



## Edible Oil Trade Liberalization in India: What Can We Say from Policy Perspective?

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I obtained my PhD in Economics from Indian Statistical Institute, Delhi in 2017. My primary research interest includes applied welfare economics, development economics, food and agricultural trade. I am very much interested about policy oriented research.

### Policy Recommendations

If Government and policy makers in India want to promote edible oil import, they should make sure smooth transition of the poor oilseeds farmers (who produce traditional oilseeds like groundnut and mustard) to other crops like cotton and soyabean.

### Summary

India moved towards trade liberalization in early 1990s' and edible oil was one of the sectors where import liberalization started intensely. Starting from near-autarkic policies that prohibited import of either edible oils or oilseeds, restrictions were relaxed and tariffs reduced on edible oil imports. India is now the world's largest importer of edible oils and imports account for 70% of domestic consumption. Among all edible oils, palm oil constitutes the dominant share in India's edible oil import. The access to cheaper imported oil increases its consumption. This is reflected in the increasing share of imported palm oil in the edible oil consumption basket during the post trade liberalization era. But the increase in edible oil consumption increases fat intake and leads to adverse health consequences. The trade liberalization of edible oils also has negative impacts on the domestic oilseeds sector in India. The decline in the tariff rate of imported oil reduces the demand for traditionally produced edible oils (like groundnut oil, rapeseed-mustard oil). Oilseeds are inputs to edible oil production. Therefore, decrease in the demand for traditional edible oils has adverse impact on the domestic oilseeds sector. We find evidence of reduction in the area devoted to traditional oilseeds production in the post trade liberalization period. Several oil mills which used to extract edible oil from domestically produced oilseeds have shut down. This article discusses the possible policy measures that can be implemented to protect the domestic oilseeds farmers as well as oilseeds industry.

## Introduction

The article examines the impact of India's edible oil trade liberalization that began in the early 1990s on the consumption of edible oil and production of edible oilseeds. Starting from near-autarkic policies that prohibited import of either edible oil or edible oilseeds, restrictions were relaxed and tariffs reduced on edible oil imports. The import duty of palm oil reduced from 65 % to 16.5% between 1994 and 1998. After that, the import duty increases slightly but again there was a steady downfall from 2004-05 onwards (see Figure1). During the 1990s, imports constituted less than 5 percent of the use of edible oil. This has gone up to 66 percent in recent years. India has now become the largest importer of edible oils with annual imports exceeding 15 million tonnes valued at over Rs. 650 million (around 9.5 million US \$). This compares with around 11000 tonnes during 1992-93. The surge in import has led to a rise in consumption of edible oil in the country, from less than 6kg per capita till 1992-93 to 18kg in recent years. No other agri-food commodity in India has seen an increase in consumption of such magnitude. The impact of edible oils trade liberalization is not limited to increase in the overall consumption of edible oils but also it matters for changing pattern of edible oil consumption. It is evident that the consumption of imported palm oil has increased drastically in the post trade liberalization period.

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The trade liberalization in edible oils has deeper implications on the production of oilseeds. At the time of opening up the sector, oilseeds were grown on 14% of India's cultivable land and were next in

importance only to the cereals of rice and wheat. Unlike edible oils, import liberalization did not happen for oilseeds. Although India allows the imports of oilseeds (non-genetically modified), such imports have not been important for several reasons. Tariffs on oilseeds have generally been higher than on oils and their imports are also governed by phytosanitary regulations. The ban on genetically modified seeds also rules out the import of soybeans since it is predominantly genetically modified in the major exporting countries. Oilseeds producers therefore have not faced direct competition from foreign producers. However, the import of edible oils could have depressed the prices of domestically produced substitutes and thereby affected the demand and prices of domestic oilseeds.

Why do we need special attention for trade liberalization in edible oils (which is an individual commodity)? The answer lies in assessing its impact on oilseeds and agricultural sector. Topalova (2007 and 2010) studied the impact of India's trade liberalization on Indian economy. Topalova constructed a district specific composite measure of trade exposure as the employment weighted average of tariffs over all traded goods. The employment weighted tariff measure assumes that a district's exposure to tariff change in any one sector is proportional to that sector's employment weight. However, if a tariff change also induces changes in derived demand for non-tradables, then the tariff measure proposed by Topalova may not be an accurate one. Edible oils is a case in point. In her analysis, Topalova does include edible oils among the traded goods in the trade exposure measure. However, the employment in the edible oils sector is negligible relative to the workforce in the oilseeds sector (a non-traded sector).

If a change in edible oil tariff shifts the demand for local oilseeds, then its impact on wages and poverty could be greater than what would be implied by an employment weighted average tariff. Therefore a detailed analysis of edible oil trade liberalization is essentially required.

## The main text

Palm oil has always the dominant share in India's edible oil import basket (almost two third of the total import comes from palm oil). The main reason is the fact that palm oil is much cheaper as compared to other edible oils (see Table1). In addition, the major palm oil exporting countries i.e. Indonesia and Malaysia are not too far from India. Therefore the transportation cost of importing palm oil is quite low. Figure 2 shows that import of palm oil has increased at a much faster rate as compared to other edible oils. Soya oil comes next to palm oil in terms of import.

The dramatic growth in the importance of palm oil can also be seen from the market share of different oils (Figure 3 and 4). In the 1970s, palm oil and soya oil were unimportant. The traditional oils of groundnut, mustard and cotton dominated the market. By the end of the century, palm oil was the leading oil followed by soya oil. The gap over the traditional oils increases by 2014/15.

The nationally representative consumer expenditure survey (from the National Sample Survey Organization or NSSO) in India does not collect palm oil or soya oil consumption figures. The survey reports the consumption of groundnut, mustard and coconut oils and all the other oils are lumped together in the 'other edible oil' category. Our research finds that the budget share of 'other edible oil' in total edible oil consumption has increased from 10% to 37% for all India between 1983-84 and 2009-10. The share of imported oils obtained from NSSO turns out to be lower than the aggregate consumption share of palm oil. Some part of the divergence is due to the fact that the NSSO survey only captures household consumption while

aggregate consumption also includes the use of the oil in processed foods and restaurants.

Imports are also the reason why retail prices of edible oils haven't gone up much in the recent years as compared to other food items. The relative price of edible oil (relative to other food items) has also declined in the post trade liberalization period (see Figure 5). Although the consumers get benefitted from the reduced

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edible oils price, the adverse consequence lies in the nutritional side. Nowadays, palm oil is predominantly used in food industry-used by the confectionaries and restaurants. As it is the cheapest oil and no aroma of its own, palm oil is also blended with other oils for final sale. But the fat content is very high in palm oil and excessive consumption can cause health hazards (Sun, Y et al. (2015)).

The link between trade liberalization and dietary pattern has been explored by many researchers all over the world (Thow 2009, Popkin et al. 2012, Pingali and Khawaja 2004, Vepa 2004, Thow and Hawkes 2009). They found that trade liberalization/globalization reduces the consumption of staples (like cereals) and

increases the consumption of meat, oils and processed food and this changing dietary pattern gives birth to obesity and many other health hazards. In India, trade liberalization of edible oils is likely to be one of the factors that has caused change in dietary pattern as it is the largest import liberalization among the agricultural commodities in the early 1990s'. The nationally representative consumer expenditure data justifies this claim by showing that per-capita fat intake has increased by 50% in both rural and urban India between 1993-94 and 2011-12.

The import liberalization has also adversely impacted the local oilseeds producers. Low import duties have tilted the price advantage towards imported oil. From our empirical analysis, we find downward trend of the relative price of domestic edible oil in the post trade liberalization era and this downward movement resembles the movement of imported oil price. We also find downward trend in the local oilseeds prices (see Figure 6 and Figure 7).

## Conclusions and Policy Implications

Should the Government increase import duty on palm oil to reduce its import? Boosting the import duty on palm will make oilseed cultivation more remunerative again. The reduction in the palm oil import may reduce total edible oil consumption and hence good for consumer's health. The question is whether banning import is a desirable solution. This can be answered from different angles. One argument in favor of keeping the import duty low is to ensure cheap availability of edible oils which are an important part of the Indian diet. Another explanation offered for low import duties are the norms of the World Trade Organisation which restrict import barriers by countries.

In 1993/94, the three major oilseeds by area were groundnut, rapeseed-mustard and cotton and 26 million hectares (or 14% of total area) grew oilseeds. In 2010/11, 29 million hectares grew oilseeds. The increase, however, hides the fact that the area under the traditional oilseeds of groundnut and rapeseed-mustard declined by 30% and 12%. The aggregate area under oilseeds rose because of cotton and soybeans. In both cases, the returns to their cultivation are not derived solely from oil extraction. Cotton area expanded in the 2000s because the technology of Bt Cotton was profitable to growers (James et al. 2015). Despite competition from imported oils, soybeans enjoyed robust demand because of domestic and overseas demand for soyameal feed (Landes, Persaud and Dyck, 2004). Farmers, however, are not the only ones hurt by palm oil imports. The industrial complex producing local oil (like groundnut oil) has suffered too. For example, in the state of Gujarat (which is a major groundnut producing state in India), more than 500 oil mills have shut down in the post trade liberalization period.

But the negative impact of low import duty can't be ignored. The reduction in import duties had a terrible impact on the farmer cooperatives. With imported palm oil flooding the Indian market, the prices of domestic oilseeds and the income of farmers fell. Many farmers switched to cotton. More imports from Malaysia and Indonesia increase the financial value of their exports and helps a handful of large importers but it hurts Indian millers quite a lot. One way to tackle this situation can be to boost palm oil production in India (which is very negligible till now) but this proposal has ecological implications.

The alternative option is to meet the domestic needs of edible oil by increasing the production

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of domestically produced oilseeds. To increase domestic production, India will have to allocate more land for oilseed cultivation, which will clash against the need to grow more of other crops like pulses. This is also not a good policy suggestion as pulses are harder to find from the global markets as compared to edible oil.

The oilseeds farmers and agricultural workers in the high oilseeds producing regions are the most vulnerable and needs special attention from the Indian government. If the policy makers and

government believe that expansion of oilseeds producing areas is not feasible and import is a desirable alternative, they must communicate it to local oilseeds industry and help the local oilseeds farmers to make smooth transition to other crops like cotton, soyabean (those farmers who have not made the transition yet). Additional investment, whether in education or health or in infrastructure such as roads and electricity, in the traditional oilseeds production regions can also help in switching sectors and occupations.

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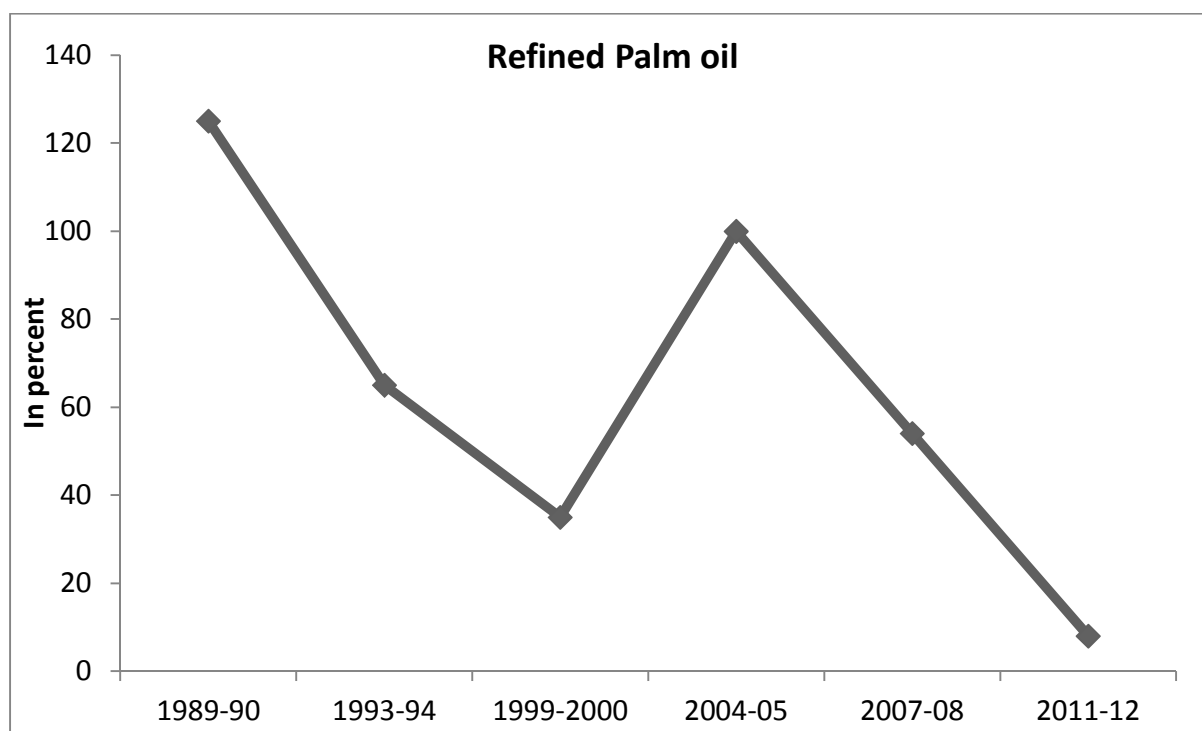
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**Table 1: World Price of Different Types of Edible Oil in India**

Year	Groundnut Oil	Palm Oil	Soybean Oil
1993-94	881	453	548
1999-2000	751	373	383
2004-05	1111	447	580
2007-08	1742	864	1070
2011-12	2212	1062	1263

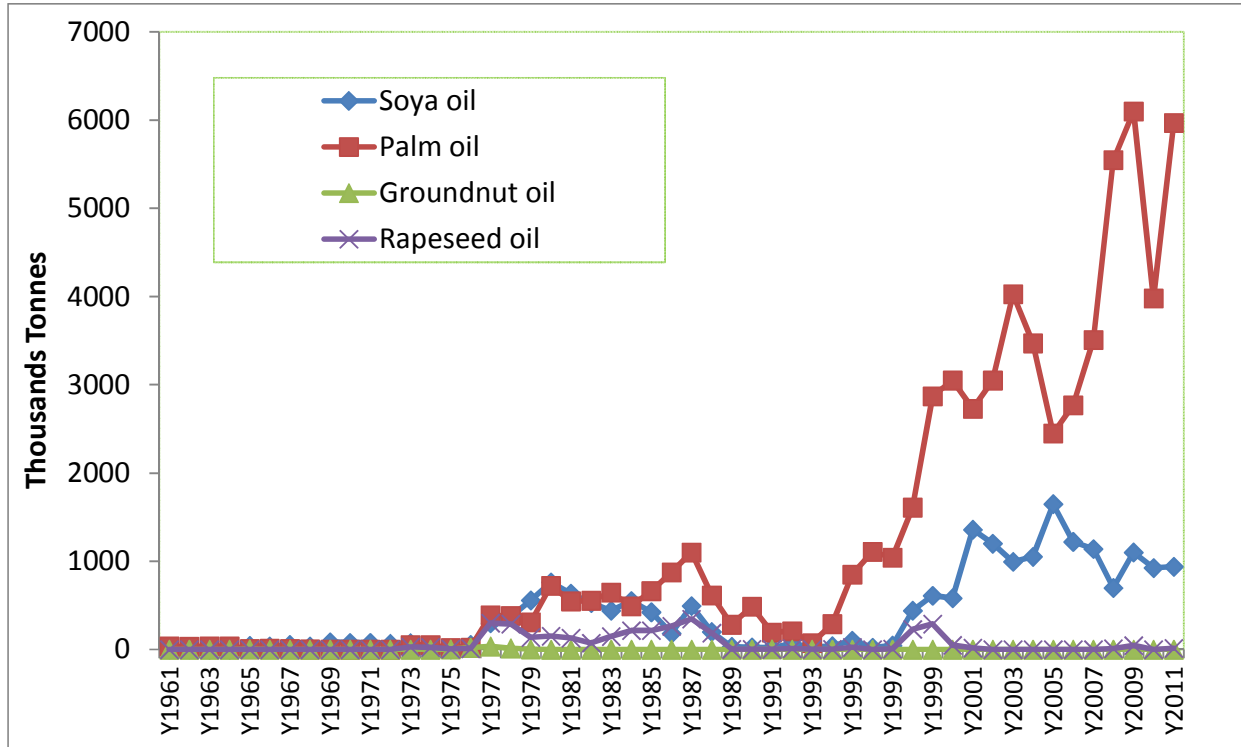
Source: -World Bank Commodity Price Data (Measured in US \$/Metric Ton)

**Figure 1:- Ad-Valorem Tariff Rate of Refined Palm Oil**



Source:-World Integrated Trade Solution Database.

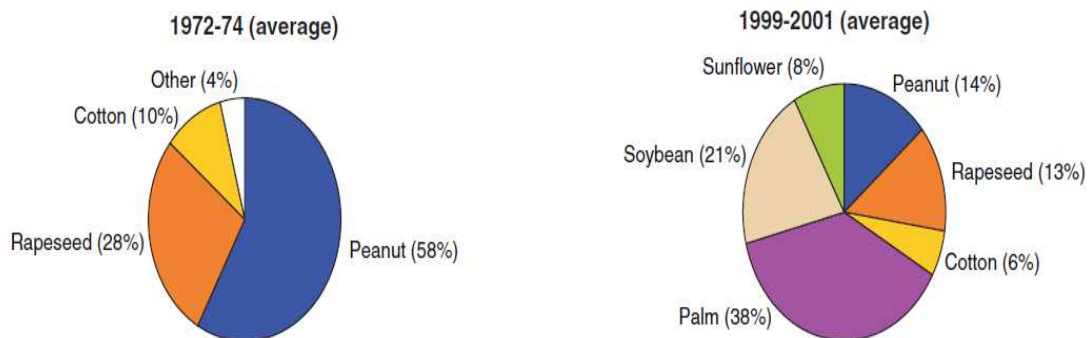
**Figure 2: Import of Different Types of Edible Oils in India**



Source: - FAOSTAT

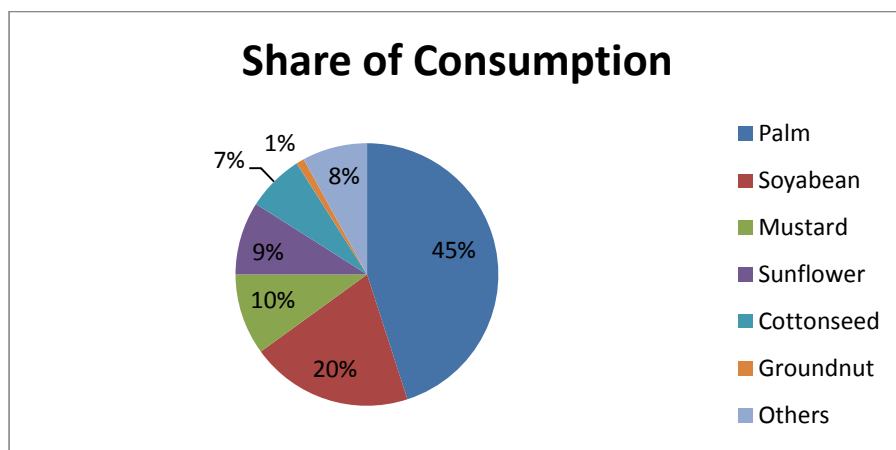
Note: - The vertical axis represents the import of different types of edible oils in thousand tonnes. The horizontal axis stands for the years.

**Figure 3: Edible Oil Consumption in India**



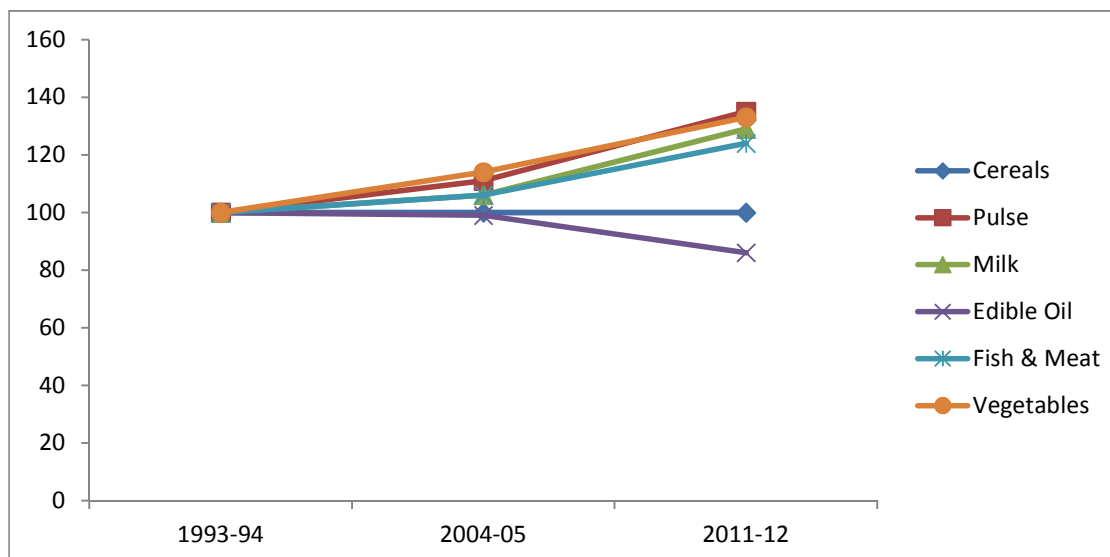
Source: -Production, Supply and Distribution database, USDA

**Figure 4: Edible Oil Consumption in India in 2014-15**



Source: -GGN Research

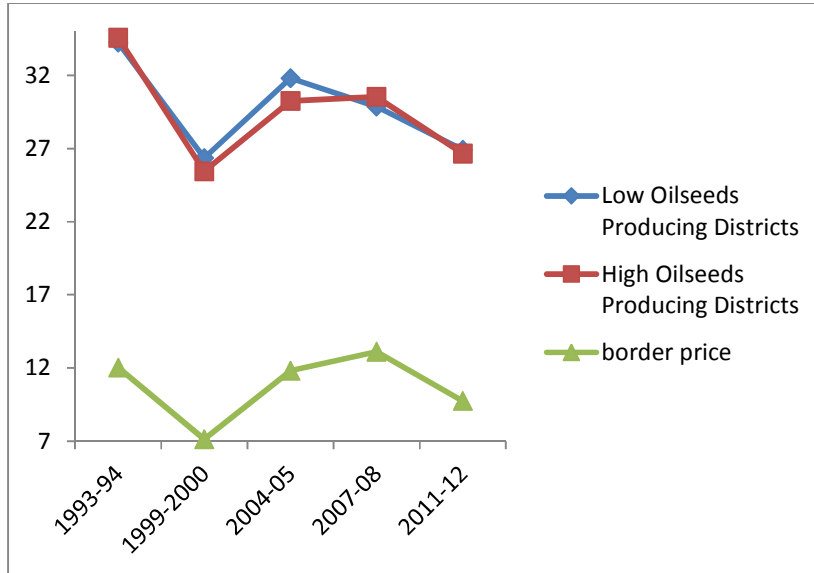
**Figure 5: Relative Price of Food Items (Relative to Cereals)**



Note: - This diagram is based on author's computation. NSSO consumer expenditure survey in India provides information on quantity consumed and amount spent on edible oil and other food items for each household. Dividing amount spent by quantity consumed, we obtain unit value i.e. value of each unit (rupees per kilogram) of edible oil/other food items consumed at the household level. The median unit value can be considered as price of a commodity. The relative price of any food item at any particular time period is the median unit value computed for that food item divided by the median unit value of cereals.

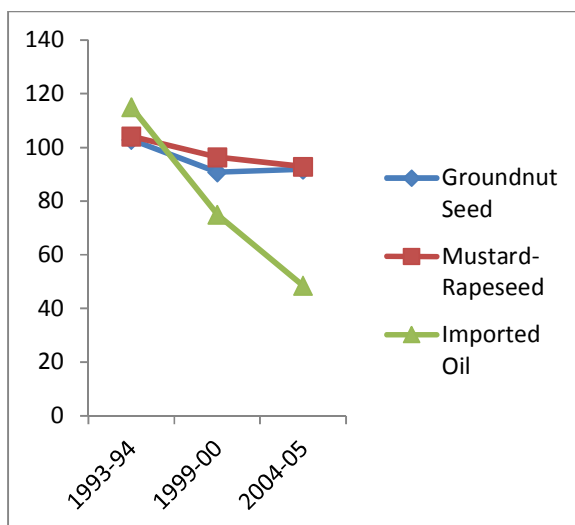


**Figure 6: Domestic/Traditional Edible Oil Price Move Parallely With Imported Oil Price**



Note: The above diagram is based on author's calculation. The two lines at the top of the graph show the traditional edible oil price for high and low oilseeds producing districts. The prices are the median unit values (per kilogram) calculated from the nationally representative consumer expenditure survey of India (NSS). The border price is the price of imported palm oil at the port. The border price is defined as the product of world price of palm oil, one plus ad-valorem tariff rate of palm oil and exchange rate. Both the domestic price and border price are divided by consumer price index for all commodities. Therefore, the prices shown in the above diagram are relative prices (relative to prices of all commodities)

**Figure 7: Domestic Edible Oil Price and Domestic Oilseeds Price**



Note: The diagram is based on author's calculation. The prices for both the oilseeds and the imported edible oils are their respective wholesale price indices divided by wholesale price index of all commodities. Therefore the prices shown in this diagram are relative price indices (relative to price indices for all commodities). The wholesale price index figures are obtained from EPW database.