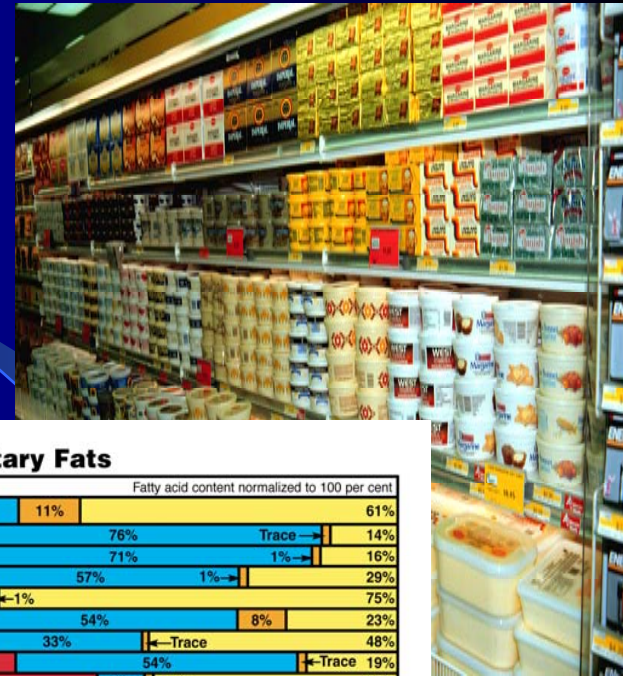


# Canadian Canola

## Past, Present and Mostly the Future



### Comparison of Dietary Fats

DIETARY FAT	Fatty acid content normalized to 100 per cent			
Canola oil	7%	21%	11%	61%
Safflower oil	10%	76%	Trace	14%
Sunflower oil	12%	71%	1%	16%
Corn oil	13%	57%	1%	29%
Olive oil	15%	9%	1%	75%
Soybean oil	15%	54%	8%	23%
Peanut oil	19%	33%	Trace	48%
Cottonseed oil	27%	54%	Trace	19%
Lard*	43%	9%	1%	47%
Beef tallow*	48%	2%	1%	49%
Palm oil	51%	10%	Trace	39%
Butterfat*	68%	3%	1%	28%
Coconut oil	91%	2%	7%	

\* Cholesterol Content (mg/Tbsp): Lard 12; Beef tallow 14; Butterfat 33. No cholesterol in any vegetable-based oil.  
Source: POS Pilot Plant Corporation, Saskatoon, Saskatchewan, Canada June 1994

■ SATURATED FAT  
■ MONOUNSATURATED FAT  
■ POLYUNSATURATED FAT  
■ Linoleic Acid  
■ Alpha-Linolenic Acid (An Omega-3 Fatty Acid)

CANOLA COUNCIL OF CANADA 400-307 LOEBARD AVENUE WINNIPEG MANITOBA CANADA R2B 0T5

# The Past

In 1974, the first modified *Brassica napus* variety “Tower” was introduced



# The Past

Breeding for <2% erucic acid/<30 micromoles glucosinolates created “balanced” low saturated fat profile

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Source: POS Pilot Plant Corporation, Saskatoon, Saskatchewan, Canada June 1994

■ SATURATED FAT

■ MONOUNSATURATED FAT



CANOLA COUNCIL OF CANADA 400-167 LOMBARD AVENUE WINNIPEG MANITOBA CANADA R3B 0T6

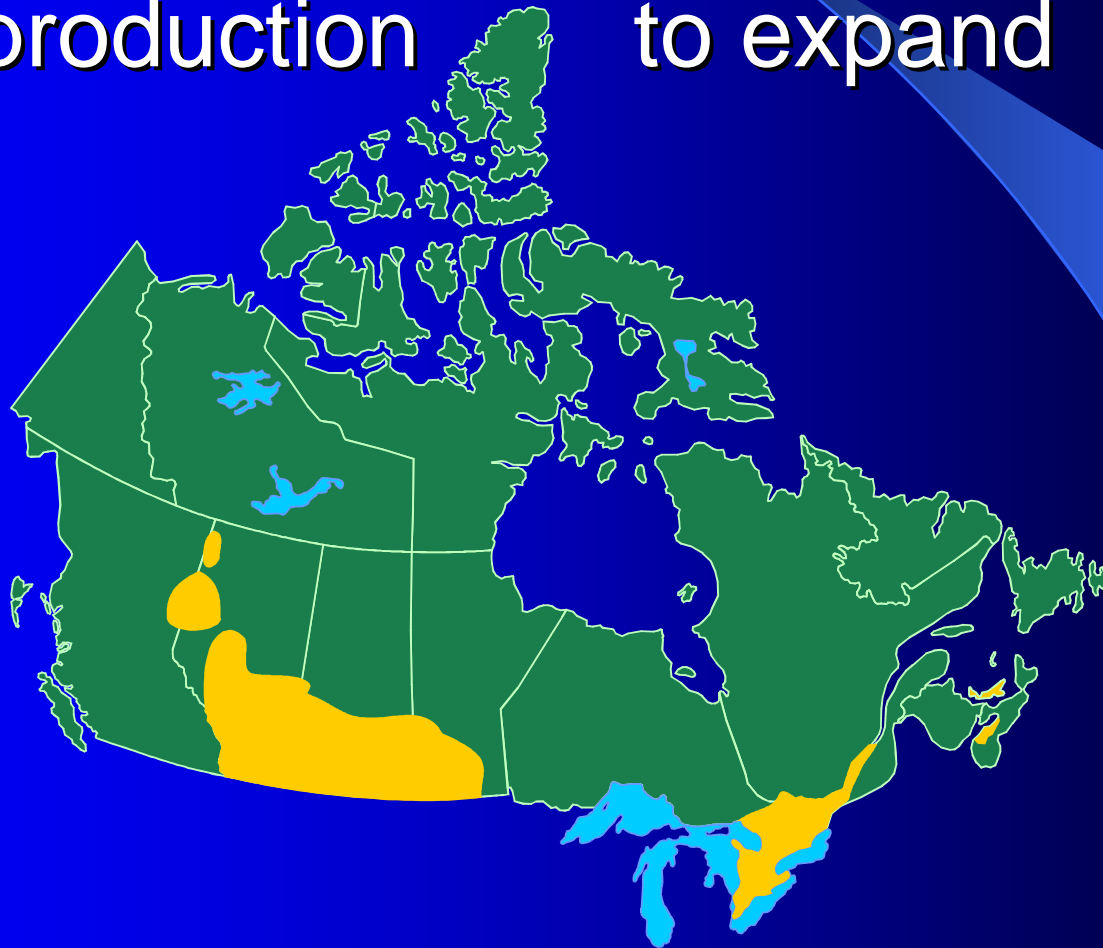
POLYUNSATURATED FAT

■ Linoleic Acid

■ Alpha-Linolenic Acid  
(An Omega-3 Fatty Acid)

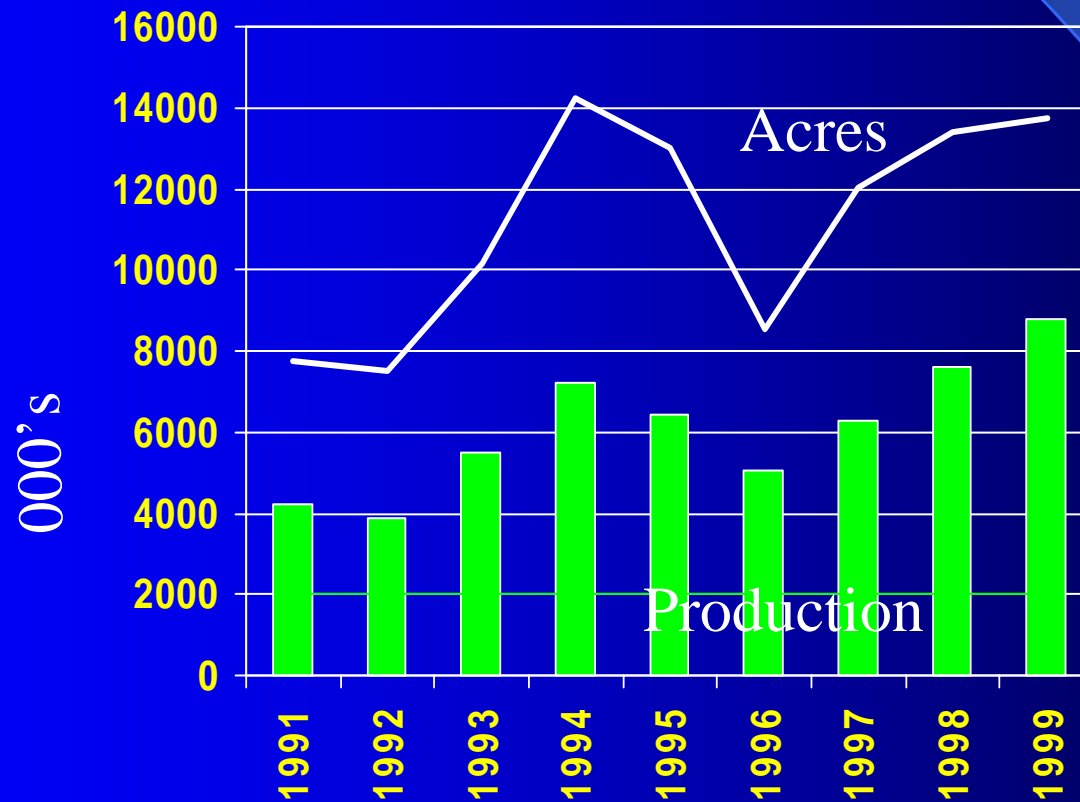
# The Past

Private sector variety development  
improves agronomics and allows  
production to expand



# The Past

Dubbed the “Cinderella crop”,  
production trend through the 90’s is  
generally upwards



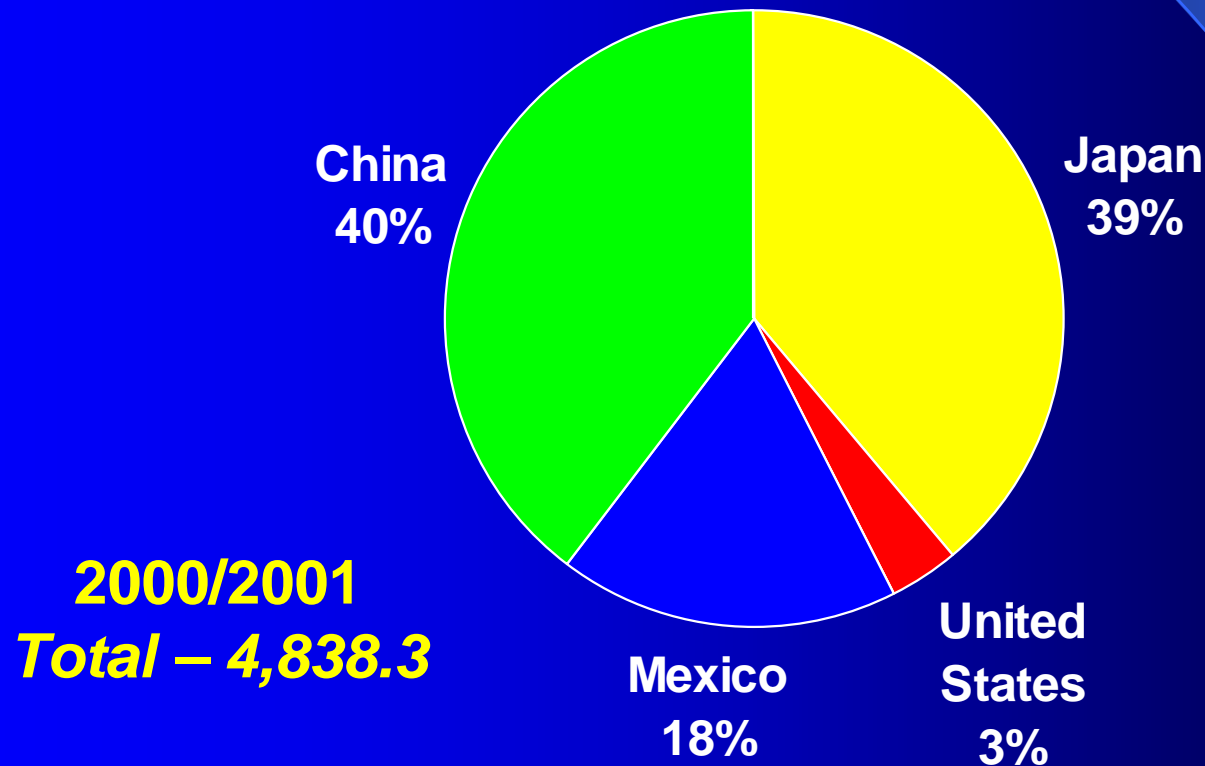
# The Past

An impressive infrastructure grows to 4.5 million tonnes crush capacity



# The Past

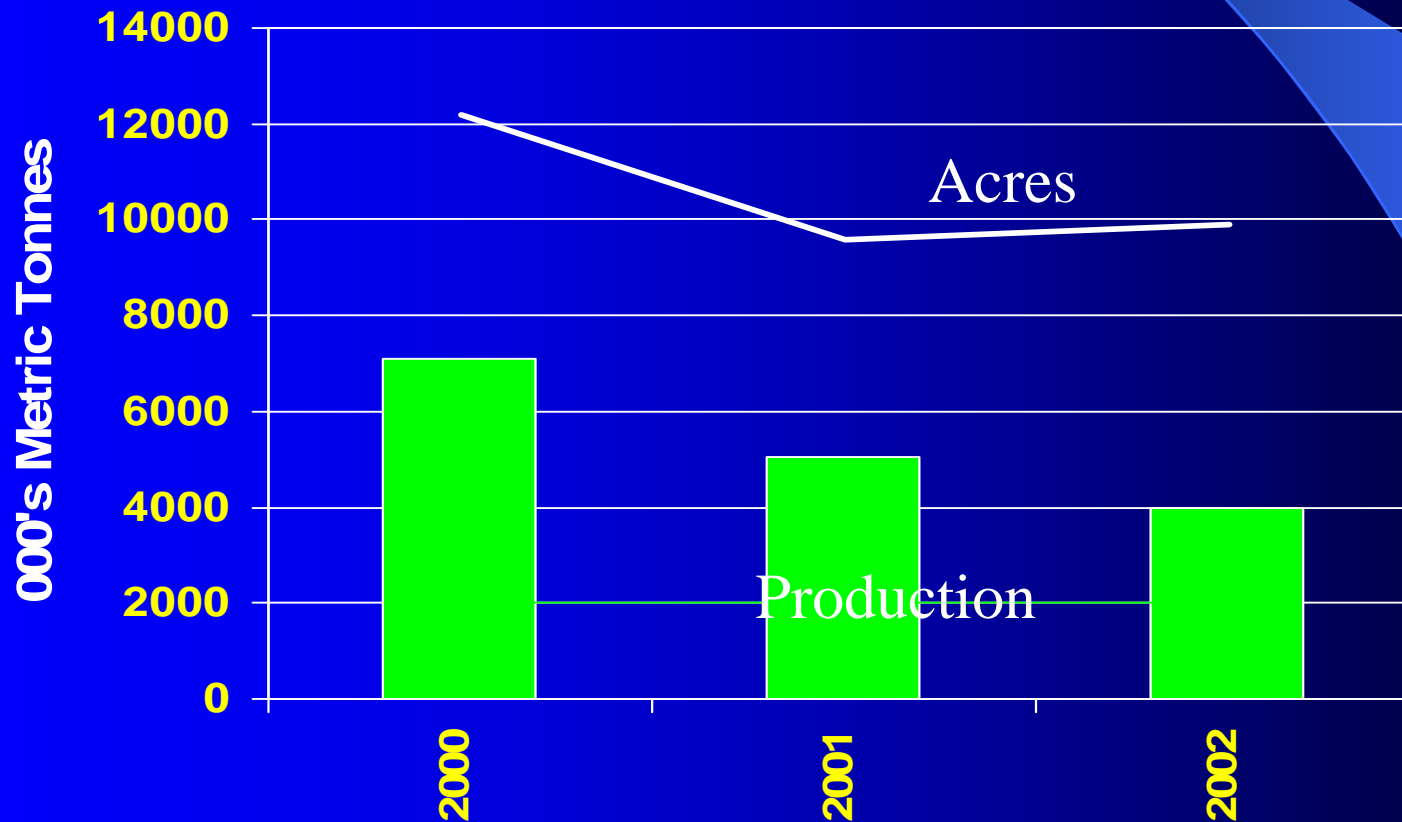
The customer base grows and seed exports peak at nearly 5 million tonnes



# The Past

## Production Begins to Fall

- Value relative to other crops
- Drought

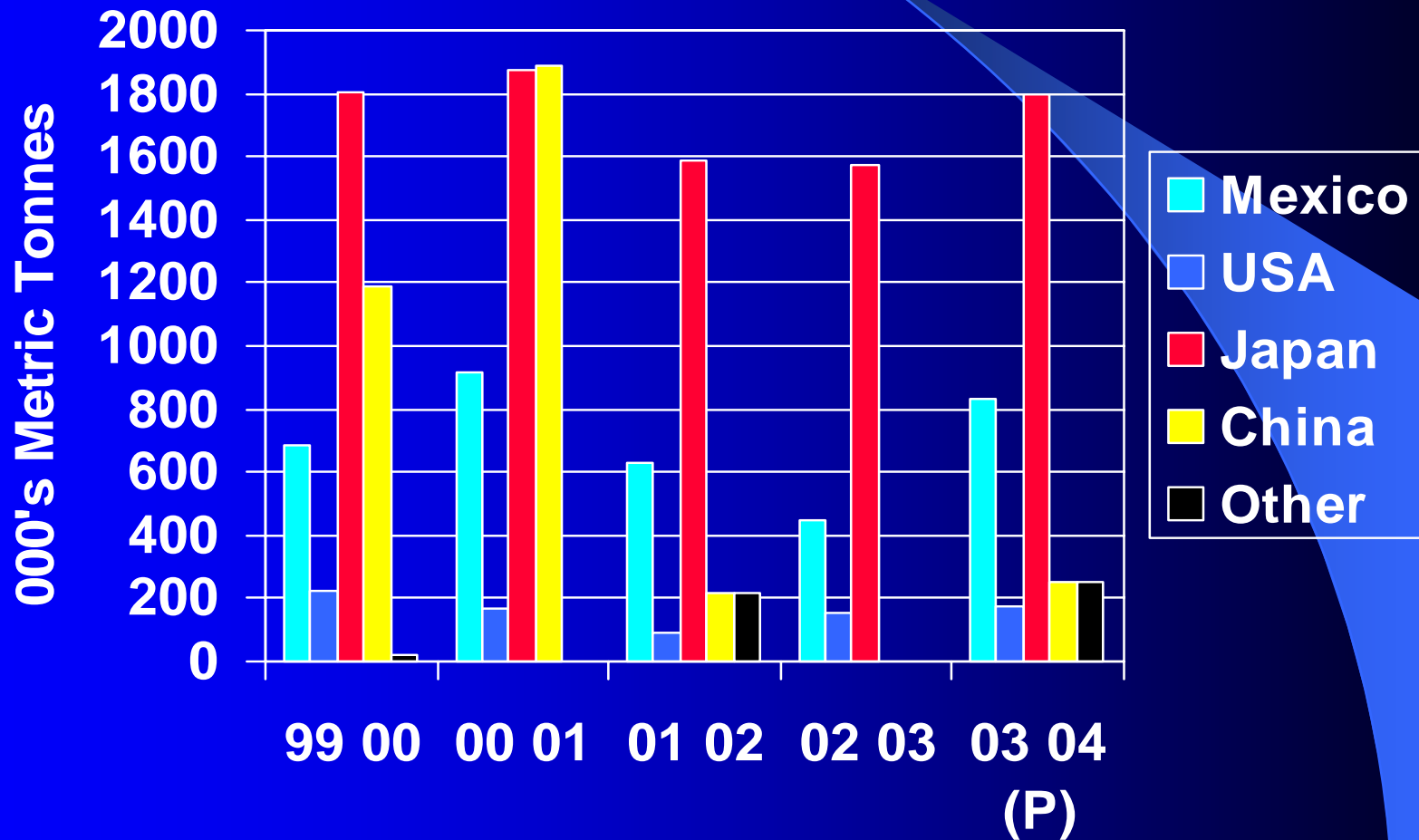


# The Present

- 2003 crop sees acreage and production rebound
- Acreage up 21% from 9.9 to 11.6 million acres
- Production estimate – 6.4 to 6.7 million tonnes
- Return of buyers like China and Mexico

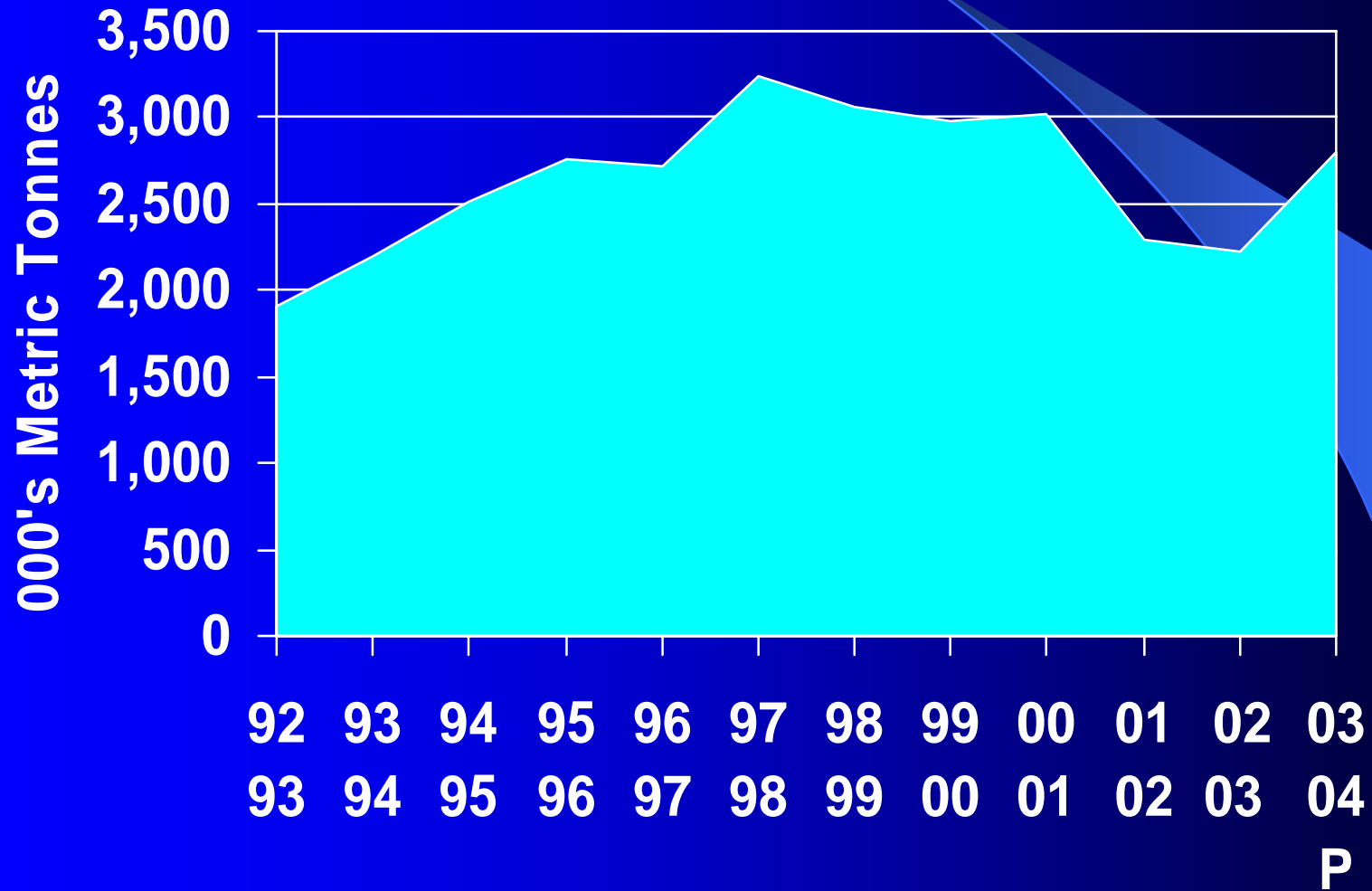
# The Present

## 2003/04 Projected Seed Exports



# The Present

## 2003/04 Projected Crush



# The Present

## Dealing with GM

- 90% of acreage in Canada planted to herbicide tolerant varieties (65% gene technology and 25% mutagenesis)
- No material impact in traditional markets
- Loss of EU as “opportunistic” market has been an issue in 3 of last 7 years
- Concern about use of GM as non-tariff trade barrier in destinations with local production base

# The Future

## A New Era for Canola

- “Low sat” profile plays into new Canadian nutrition labeling regime and U.S. label claims
- Essential fatty acids given increased attention by U.S. government
- Revisions to Canadian and U.S. food guides may recommend higher vegetable oil consumption
- Growing middle class in developing world will expand market for canola
- Small but committed production base being developed in Mexico and Iran for canola

# The Future

## Addressing the Trans-Fat Issue

- Cargill's Clear Valley and Dow's Natreon offer alternative to partial hydrogenation

<b>Specification</b>	<b>Conventional</b>	<b>High Oleics</b>
Sats	<7%	<7%
18:1 (oleic)	60%	65%-85%
18:2 (linoleic)	20%	6% - 20%
18:3 (linolenic)	10%	2% - 4%
Iodine value	110 - 120	86 - 100
AOM value	18 hours	30 – 65 hours
Smoke point	220 Deg C	

# The Future

## Addressing the Trans-Fat Issue

- Target – North American deep frying market and Japan
- Planted acreage jumps from 200,000 to 500,000+ in the 2003
- New agronomic packages will help boost production
- Goal - 2,000,000 acres by 2007 (1 million tonnes seed)

# The Future

## Addressing Stability in Supply

- Improving production economics
  - Canola College
  - JIT delivery of pest control information
  - Production Guide
  - R&D to address climatic change in traditional growing regions
  - B. juncea
  - Hybrids

# The Future

## 7 by '07 Seed Equivalent Objectives

<b>Maintain base consumption (Japan/Mexico/domestic crush)</b>	<b>4,300,000</b>
<b>2-3 new dedicated canola customers (geographic)</b>	<b>500,000</b>
<b>Expand sales to Mexico</b>	<b>500,000</b>
<b>Expand U.S. oil consumption (high oleic)</b>	<b>1,000,000</b>
<b>Create domestic biodiesel market</b>	<b>700,000</b>



# The Future

## Our Survival Depends On



- Differentiating ourselves in the marketplace so we can avoid the “commodity crunch”
- Maintaining the “critical mass” and business environment necessary to ensure continued R&D investment
- Maintaining open access in key markets

