## RAPESEED OIL IN INDIA - SOME GENERAL PROBLEMS

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Hon'ble Mr. Chairman and Fellow Delegates,

I am to thank you for the kind invitation accorded to me to participate in the 5th International Rapeseed Conference which is being held here. I come from India, a country populated by six hundred million i.e. one-fifth of the entire human race. Mine is a country of great diversity in terrain, in climate, of people of various ethnic origin having different customs, culture, literature and traditions. There are three hundred spoken languages of which at least two scores of literature have histories dating back a thousand years or even more. These diverse people have been welded into one political entity in the course of our long struggle against colonial domination. But the diversity in all respects, including food habits, remains and we cherish it.

Our country now is even basically an agricultural country in the sense that 80 per cent of our people live in villages and they depend on agriculture for their livelihood. The sad tale is that during two hundred years of foreign domination our agriculture was completely neglected and an anachronistic social structure was maintained which acted as a brake on any improvement in agriculture and in the progress of the country. Since our Independence, a great deal of change has taken place. The production of rice and wheat has increased and, at the moment, we can sustain the cereal needs of our people. But, we have a long way to go. Unless we cover the entire cultivable land with irrigation which at the moment covers only 12 per cent of the land, our agricultural production will continue to be subject to the vagaries of nature and our economy, a gamble in rains.

At the moment, among the shortages in agricultural produce, oilseeds take a prominent place and, what is most alarming is that their production is stagnant, and even declining. The main factor, unlike rice and wheat, is that high-yielding varieties of oilseeds have not yet been evolved. At the same time, due to higher returns from cultivation of high-yielding varieties of wheat and paddy, cotton and sugar-cane, most of the irrigated land is being monopolised by these crops and oilseeds are grown mostly on unirrigated lands. Use of fertiliser is also far from adequate. Among the indigenous oilseeds, rapeseed, the Indian variety of which is popularly known as mustard or "Sarson", is considerable; it has deep yellow collour and pungency. A very large section of the population throughout eastern and northern India strongly prefer this mustard oil for its pungency and taste. In India, this oil is extracted entirely by the expeller method, consequently leaving in the resultant oil cake rich The other principal edible oils are groundnut oil, coconut oil and sesame oil. There are some other inferior oils which cannot be used as edible oil unless refined and standardised. The production of all the oilseeds is around 9 to 10 million tonnes on an average, the resultant oil being about 3.5 million tonnes which is short of our total requirement according to nutritional standard, by at least one million M.T. enough oilseed is produced, we are in need of importing edible oil to fill

the gap. We have found that rapeseed oil may become a suitable alternative, principally to consumers of mustard oil. Initially, imported raw rapeseed oil, all solvent extracted, was found to be unacceptable to the people and, besides, there appeared to be great likelihood of the presence of substances constituting health hazards in that oil. Thereafter, the Government decided to distribute imported rapeseed oil only after it had been refined in conformity with the standards prescribed by the Indian Food Adulteration Act.

I am happy to bring to your notice the fact that the State Government I represent has been able to make this refined oil entirely acceptable to the people, for its purity and fair price (due to governmental subsidy). To achieve this acceptability, we have had to use every form of mass media like radio, television, newspapers etc. and I may be excused for mentioning that we are the only State Government who have been able to win the distinction of making this oil acceptable to our 50 million people.

At this point, I would request the conference to take note of some of our basic problems in respect of distribution of this oil:

- (1) The solvent-extracted rapeseed oil before refining is not assuredly of the standard prescribed by the Indian Food Adulteration Act. Unless the raw oil conforms to the above-mentioned standard, even refining cannot bring the oil up to the required standard of a high-grade edible oil.
- (2) The high price and price fluctuations are a great impediment for a poor country like ours. We need lower and stable prices.
- (3) The oil is transported by bulk containers, the holds of which are made of iron whithout any protective coating. The oil tends to deteriorate on coming in contact with iron and repeated exposure to weather causes further deterioration of the oil.
- (4) There being no exclusive edible oil bulk carriers nor any with stainless steel holds capable of being thoroughly washed and disinfected, any residue of other materials previously carried by these ships can always contaminate the oil.

As a matter of fact, we had cases of extensive contamination of imported wheat because the ships had carried poisonous insecticides on previous trips.

- (5) After refining for mass distribution, as is done in my State, there is the risk of the oil being adulterated with inferior oils, unless the oil is packed in sealed containers which must be durable and, at the same time, for a country like ours, cheap. We need your technical assistance in this respect.
- (6) Since edible oil is in short supply, the danger of adulteration by unscrupulous tradesmen is considerable and it may occur at various points between the refinery and the consumer. A simple and fool-proof method of detecting adulteration would assure the consumer of its safe use for edible purposes. In this respect, too, we need technical advice from this conference.

(7) Since the edible oil requirements of an expanding population are on the increase, it is necessary for agricultural research to concentrate on two important fields, namely, (i) the increase of per hectare yield of rapeseed; and (ii) increasing of the oil content of rapeseed so as to get a higher extraction percentage than what obtains at present.

This, briefly, is an account of the experience that we have had in the procurement, refining, marketing and distribution of rapeseed oil in our country. We shall be extremely grateful if the points I have raised engage the attention of the experts who are participating in this conference. We shall be glad to profit by their findings, conclusions and advice.

 $\boldsymbol{I}$  thank you for permitting me to present one of our important problems before this august conference.