

## Mustard Seed Report

### Introduction

Mustard Seed (*Brassica Sp.*)/ Rapeseed is the third leading source of vegetable oil in the world after soybean and oil palm, and also the world's second leading source of protein meal. Rapeseed meal production is only one-fifth of the production of soybean meal. *Brassica juncea L.* (rai) was originally introduced from China into north-eastern India, from where it has extended into Afghanistan via Punjab. Eastern Afghanistan, together with the adjoining north-western India is one of the independent centres of origin of brown sarson (*Brassica campestris var. brown sarson*).

The primary use of mustard seed is for extracting oil while the seeds are also used as condiment in pickles, meat and salad dressings. Mustard seed can also be milled into mustard flour and used as an ingredient in processed foods, such as salad dressings and soups. The seeds when crushed yield around 27-33% of oil. Rapeseed oil has been used for centuries as a crop for a variety of uses. It was initially burned as oil in lamps by our ancestors in Asia and Europe, and later was discovered as cooking oil which people used to cook a number of items. The oilcake is mostly used as cattle feed.

While several *Brassica* species are cultivated in India as Rapeseed/Mustard, three species viz. *B. Campestris*, *B. juncea* and *B. napa* are grown important from the economic perspective. Based on seed colour and shape the mustard/ rape seed grown in the country can be broadly compared as follows:

- ❖ Sarson (*Brassica Campestris*):
  - The seeds are Bold or large size; Round in shape have a smooth surface.
  - Colour- Yellow or Brown or Dark Brown to Black
- ❖ Toria ( *Brassica Campestris* ):
  - Seeds are spherical or ovoid in shape having slightly wrinkled surface
  - Colour- reddish or dark brown in colour.
  - Seeds are slightly smaller than those of Sarson.
- ❖ Rai (*Brassica Juncea*):
  - Seeds are spherical or ovoid in shape and have a distinctly wrinkled surface.
  - Colour of the seed is dark brown or black
  - Seeds are small in size

The crop is grown both in subtropical and tropical countries. In Asia, it is chiefly grown in China, India and Pakistan. It is also grown in Europe, Canada and erstwhile USSR, but the forms of rapeseed and mustard grown there are different from those grown in India.

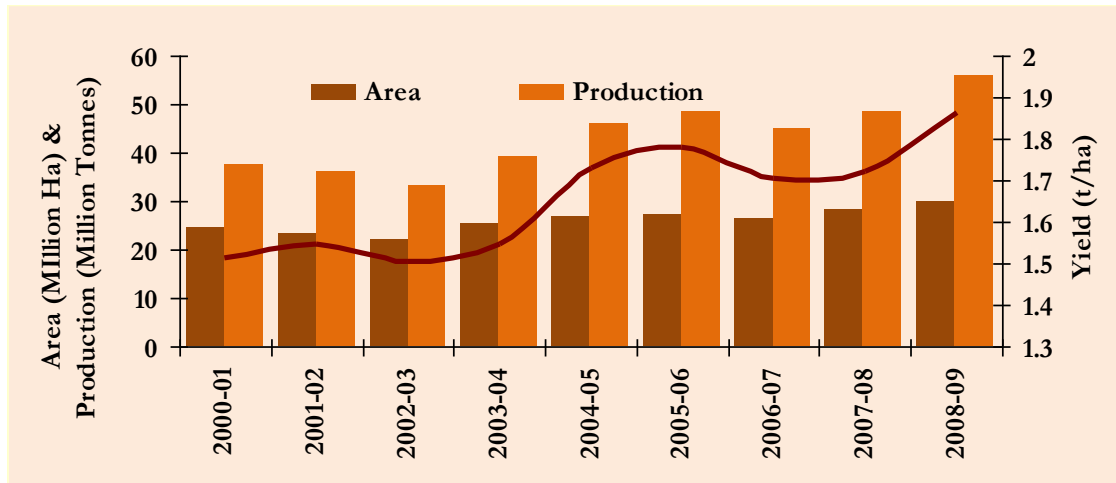
### Climatic Requirements

The mustard crop grows well in areas having 25 to 40 cm of rainfall. Sarson and toria are preferred in low-rainfall areas, whereas raya and toria are grown in medium and high-rainfall areas, respectively. The mustard thrives best in light to heavy loams. Raya may be grown on all types of soil, but toria does best in loam to heavy loam. Sarson is suited to light-loam soil and taramira is mostly grown on very light soils.

### Global Mustard Seed Scenario

The area and production of mustard seed have been increasing consistently. Being an important source of oil and protein meal, mustard seed is grown across the world. The area of mustard seed has risen from 24.68 million hectares to 30.06 million hectares with a Compounded Annual Growth Rate of 3.02% while the production has increased from 37.32 million tonnes to 55.97 million tonnes with a CAGR of 5.70% during the period 2000-07 to 2008-09.

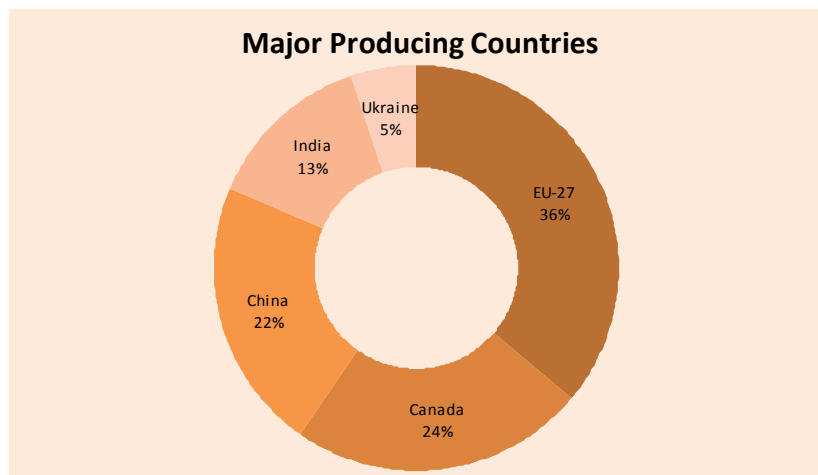
**Figure 3: World Area, Production & Yield of Mustard Seed**



Source: SEA

### Major Mustard Seed Producing Countries

European Union – 25 is the leading producer of mustard seed in the world accounting for 34% of the world production followed by China (23%), Canada (19%) and India (14%). EU, China and Canada all together accounts for 79% of the world mustard seed production.



## World Mustard Seed Balance Sheet

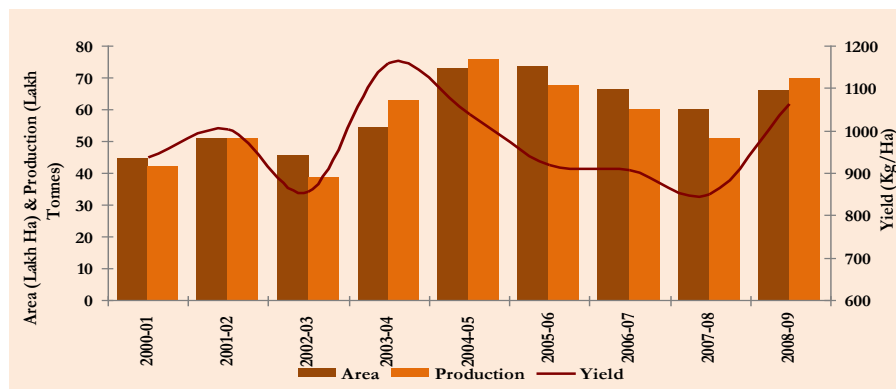
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Beginning Stocks	4.25	2.69	2.78	2.17	2.10	4.75	5.51	4.41	3.09
Production	37.32	36.01	33.26	39.43	46.09	48.50	45.16	48.42	55.97
Imports	6.99	4.95	4.03	5.15	5.02	6.71	6.92	7.58	9.81
Total Supply	48.57	43.65	40.07	46.74	53.20	59.96	57.59	60.41	68.87
Exports	7.18	4.90	4.13	5.48	4.87	6.99	6.64	8.27	10.22
Consumption	38.69	35.97	33.77	39.16	43.58	47.46	46.54	49.05	53.48
Ending Stocks	2.69	2.78	2.17	2.10	4.75	5.51	4.41	3.09	5.18
Stock:Use Ratio	6.96	7.72	6.43	5.36	10.89	11.60	9.47	6.30	9.68

## Indian Scenario

In India, mustard seed is basically a Rabi crop. It's sowing start in the month of October and continues till end of December. Mustard seed is mainly grown in North West parts of India. Rajasthan and Uttar Pradesh are the major Mustard Seed producing States in the country. The production from Rajasthan is highly monsoon dependent. The other significant producers are Madhya Pradesh, Haryana, Gujarat, West Bengal and Assam.

Rajasthan is the largest of producer of mustard seed in the country with a contribution of 54% to the country's total mustard seed production followed by Punjab and Haryana together contributes 14%. Other major producers of mustard seed in India are Madhya Pradesh/Chattisgarh (13%) and Gujarat (7%).

**Figure 1: Area, Production & Yield of Mustard Seed in India**



Source: USDA

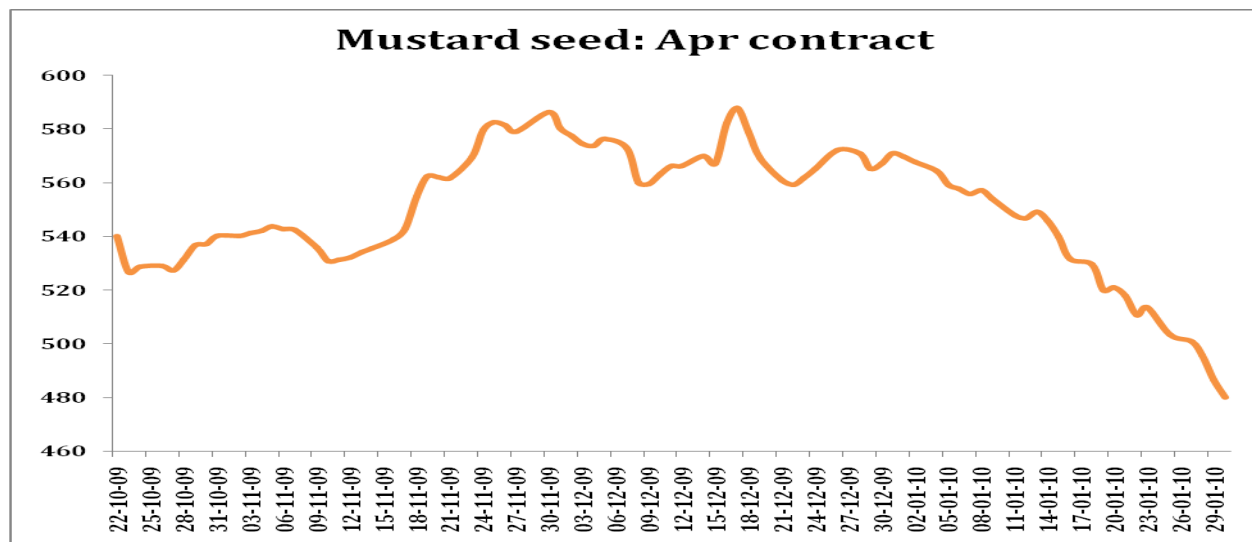
Despite moderate decline in area under mustard seed cultivation, there was a drastic fall in the production from 2004-05 to 2007-08 (Figure 1) mainly because of dramatic fall in the yield level from 1059 kg/ha in 2003-04 to 848 kg/ha in 2007-08 due to unfavorable weather condition during critical growth stages of the crop. Severe winter in January month of those years led to pod shrinkage resulting to lower production level.

However, in 2008-09 output increased dramatically following increased acreage and favourable weather condition.

### Demand

Mustard seed is primarily used as a source of edible oil and protein meal while it is also used as a condiment. The seeds when crushed yield around 33% oil and 67% protein meal. The semi-drying oil obtained from the seed can be used as a lubricant, illuminant and in making soap apart from being edible while the meal is used as animal feed because of its protein content. Over the last 4-5 years, the production and consumption have been in sync with each other and the ending stocks have been in the range of 5.2% to 9.9% of the total production. The consumption of Mustard seed as a condiment is higher in India compared to that of the world.

### Price action

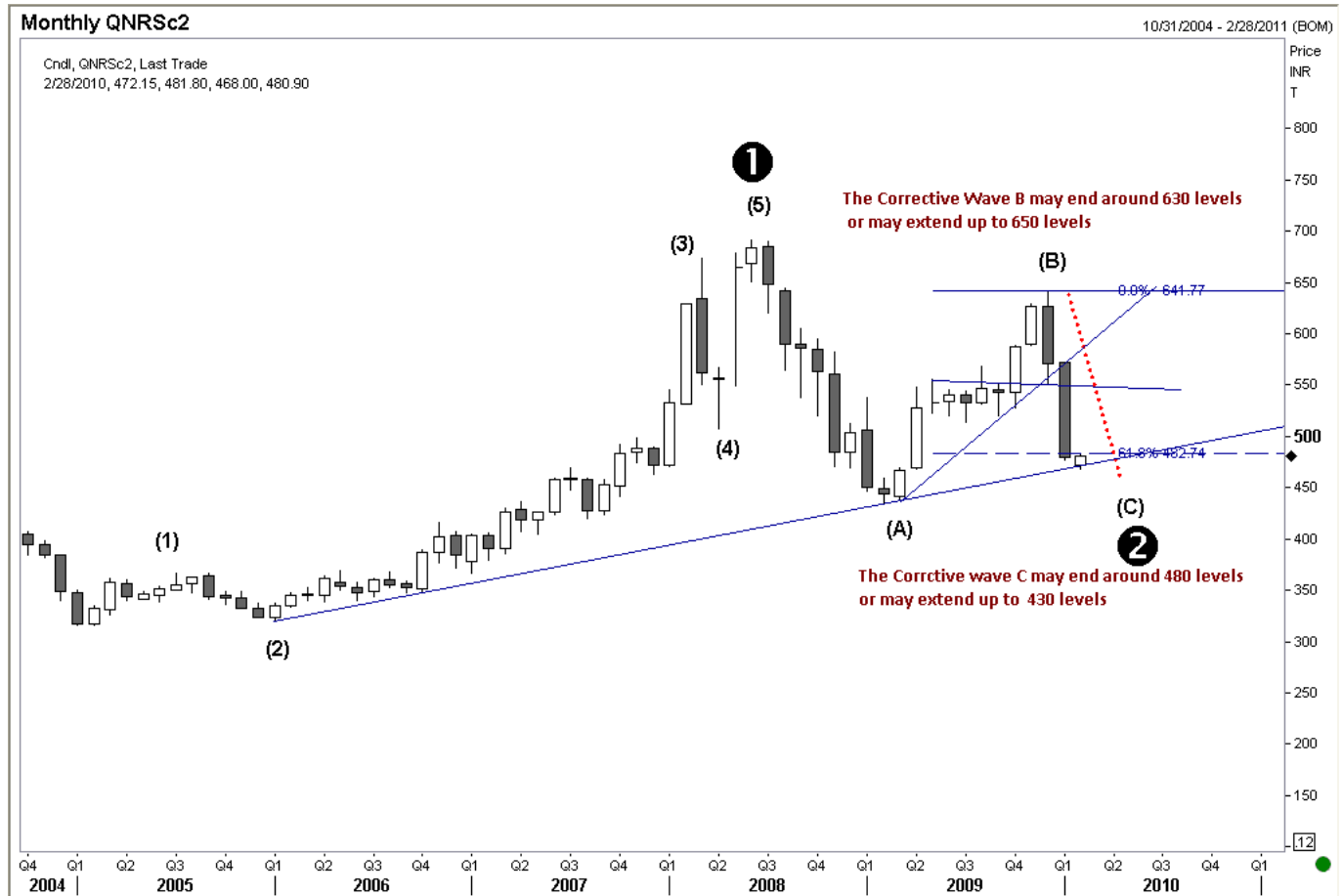


Rapeseed/Mustard seed futures fell drastically in last couple of weeks on strong selling pressure supported by slack demand in the market. Furthermore, sharp decline in soy market also had a bearish impact on the mustard seed market. Improvement in acreage following improved weather condition also had a bearish impact on the market. Moreover, record inventory at exchange warehouses was also one of the reasons for the fall in the price. The most active April contract futures prices fell to as low as 474 levels from a high of 580 levels. In 2008-09, mustard seed production in India rose to 65 lakh tonnes against 46 lakh tonnes a year ago.

### Price Outlook

The prices have fallen drastically from around Rs.580 levels to Rs.474 levels, registering a decline of 18.30% within a span of a fortnight. A record delivery upon expiry of January contract and nearing of new harvesting season resulted into sharp decline in the prices. Furthermore, weak trend in soy complex market also had a bearish impact on the mustard seed market. The central government has raised the Minimum Support Price for mustard seed by Rs30 to Rs1830 a quintal from Rs1800 a quintal.

The prices are expected to recover from its recent losses due to short covering. But, the medium term trend will remain weak because the new harvesting season has begun and produce is slowly moving to the spot markets and is expected to pickup from first week of February. According to trade sources, production is expected to be around 57-58 lakh tonnes in the current year.



**Supports: 430, 390 Resistances: 510, 550**

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