seeds are like raw potatoes. pharmaceutical products of lotus plant like anti-aging enzymes named L-iso aspartyl methyltransferase found, lotus can be used in making Perfumes, Facial masks, Essential oils, and other beauty Products. (meticulousplans.com/2019/05/08/lotus-processing-business)

OBSERVATION AND DISCUSSION:**DATA OF PRODUCTS:**

Sr. No.	Products of Lotus	Cost	Product-Country
1	Lotus Stem Chips	300 INR / jar (vegan100%)	Burma
2	Lotus Flower Powder	94 INR / 100gms	India
3	Lotus Flower Oil	27180 INR/ 15ml	Burma/India
4	Dried Lotus Stem	332 INR / 200gms	India
5	White Lotus Youth enhancing activator	790 INR / 200ml	India
6	(Kamal Ghatta) Lotus seeds Makhana	149 INR / 100gms	India
7	Lotus Fibre Cloths	31,000 INR for 33cm x 175cm long. scarf	Burma
8	White Lotus Seed	630 INR / 500gm	China
9	Black Lotus Seeds Dried Natural	720 INR / kg	China
10	Lotus Jam by Future organic	375 INR / 350gm	India
11	Korean Nutritious Lotus Seed Core Tea For Blood Pressure Control	172 INR/40 sachets(0.9gmeach)	Korea
12	Tea Dried Blue Lotus Flower	720INR/pack(30gm)	Korea/China
13	Lotus root Powder	699 INR / 500gm	Korea

Twenty blooms are produced by a single lotus plant and a 17452sq. feet pond produces 5,000 to 6,000 flowers in one season. On average, each farmer gets around one lakh lotuses every year. With each flower selling at a minimum of Rs 5 per piece, growers make at least Rs 5 lakh annually. Lotus flowers are required for puja almost throughout the year. But in India thus this use stand limited for the production of lotus. Lotus requires 6-7 hours of sunlight, to blossom, the lotus flower grows through mud, and dirty pond water, the plant is tropical, and its plants grow properly at a normal temperature less care is required as compared to other cultivations. Lotus prefers running water but can grow in stagnant water and mainly grows in the water around 7 feet deep (Hlaing C. S., 2016;). Freshwater fish can be grown along with this aquatic herb generating double income. Several fish species have been used in such integrated systems including carp, tilapias, and others. (<https://www.wikihow.com/Make-a-Lotus-Pond>)

The most flourishing business is lotus fibre cloth making in Myanmar which is 100 percent vegan fibre like cotton. Lotus Fabric at Rs31,000 INR for 33 cm / 175cm long. Scarf. Lotus Silk Fibre is extracted in certain parts of Manipur India. The practice of Lotus fibre extracting has been popularized in the Bishnupur district of Manipur by a 27-year-old girl, Bijiyashanti Tongbram. A few kilometers from her home is Loktak lake, which is the largest freshwater lake in the Northeast region and is still in the preliminary stage in India. (www.prakati.in/clothes-made-from-lotus) The lotus fabric looks like a blend of linen and silk, with unique properties, such as being light, soft, and special breathable, it breathed like linen without wrinkling badly and repels stains as well. Cool in summer and warm in winter, lotus fabric is highly breathable and wearable year-round.) Chinese water lily or Indian lotus is the major type of lotus used for weaving in Myanmar (Ashin Jawti, 2016)

Lotus root tea, called yeongeun-chain Korean, is a tea made by infusing dried lotus root (rhizome) slices or mixing lotus root powder in hot water. (Jeong, Dong-hyo; Yun, Baek-hyeon; Yi, Yeong-hui, eds. (2012).) (-Nutritious Lotus Root Recipes To Try". 2021). Lotus root powder for tea can be made either by drying lotus root juice, or grinding dried lotus root slices into powder Shin Yun-Nam, owner and chef of "Andong Hwaryeon," serves lotus tea, at her restaurant in Andong, North Gyeong Sang Province. The leftovers produced from lotus tea- and yeast-making are used as compost to grow apples. Bottled yeast extract from lotus leaves and flowers is used at Andong Hwaryeon Korea(jinhai@ktimes.co.kr)

Currently, most rhizomes (Kamal prakand)are consumed fresh, and it is not common to store them due to their poor shelf-life performance. (Guo, H.B. (2009), Lotus stem in India called Kamal kakdi is a vegetable dish.

CONCLUSION:

Lotus has historical cultural and spiritual significance. It is a sacred flower in both Hinduism and Buddhism, ["*Nelumbo nucifera* (sacred lotus)". Kew. Archived from the original on 30 May 2014. Retrieved 26 July 2015.] representing the path to spiritual awakening and enlightenment. In Christianity, the lotus flower is often associated with the apostle Thomas and his coming to India(Erwin Fahlbusch 2008). It was also an important symbol in ancient Egypt, where it represented the path from death to rebirth to the afterlife (Stanton, Kristen M. 2021). "*Lotus Flower Meaning & Symbolism*". Uni Guide. The market for products will easily be available because almost religions believe Lotus is sacred. Though India produces few products they are in low-scale production for local consumption or limited sale online. Since India has huge water resources the lotus product business can be profitable if tapped to the best.

REFERENCES:

- 1) Ashin Jawti. (2016, 11). Ashin Jawti Personal Blog. Retrieved 12 2017, <https://ashinjawti.blogspot.com/2016/11/blog-post.html>
- 2) <https://www.wikihow.com/Make-a-Lotus-Pond>
- 3) Hlaing, C.S., 2016. Lotus Robe in Kyaing Khan Village Innlay Lake, Shan State (South): An Anthropological Perspective. Dagon University Research Journal, 7(1), p.102.
- 4) [Meticulousplans.com/2019/05/08/lotus-processing-business](https://meticulousplans.com/2019/05/08/lotus-processing-business)
- 5) "*Nelumbo nucifera* (sacred lotus)". Kew. Archived from the original on 30 May 2014. Retrieved 26 July 2015.
- 6) Nutritious Lotus Root Recipes To Try". Honest Food Talks. 15 January 2021.

- 7) Stanton, Kristen M. (June 21, 2021). "Lotus Flower Meaning & Symbolism". Uni Guide.
- 8) Erwin Fahlbusch. Wm. B. Eerdmans The Encyclopedia of Christianity, Volume 5 y
Publishing - 2008. p. 285. ISBN 978-0-8028-2417-2.
- 9) Jeong, Dong-hyo; Yun, Baek-hyeon; Yi, Yeong-hui, eds. (2012). "Yeonnip-cha". Cha saenghwal
munhwa daejeon (in Korean). Seoul, Korea: Hongikjae. ISBN 978-89-714- 3351-5. Retrieved 28
February 2018.
- 10) jinhai@ktimes.co.kr
- 11) Guo, H.B. (2009). "Cultivation of Lotus (*Nelumbo nucifera* Gaertn. spp. *nucifera*) & its utilization
in China". Genet Resource Crop Evol. 56 (3): 323–330. doi:10.1007/s10722-008-9366-2. S2CID
19718393.