

3. Atmanirbhar India: A Case Study of Edible Oil and Government Initiatives to Promote Oilseeds

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Abstract:

The vast gap between the demand and production of edible oil forces India to import humongous quantities of edible oil. This import bill puts negative pressure on our economy for its development. To fill this gap between demand and production and getting self-reliance in the field of edible oil import, the Government of India has implemented various measures such as promoting oilseed cultivation with various schemes and financial support to the farmers and increment in import duties on crude edible oil. These measures will impact the livelihood of farmers as well as the people of the nation. This chapter will emphasize the current and future strategies which include various measures on supply-side interventions as well as demand-side interventions, investment scenarios in research and development, innovation, and technology adoption, and collaboration among stakeholders. In this chapter, some of the successful case studies are discussed which serves as an example of how targeted interventions and collective efforts can lead to transformative change and a self-reliant nation.

Keywords:

Atmanirbhar Bharat, oilseed, import, vegetable oil, farmer, NMOOP, PMKSY, Adani Wilmar, Saffola, Patanjali Ayurved Limited.

3.1 Introduction:

As we know that India is the most populous nation on the earth which makes it one of the biggest markets in the world also. This market has a huge demand for edible oil. This huge demand is partially fulfilled by domestic production and largely relies on imports. This large import creates a huge import bill which hurts the nation's economy and also makes us

dependable on various external powers which makes our nation susceptible to various external causes and decreases the sovereignty of our nation.

To address these issues this problem government of India started National Mission on Oilseed and Oil Palm (NMOOP) in 2014. This mission has goals for encouraging the local production of edible oil. Under NMOOP, the government offers various incentives including financial support to the farmers for encouraging the production of oilseeds and oil palm production and productivity. To increase productivity the NMOOP promotes the use of high-yielding varieties and best agronomic practices. In addition to this government also introduced various schemes.

These schemes include PMFBY (Pradhan Mantri Fasal Bima Yojna) which ensures farmers' crops by an insurance coverage program which saves them in case of crop failure, RKVY (Rashtriya Krishi Vikash Yojna) which ensures the overall development by providing financial assistance for various activities for the cultivation of oilseed and PMKSY (Pradhan Mantri Kisan Sampda Yojna) which focuses on providing modern infrastructure for the food for oilseed processing industry.

In addition to this reducing the import bills on edible oil import government increased the import duties on refined and crude edible oils. This increases the cost of imports. Thus, the import of edible oil would be reduced consequently and increased domestic production.

What are Edible oil and its importance:

What is Edible oil and its importance: Oils which are safe for human consumption are called edible oils which are also known as cooking oils which are of liquid or semisolid consistency at room temperature and are generally obtained from various sources like animals, plants and microorganisms.

With uniqueness in taste and variety, there are numerous types of edible oils available in the market. In which the most common ones are soybean oil, rice bran oil, sunflower oil, corn oil, olive oil, coconut oil etc. Out of this soybean oil is the most popular due to its low price, high smoke point and neutral taste and the olive which is known for its heart-related benefits.

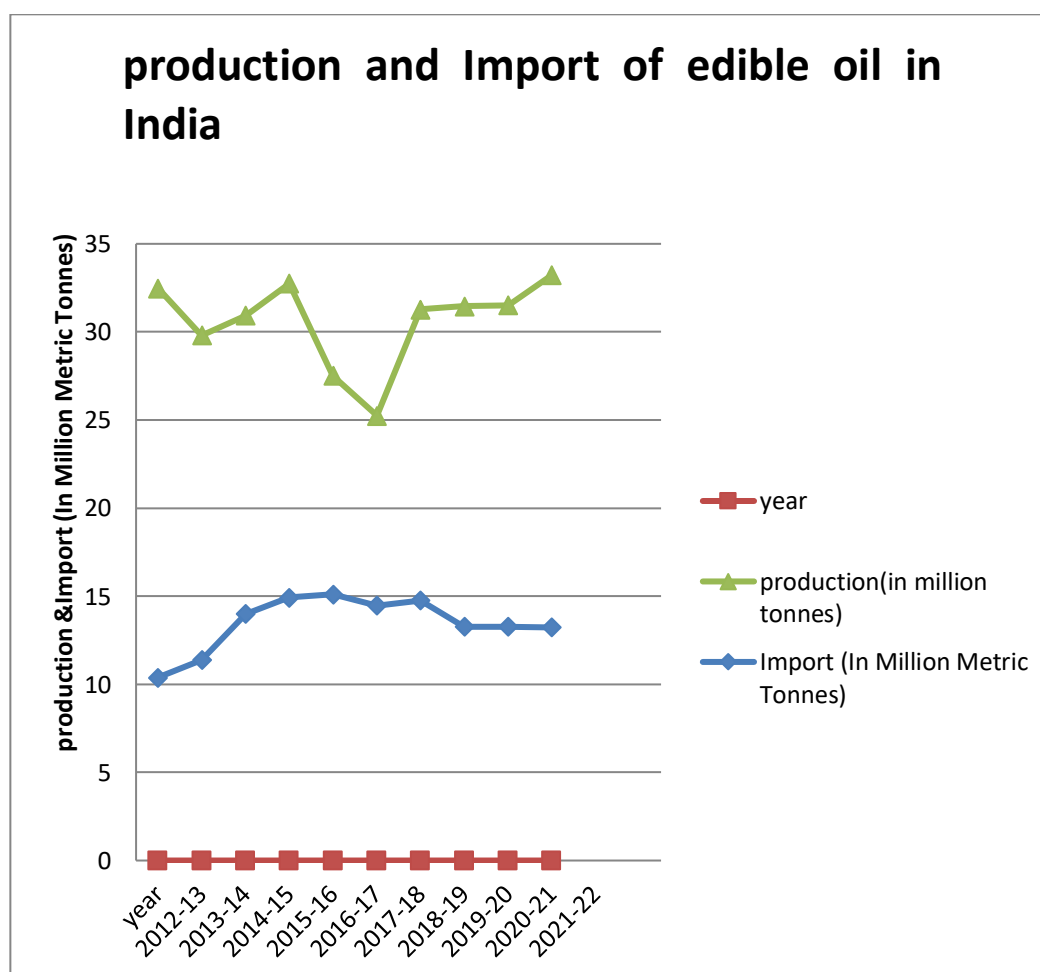
The high consumption of oil in Indian cuisine increases its significance in Indian culture. Due to the high consumption of oil, our country has ranked top in the per capita consumption rate of oil. To fulfil this huge demand our own production is not sufficient so we rely highly on imports for fulfilling our demand. This import creates very large import bills which impose varieties of risks on our economy. Besides, economic risk, it also poses a risk to the food security of our nation.

As we know that our large proportion of the population is dependent on agriculture and is poor so for increasing the income of these underprivileged people, the production of edible oilseed will help a lot and will also help in the diversification of agriculture and also helpful in encouraging the sustainable farming practices by farmers. For promoting this government has taken various measures the provision of subsidies and incentives.

A large portion of our diet consists of edible oils which are not only a rich source of essential nutrients and also have various health benefits, the anti-inflammatory properties of olive oil and coconut oil which is believed to be helpful in weight loss and improving the function of brain. There are various health benefits which are hard to count in general.

Overview of Edible Oil Market in India: Nearly 60% of the total requirements of edible oils are imported into India. The vastness of the nation and its dependency on imports makes it the largest importer of edible oils in the world. Besides the vastness, the diversity in the population has different preferences on the regional level also.

The South and West Indian people prefer groundnut and coconut oil, while Vanaspati and a partially hydrogenated mixture of edible oils such as soybean, sunflower, rice bran, and cottonseed oils, are preferred by people of northern plains and the peoples of east and north Indian people prefers mustard or rapeseed oil.



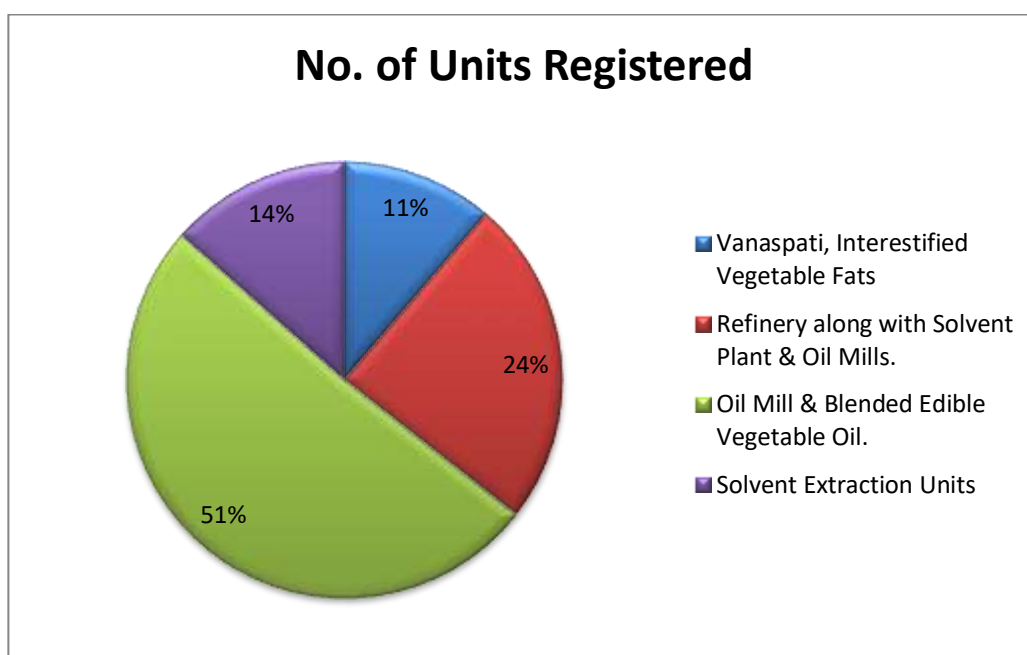
Source: Indian Vegetable Oil Producers' Association. Govt. of India

Thanks to advancements in technology, oils can now be refined, bleached, and deodorized, making them colourless, tasteless, and odourless. Consequently, different oils such as soybean, cottonseed, sunflower, rice bran, and palm oil (specifically, its liquid fraction known as palmolein) are widely used in the Indian kitchen. Refined palmolein, in particular, has become increasingly popular in hotels, restaurants, and the preparation of various food products.

According to estimates, roughly 35% of the Indian edible oil market comprises raw oil, 60% comprises refined oil, and 5% comprises Vanaspati. Of the total domestic demand for edible oils, approximately 56% is satisfied through imports, with palm oil/palmolein accounting for about 54% of those imports.

3.2 Status of the Vegetable Oil Industry:

Vegetable Oil Industries registered under VOPPA(R) Order, 2011, with the Directorate



Challenges and Solutions: despite the fact that the steps taken by the government have been productive, boosting the commercialization of oilseeds remains confronted with an assortment of obstacles. Farmers' struggle to obtain financial assistance is an important barrier that prohibits them from undertaking investments in the cultivation of oilseeds. The government may resolve this problem through offering economic assistance to farmers through a variety of programs, including the Pradhan Mantri Fasal Bima Yojana, offering crop protection and support against the possibility of crop failure.

Lack of infrastructure, such as transportation and storage systems, is another problem that could lead to the loss of crops like oilseeds. To resolve this problem and enable farmers to

receive higher prices for their commodity, the government should act to build storage facilities and improve the transportation system.

Another problem is that farmers don't understand the benefits and drawbacks of farming sustainably and of cultivating oilseeds. By offering farmers opportunities for education and training that would encourage them to transition to environmentally friendly farming practices and increase agricultural output, the government may be able to address this issue.

3.3 Impact of external dependence on edible oil:

Current Account Deficit: India has been one of the biggest consumers of edible oil worldwide, with a \$19 billion import bill for the commodity. This significantly impacts the nation's current account deficit.

Impact on Economy: The high import bill for edible oil negatively impacts the economy of the country. It puts pressure on the Indian rupee, which may lead to devaluation of the currency.

Dependence on Other Countries: India is more sensitive to alterations in the price and gaps in supply as a result of its reliance on foreign nations for its edible oil. This might outcome in a shortage of edible oil, which might have a consequence on a nation's capacity to sustainably feed itself.

Competition for Local Producers: The local producers of edible oil are additionally opposed by the imports from abroad. The demand for locally generated edible oil could drop as an outcome of rising affordable imports from other nations.

Adverse Environmental Impact: Transporting edible oil to India generates a sizable amount of carbon emissions, which contribute to climate change. Additionally, it's possible that other nations' edible oil production doesn't follow the same environmental norms as it does in India.

Health Concerns: In India, vegetable oil is a essential component of the eating habits, and the oil's composition is critical to preserving human health. Medical problems could occur if foreign oil is not manufactured to the same standards as native oil.

3.4 Government Initiatives to Promote Oilseeds:

A. National Mission on Oilseeds and Oil Palm (NMOOP):

The NMOOP is a government initiative in India to boost oilseed and oil palm production, reduce import dependence, and achieve self-sufficiency in edible oil. Launched in 2014, it focuses on expanding cultivation areas, enhancing productivity, and rejuvenating the oil palm sector. It provides farmers with high-yielding varieties, quality seeds, and technological support. Advanced agricultural practices, mechanization, and irrigation techniques are promoted. Financial assistance is given for oil palm planting material and

processing units. The mission conducts training, capacity building, and farmer education programs. Public-private partnerships are encouraged. The NMOOP aims to increase oilseed production, decrease oil imports, enhance food security, and uplift rural livelihoods. It is implemented through state agricultural departments, with funds allocated based on production potential.

B. Pradhan Mantri Kisan Sampada Yojana (PMKSY):

Pradhan Mantri Kisan Sampada Yojana (PMKSY) is a scheme by the Indian government to strengthen the food processing value chain. It was announced in 2016 under the Ministry of Food Processing Industries (MoFPI). Its goal is to increase farmers' income by reducing post-harvest losses and creating value-added opportunities. PMKSY focuses on establishing modern infrastructure like Mega Food Parks and cold chain facilities. It promotes agro-processing clusters near farms, fosters linkages between farmers and stakeholders, and emphasizes skill development. Quality assurance measures are encouraged to ensure safe and high-quality processed food products. Financial assistance is provided to state governments, cooperatives, farmers' organizations, and entrepreneurs. PMKSY aims to enhance food processing, minimize wastage, add value to agricultural products, and generate employment in the sector.

C. Technology Adoption:

The government stimulates the implementation of innovative techniques in agriculture for the production of oilseeds. This includes the spread of high-yielding varieties, the use of superior seeds, as well as modernized farming methods, efficient drip irrigation methods, and integrated control of pests.

D. Subsidies and Financial Assistance:

Farmers obtain an array of grants and subsidies that support the farming and cultivation of oilseeds. Subsidies for commodities like seeds, fertilizer, herbicides, and irrigation technology are all included in this. Farmers are additionally provided with access to loans and credit facilities at discounted rates. Farmers will benefit economically from this.

E. Price Support Mechanism:

Price support mechanism involves the government purchasing the surplus produce from farmers at a pre-determined minimum price, which is often higher than the prevailing market rate. By this the main commodities are procured and protect the farmer against economic loss.

To make sure there is an equitable price for farmers' produce and protect them from market fluctuations, the government provides a Minimum Support Price (MSP) and procurement mechanism for oilseeds. They are given an assured marketplace and income security as a result. 7 oilseeds are covered under MSP (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed)

Research and Development: The government provides financial assistance to research and development organizations to produce improved oilseed varieties that have high oil content as well as develop innovative technologies for oilseed cultivation. Research institutions and agricultural universities play a significant role in these efforts. e.g. The Indian Institute of Oilseeds Research is located at Rajendranagar, Hyderabad.

3.5 Case Study: Success Stories of Atmanirbhar Bharat in Edible Oil:

A. Groundnut Oil: Empowering Farmers in Gujarat:

Groundnut oil serves an essential part in Gujarat in strengthening local farmers. This is because there's an enormous demand for the oil, which offers farmers lucrative possibilities to sell what they grow. Additionally, groundnut growing and oil manufacturing facilities provide farmers with a stable source of income that supports their families. Farmers can earn greater profits by transforming groundnuts into oil rather than by selling it raw, offering up new prospects for earnings. Groundnut farming stimulates the adoption of superior agricultural techniques, which raises agricultural understanding and fosters environmentally friendly farming practices.

In addition to providing support through various programs, subsidies, and financial aid, the government and Farmer Producer Organizations (FPOs) play critical roles in empowering groundnut producers by supporting collective marketing, bulk input purchases, value addition, and market connections.

B. Adani Wilmar Limited:

A partnership comprising the Adani Group and Wilmar International Limited, has achieved outstanding accomplishments in the Indian edible oil industry. Their market value hovers around 603 billion INR. The company offers an extensive array of edible oils to satisfy the preferences and needs of different customers. Various cooking oils can be purchased under their brand name Fortune, namely refined oils, groundnut oil, rice bran oil, and soybean oil. They have been able to have an impact in numerous sectors of the edible oil market because of their wide variety of products.

Adani Wilmar is devoted to producing outstanding goods as well as creating unique edible oil products. To attain flawlessness, they adopted modern production processes and exacting standards for quality control. They were among the first to bring branded, sealed edible oils to India, giving clients access to dependable commodities.

Their products are now obtainable in rural as well as urban parts of India because of the extensive distribution network they have built there. They have been able to effectively reach their consumer base and keep a strong presence across the country through their established connections with merchants, wholesalers, and retailers.

The organization implements an approach that prioritizes customers, acknowledging and responding to the ever-evolving requirements and tastes of consumers. They make expenditures in research and development to produce revolutionary products that fulfill

customer demands for more nutritious and sustainable oils to use for cooking. Adani Wilmar has been able to engage customers and build trust in their products thanks to their strong brand positioning and effective advertising strategies.

In the cooking oil industry, Adani Wilmar places a high priority on sustainability. They place a strong emphasis on ethical raw material sourcing, assist farmers through agricultural programs, and finance renewable energy initiatives. This dedication to environmentally and socially responsible business practices not only contributes to the company's success but also reflects the rising demand for such products among consumers.

C. Marico Limited:

Since their brand "Saffola," has become a market leader in edible oil. Their success has been credited with a number of variables such as the emphasis on health and wellness, the requirement of healthier cooking oils like Saffola Gold, Saffola Active, and Saffola Total, and appealing to consumers searching for cooking oils that enhance health. They have made investments in research and development to promote the medical advantages of saffola oils with information gathered from the scientific community. Saffola oils have been shown in studies to contribute to heart health, cholesterol control, and general health.

Because of its scientific foundation, the brand has been able to attract the attention of both consumers and physicians. Thanks to their approach to promoting health, scientifically proving their products, using effective advertising, beginning innovative products, and maintaining a well-established distribution chain, they achieved enormous success in the Indian edible oil market. Their devotion to both product quality and client satisfaction has been an important variable in their success.

D. Patanjali Ayurved Limited:

Since its establishment in 2006, by Baba Ramdev and Acharya Balkrishna Patanjali Ayurved Ltd. has broadened its sales channels to include dedicated stores, hypermarkets, and even the premises of its ashram. Casual conversations with shopkeepers and retailers show how major FMCG corporations are altering their marketing techniques and even significantly reducing prices in order to compete with the Patanjali trend. With its brand name "Patanjali", it has achieved tremendous achievement in the vegetable oil industry.

This company utilizes organic components in its oil products and has focuses on Ayurvedic principles. They encourage the use of traditional approaches and herbal extracts to produce oils that are thought to have beneficial impacts on health. This Ayurvedic positioning has received favorable reviews from individuals seeking natural and holistic health cures. By providing edible oil products at affordable prices when compared to other organizations on the market, Patanjali has gained popularity. Cost-conscious consumers have been enticed to this strategy, which has given them access to a substantial chunk of the market. A broad spectrum of edible oils is available from Patanjali to satisfy various customer tastes and preferences.

There are many success stories on processing and marketing side but rare success stories are available at production level. But recent government policies and intervention may lead to numerous success stories in future.

3.6 Conclusion:

This chapter which is entitled "Atmanirbhar India: A Case Study of Edible Oil and Government Initiatives to Promote Oilseeds" will give an insight view of the various steps and efforts which are made by the Government of India in the process of making the nation self-reliance in the sector of edible oil. This chapter provides a comprehensive analysis of various challenges faced by India in filling the gap in domestic demand and supply with a limited amount of domestic production and ways of reducing the import bill thus removing the hard nail from the economy, which is the promotion of oilseed cultivation and other remedies for it. One of the key findings of the chapter is the large import bill for meeting the demands of the nation which costs a drain of foreign exchange reserves. Putting the Indian economy at a vulnerable financial risk and also may put forward a risk of food security due to the fluctuation in the price at international markets. To address this issue, the Indian government has introduced several policy measures and initiatives to boost the cultivation of oilseeds within the country. The chapter highlights the implementation of schemes such as the National Food Security Mission (NFSM) and the Pradhan Mantri Kisan Sampada Yojana (PMKSY) that aim to increase oilseed production and improve the overall productivity of the sector. These initiatives involve providing financial assistance, promoting modern farming techniques, enhancing research and development efforts, and creating infrastructure facilities for oilseed growers. In addition to this, the chapter also signifies the technological advancement and research & development in the field of high-yielding and disease-resistant varieties of edible oilseeds. It also focuses on the need for effective coordination among various stakeholders' farmers, agricultural research institutions, and policymakers, to achieve the desired objectives. While the various government-led initiatives have shown good results in boosting local oilseed production, it is also important to acknowledge that achieving complete self-sufficiency in edible oil production will require consistent and sustained efforts, long-term planning, and continuous monitoring of this important sector. In addition, to these addressing challenges such as fragmented and small land holdings, access to credit, and market linkages for small and marginal farmers will be crucial to ensure the success of these very initiatives. In conclusion, the case study on Atmanirbhar India's efforts in the edible oil sector demonstrates the government's commitment to reducing dependence on imports and promoting self-reliance. The initiatives implemented so far have laid a strong foundation for the growth of the oilseeds sector. However, ongoing efforts and innovative approaches will be necessary to achieve long-term sustainability, enhance productivity, and make India truly self-sufficient in edible oil production.

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