EDIBLE OIL SCENARIO IN PAKISTAN: 1995-2008

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ABSTRACT

Since edible oil is a vital food item, its persistent shortage and, consequently, increasing imports for meeting domestic consumption-needs, has attained almost the second position in the import-bill, the first being petroleum products. Not only the increases in quantity and import-costs, but also the remedial measures suggested to reduce the imports and increase domestic production of oil-seeds have, thus, prompted us to re-visit the situation that exists in the country. The present report, describes in detail the domestic production, imports and processing facilities that have been available from 1994 onwards till 2008.

The unfavourable edible oil position in the country has not changed much since 1994, except that the imports have almost doubled from about one million to two million tonnes, the population has increased from about 130 millions to 160 millions and the local production/availability has shown a slight increase only.

In order to remedy this situation, there should be a clear national plan defining the objective to achieve the goals of both long and short-terms for maintaining the determined percentage of local production of oilseeds. The plan should be drawn up with the stake-holders and its implementation should be entrusted to the provincial governments, with complete cooperation of the Pakistan Agricultural Research Council.

INTRODUCTION

In an earlier report under the same caption (Shafiq, et. al., 1996), the situation regarding local production, imports and domestic consumption of edible oils in Pakistan was studied for a period of 25 years (1970-1994) and it was observed that imports increased from 81 thousand tonnes to 1057 thousand tonnes (1970-1971), while domestic production increased from 199 thousand tonnes to 471 thousand tonnes for the same period. It was further observed that the total consumption increased from 280 thousand tonnes to 1528 thousand tonnes for the same period and consequently, the domestic production (as percentage of consumption) decreased from 71.07 to 30.17 and the imports as percentage of consumption increased from 28.93 to 69.83, during the considered period of time (Shafiq, et. al., 1996).

The most striking fact provided by this study was that the situation in 1993-94 was reversed, as the imports catered for about 70% of the needs compared to the period of 1970-71 when 70% needs were met from the domestic production. In yet another report titled Reflections of the Contributions related to the Edible Oil scenario in Pakistan, the background and the changes have been discussed in detail (Shafiq, 2002).

Since edible oil is a vital food item, its persistent shortage and, consequently, increasing imports for meeting domestic consumption-needs, has attained almost the second position in the import-bill, the first being the petroleum products. Not only the increases in quantity and import-costs, but also the remedial measures suggested from private and public sources to reduce the imports and increase domestic production of oil-seeds have, thus, prompted us to re-visit the situation that exists in the country. The present report therefore, describes the domestic production, imports and processing facilities that have been available from 1994 onwards till 2008. It is hoped that the report will re-emphasize the need to have a plan in place for staggered implementation with a view to attaining a modicum of self-reliance in this essential food-factor over the next few years and, thus, reduce and then completely get rid of dependence on imports. This approach is practicable, as Pakistan is basically an agricultural country and both land and weather circumstances are favourable for attaining this goal by concerted efforts of the private and public sector stake-holders, in the larger interests of the country.

LOCAL PRODUCTION OF EDIBLE OILS: 1998-2008

The major commercial oil-seed crops of Pakistan, as reported earlier, are cotton and rapeseed. However, under various developmental projects, efforts were made over the years to not only increase the area of cultivation for these crops but also to introduce some non-traditional oilseed crops so as to increase their local availability. It is observed that, of the three non-traditional crops comprising soyabean, saflower and sunflower, only the last mentioned has provided encouraging results and is supporting the traditional/commercial crops of cotton seed and rapeseed in broadening the base for local production. It is of interest to state here that the introduction of "double zero" rapeseed (canola types), either free of erucic acid and glucosinolate or have them in insignificant amounts in their seed, have come up

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Table - 1: Local Annual Production of Edible Oils (1998-2008)

Tonnes

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cotton Seed	360,000	436,791	436,800	432,800	433,000	414,000	449,000	536,000	456,000	478,000	465,000
Rapeseed(+Canola)	114,700	98,065	95,000	85,100	89,000	121,000	137,000	116,000	117,000	128,000	127,000
Sunflower	109,400	77,109	71,000	43,500	79,000	106,000	154,000	205,000	220,000	251,000	250,000
Total	584100	612,145	602,800	561,400	601,000	641,000	740,000	857,000	793,000	857,000	627,500

Source: *Pakistan Economic Survey*

Table - 2: Imports of Edible Oils (1998-2008)

Tonnes

Oil/Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Crude Palm Oil	-	-	-	-	-	125,581	117,248	141,387	427,412	483,466	502,797
RBD Palm Oil	1,087,596	1,018,961	10,99,702	1,340,065	326,582	199,169	248,568	100,095	15,694	2,299	278,422
RBD Palm Oil	-	-	-	-	879,839	1,047,561	1,053,011	1,361,047	1,301,819	1,146,349	619,034
Soyabean Oil	258,950	268,081	166,025	187,601	80,988	126,000	52,350	19,999	20,121	96,164	20,969
Other Edible Oils	4,325	6,999	44,300	42,625	-	2,657	1,106	-	-	-	-
Total	1,350,871	1,357,041	1,310,027	1,570,291	1,287,409	1,500,968	1,472,283	1,622,528	1,765,046	1,728,278	1,421,222

Source: *Malaysian Palm Oil Council (MPOC)*

nicely in the country. The data provided in the Table-1 makes the present scenario rather clear. It is encouraging to note that the local production of rape seed is now also composed of about 50% share contributed by canola types. The canola seeds are also imported and oil is extracted from them to enhance the availability of oil. Similarly, the contributions from sunflower seeds are also significantly improving, as seen from the figures in Table-1(1998-2008), which can be compared to those of the previous decade (1988-1997).

Inspite of this increase, the situation has not taken a turn for the better because of the population increase, low yields and no satisfactory increase in the areas under cultivation of these annual crops, which also have to compete with the other seasonal food grain crops. Secondly, the domestic consumption has been increasing steadily because of the awareness and desire for better quality of life, particularly, in the urban areas where almost 40% of the country's population resides. The rural population, however, still uses the animal fat (butter oil) which is being produced and consumed by the agricultural community. The production of butter oil is probably not more than about 0.35 million tonnes per annum. Exact figures for this commodity are not available as the dairy farming is not so organized in the country. The local production of edible oils is, thus, still not enough to meet more than 30% of the indigenous requirements of this important food item and, consequently, the country is meeting its needs through massive imports.

IMPORTS OF EDIBLE OIL

It has been estimated that the country needs about 2.6-3.0 million tonnes of edible oils and fats for its ever-increasing population that now stands at a figure of 160 millions. These needs are met by importing about 1.8 million tonnes of edible oil from abroad and producing about 0.7 million tonnes, indigenously. The annual import and production figures for the years 1998-2008 are provided in Table-2. When compared with the previous report's figures, it becomes evident that the imports have increased while the local production has virtually not shown any visible increase. The locally produced oils are mainly extracted from cotton seed and rapeseed (including canola and sunflower seeds), while the imported oils are as usual palm oil (and its fractions) and soyabean oils. In addition to Refined Bleached and Deodourized (RBD) palm oil, the oil processors have now also started importing crude palm oil (since 2003) and RBD palm-olean (since 2002) in various amounts. In this scenario, it is observed that the import of soyabean oil is decreasing from 0.26 million tonnes to about 0.02 million tonnes from 1998 to 2008, respectively. On the other hand, the import of palm oil and its products (for edible purposes) has shown a steady increase during 1998 to 2007 from about 1.1 million tonnes to 1.8 million tonnes. In the breakup, the crude palm oils share is 28%, RBD palm oils share is 0.1%, RBD palm-olean share is 66.3% and that of soyabean oil is 5.5%. The most striking development during the period under study is, thus, the virtual replacement of RBD palm oil by palm-olean and a significant addition of crude palm oil (28%) for the use in the refineries that have been set up in the country. By physical refining, these facilities provide RBD palm oil as such for a replacement and/or a competitive product to vanaspati (hydrogenated vegetable oil) which is still largely used as a cooking medium of choice in Pakistan.

THE EDIBLE OIL AND FAT INDUSTRY

A recent report described the current scenario regarding edible oils, particularly emphasizing the hydrogenated oil industry in the country. This information is reproduced below for the general benefit of the public at large, but the changes that have occurred during the past six years are described first.

As a consequence of the Government's policy of denationalization, whole of the vegetable oil hydrogenation industry now exists in the private sector and an organization called Pakistan Vanaspati Manufacturers Association (PVMA), located in Islamabad, looks after the affairs of the member units registered with the PVMA number 92. The concentration of the registered units throughout the country is: North, 21 units; Central: 38 units and South 33 units, and their installed capacity is estimated to be over 2.5 million tonnes per annum.

Another organization called Pakistan Edible Oil Refineries Association (PEORA), which has started functioning, deals exclusively with edible-oil refining and has the membership and installed capacity (per day) as given in Box-1.

Currently, the national demand for 160 million people is estimated to be around 3 million tonnes and the total installed capacity for producing hydrogenated vegetable oils (vanaspati) and refined edible oils is over 3.5 millions tonnes, enough to cater for the indigenous needs.

Box - 1: Member Refining Units of PEORA

Unit	Group	Installed Capacity (Tonnes/Day)
Evian Fats and Oils	Allana Group	800
Habib Oil Mills	Habib Oil Mills	500
M.H Oil Mills	-	200
Faisalabad Oil Refinery	Madina Group	500
Mapak Edible Oils	Westbury, Mapak, KLK	800
Eva Oil Refinery	Shujabad Agro	150
Sufi Oil Refinery	Sufi Group	300
Paracha Oil Refinery	Paracha Textiles	500

Source: *Malaysian Palm Oil Council*

LITERATURE REVIEW

A number of reports (both survey and research) indicate that a large percentage of population prefers hydrogenated vegetable oils as a frying medium for preparing traditional foods. This trend has emerged and strengthened because of many factors, including decreased local production of oil seeds, increasing population growth rate, non-expansion of dairy-farming industry and heavy dependence on imported vegetable oils.

In spite of this, the consumption of edible oils has been increasing (at over 10% per annum) and, consequently, the hydrogenation industry has expanded during the past two decades to meet the popular local demands. It is, thus, seen that during the 70's, when this industry was nationalized, there were about 30 units with installed capacity of less than 0.25 million tonnes, whereas in the 90's Pakistan has about 140 units with a capacity of over 2.0 million tonnes per year. The increase in the size of the industry's units for the past 20 years alone (1974-1994) is almost 4.7 times, while their processing capacity has increased by a factor of (about) 8 in the same period. It has been estimated that the functional hydrogenation units are spread all over the country and their largest concentration is in Punjab (70) followed by Sindh (35), NWPF (15), Baluchistan (2) and Azad Kashmir (1). The Federal Capital, Islamabad, has 8 units in its territorial limits. This spread in the country, including the Federal Capital, is well understood as it caters to the needs of population density and because of the incentives provided by the government to create industrial estates at selected places. The effect of these incentives is well-established from the fact that the conglomeration of the units is at Bahawalpur, Faisalabad, Hattar, Islamabad, Karachi, Lahore, Multan and Peshawar-the cities where industrial estates have been established, as planned. Many entrepreneurs have been offered various incentives to establish industry. The majority of the units produce hydrogenated product "Vanaspati", while the same are geared for producing and marketing the cooking oils as such. Both the "Vanaspati" and "Cooking Oil" products are not necessarily produced from any single oil, but are largely based on a blend of oils that is easily and economically available during the manufacturing period of the year. The major oils that go into production of the local products are: local cottonseed oil, rapeseed (canola), sunflower and imported soyabean and palm oils.

The expansion and growth of the hydrogenation industry in Pakistan suggests that the local consumers of the processed product (vanaspati) prefer the semi-solid fat, which resembles "Ghee" (butter oil) in appreance, as a frying medium. This argument is supported by another observation that the production, marketing and consumption of cooking oils is hardly 10% of the total turnover of the industry, and is limited to the big cities only. Vanaspati is marketed in packings of various capacities, ranging from 1kg to 16kg, both in cans, as well as plastic containers and bags. The industrial product produced by oil-processing units is marketed under different trade names (over 50), although it may have been manufactured from a similar blend of oils. Because of the similarities of the specifications of the imported RBD palm oil to those of the Vanaspati, the former is also being packed and marketed as such, without hydrogenation. This practice irritates the processing industry but is viewed differently by the educated consumers, as it provides a product that is naturally occurring and is free from trans fatty acids that are always present in minor amounts in the hydrogenated product. Theoretically, catalytic hydrogenation is supposed to provide an allcis-product, but practical evidence is there to suggest that during hydrogenation some trans-addition of hydrogen also occurs and, consequently,

Table - 3: Retail Prices of 1kg Vegetable Ghee and 1 Ltr Cooking Oil During the Years 1990-91 to 2007-08

Year	Veg. Ghee	Cooking Oil	Year	Veg. Ghee	Cooking Oil
	Rs./Kg	Rs./Ltr		Rs./Kg	Rs./Ltr
1990-91	19.63	23.80	1999-2000	65.98	66.77
1991-92	20.70	25.13	2000-01	61.37	62.26
1992-93	24.83	28.30	2001-02	67.70	68.39
1993-94	31.18	34.89	2002-03	78.71	79.87
1994-95	41.85	46.73	2003-04	80.11	81.59
1995-96	43.93	49.00	2004-05	81.66	82.00
1996-97	47.62	53.86	2005-06	81.45	81.76
1997-98	52.79	59.58	2006-07	89.62	89.79
1998-99	63.18	67.31	2007-08	119.76	120.77

Source: *Pakistan Economic Survey, 2001-02 and 2007-08, Ministry of Finance, Government of Pakistan*

the end- product has certain taints of trans-fatty acids in it. However, the produced and marketed product is claimed to conform to the Pakistan Standard Specifications No. 221 of 1962 issued by Pakistan Standards Institution, Karachi, and is utilized by the consumers of the country.

RETAIL MARKET PRICES

In view of inadequate local production of vegetable oils, the retail market price of the hydrogenated and un-hydrogenated vegetable oil is supposed to be dependent on the global prices of the vegetable oils that are imported in the country for meeting the local demands. Although the changing global prices of not only the vegetable oils, but also those of the crude oil (petroleum/ hydrocarbon, as it effects the transport expenses) are always linked to the increases/ decreases of the locally produced hydrogenated and un-hydrogenated products' prices for the consumer. It has been observed that the local manufacturers do not always pass on the benefits to the consumer, as exemplified by the prices for (16 kg tin) vanaspati and cooking oil (Dawn, 2009) for December 2008 and January 2009, as given in the footnote in the form of Box-2(a) and Box-2(b).

A comparison of current prices, with those from the selected previous years, is provided above as it makes reading interesting because cooking oil was sold at a higher price (about 4 times in 1995) than vanaspati in 1986 (at almost equal price in 1995) and, after about twenty years, is again marketed at a price higher than the vanaspati in 1986. However, an idea of variations in prices of 1kg packs of vanaspati and cooking oil over 2 decades can be had from the data (Table-3).

In conclusion, it is summarized that the edible oil position in the country has not changed much since 1994, except that the imports of edible oil have almost doubled from about one million to two million tonnes, the population has increased from about 130 millions to 160 millions and the local production/availability has shown only slight increase from 0.584 to 0.627 million tonnes. Consequently, the dependence on imports now stands at about 70%, while the local production contributes only 30% of the current consumption demands, as the measures suggested in various earlier reports, referred to in the text here, have not been taken to improve the situation. It is reiterated that there should be a clear national plan defining the objective to achieve the goals of both long and short terms for the determined percentage of local

Footnote:

Box - 2(a): Retail Prices of 16kg Vanaspati and Cooking Oil

Date	Vanaspati Price	Cooking Oil Price
December 2008	Rs. 1370.00	Rs. 1550.00
1st January 2009	Rs. 1510.00	Rs. 1650.00
6th January 2009	Rs. 1620.00	Rs. 1740.00

Box - 2(b): Comparison of Escalating Prices of Vanaspati and Cooking Oil (5kg packs)

Year	Vanaspati Price	Cooking Oil Price
1968	Rs. 67.45	Rs. 60.00
1995	Rs. 243.00	Rs. 242.00
2009	Rs. 640.00	Rs. 685.00

production of oil seeds. The plan should be drawn by the stake-holders and its implementation should be entrusted to the provincial governments, with complete cooperation of the Pakistan Agricultural Research Council. This could provide a path towards a balanced oil-seeds scenario in Pakistan.

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