

**Future Business Strategies for the Fertiliser
&
Agriculture Sector**

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Opportunity for

- Consolidation (eg. Drought, water harvesting)
- Diversification (eg. Invasions)
- Innovation (eg. World war – II)

Reforms in Farm Segment

- ❖**Rural infrastructure** – Improving connectivity, warehousing etc.
- ❖**Emphasis on rural and agri credit-** Reduce interest rate
- ❖**Agri Export Zones** – 28 sanctioned
- ❖**Irrigation projects** – River linking, micro irrigation
- ❖**Rural employment** – Agri clinics etc.



Reforms in farm Segment Contd.....

- ❖ **Contract Farming-** Firming up laws

- ❖ **Land Leasing** – Enable corporate farming

- ❖ **Land Share Company in Agriculture** – New concept

- ❖ **Commodity Exchanges-** Price discovery, Risk hedging

Impact

- ⊕ **Linkages to world markets-Opportunities/Competition**

- ⊕ **IPR (Intellectual Property Rights) – Seeds right, GM crops**

- ⊕ **Commodity exchanges - Risk hedging, Price insurance**

- ⊕ **Crop diversification – Growth in contract farming**

- ⊕ **Subsidies - Direct & indirect**

- ⊕ **Custom Duties-Favourable / unfavourable**

- ⊕ **Farm service sector - High growth**

Fertiliser Industry.....



Markets we operate

Insights - Rural market

➤ Largest potential in the world- 742 million people

➤ Rural Market > Urban

FMCGs 53%

Durables 59%

➤ Annual rural market estimate

Source: NCAER, IMDR 2002

FMCG Rs 65,000 crore

Durables Rs 5,000 crore

Agri-inputs (incl tractors) Rs 45,000 crore

2 / 4 Wheelers Rs 8,000 crore

Total

Rs 1,23,000 crore

(1 crore = 10 million)

Source: Francis Kanoi, 2002

Insights contd.....

- 50% of BSNL mobile connections are in small towns & Villages(out of total two million)
- LIC sold 62 lakh policies in rural India (about 50%)in 03-04
- 41 million Kisan Credit Cards (KCC) issued in rural exceed the 40 million credit-plus-debit cards issued in urban.
- 20 million Rediffmail signups, 60 % are from small towns.
- 1,00,000 who have transacted on Rediff online shopping site, 50 per cent are from small towns

Rural Market : Changing Scenario

All figures in %

Consumer Class	Income Groups	1994-95	2006-07
Very Rich	Above Rs 215,000	1.6	5.6
Consuming Class	Rs 45001-215,000	2.7	5.8
Climbers	Rs 22,001-45,000	8.3	22.4
Aspirants	Rs 16,001-22,000	26.0	44.6
Destitutes	Rs 16,000 & below	61.4	20.2
Total		100.0	100.0

Projections based on 7.2% GDP growth

Source : NCAER

Shift in consumer class from lower to upper strata is higher in rural areas

Rural Market - Opportunities & Challenges

Opportunities

- Large population- high potential
- Average annual household income - Rs.56,630
- High saving rate – 30%
- Changing rural aspiration & lifestyle
- Rising literacy level -60%
- Significant progress in Information and Communication Technology

Challenges

- Understanding customers-Complex
- Poor infrastructure

Agri Input Companies - Strength

- Understanding of rural consumers**
- Rural reach –Established dealers/retailers network**
- Recognition / acceptability – Channel partners and consumers**
- Logistics –Rich experience –Rail /road**
- Warehousing – Set up and handling experience**
- Port operations - DAP ,MOP ,etc**

New mantra for success

“Putting results ahead of resources”

*“Companies will no longer find some use for their resources.
In contrast they will find resources that are useful in
accomplishing corporate objectives”*



✓ Companies will find horses for courses

✓ Companies will put results ahead of resources

Some Opportunities.....

Leveraging on Strength

- 1. Commodity exchange**
- 2. Commodity Trading**
- 3. Food Processing**
- 4. Agri Retail Centers**
- 5. Contract Farming**
- 6. Micro irrigation**
- 7. Medicinal & Aromatic Plants**
- 8. Cattle Nutrition**
- 9. Insurance**

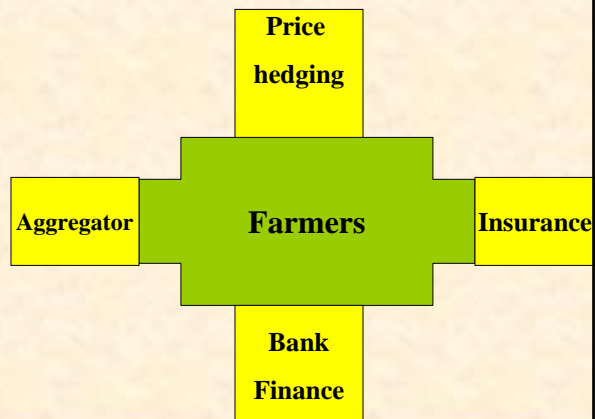
Commodity Exchanges

Paradigm Shift

- ❖ Setting up nation wide online multi commodity exchanges
- ❖ Enable producers / processors / traders / exporters to sell / buy in advance & protect against possible price fall / rise

Function

- ✓ Price Discovery
- ✓ Risk management
- ✓ Price for Quality



Key Drivers

Supply – World's leading producer of 17 Agri Commodities

Demand – World's major market of Foodgrains, Edible oils, Fibres, spices

GDP Driver – Predominantly an AGRARIAN Economy

Captive Market – Agro products produced and consumed locally

Width & Spread – Over 30 major markets and 5500 Mandis

Waiting to Explode – Value of production : Rs. 3,00,000 crore

Expected future market Rs. 30,00,000 Cr (as per MCX)

Opportunities for Fertilizer Sector

Equity participation

IFFCO 30% equity in Multi Commodity Exchange, 12% in NCDEX

Information provider

ITC, EID Parry & DSCL tie up with NCDEX for agri commodity price data

Services provider

Warehousing – FCI, CWC & SWC

Membership

Under various categories

- Trading-Cum Clearing member(TCM)
- Institutional Trading-Cum-Clearing Member (ITCM)
- Professional Clearing member (PCM)

Commodity Trading

Why ?

1. **Opportunity - Build long term relationship with the farmer**
2. **Completing the cycle – Backward & forward linkage**
3. **Leverage - Existing strength**
 - Knowledge
 - Reach
 - Warehousing
 - Logistics

Case Study

WHEAT

Under Surplus Scenario (Export)

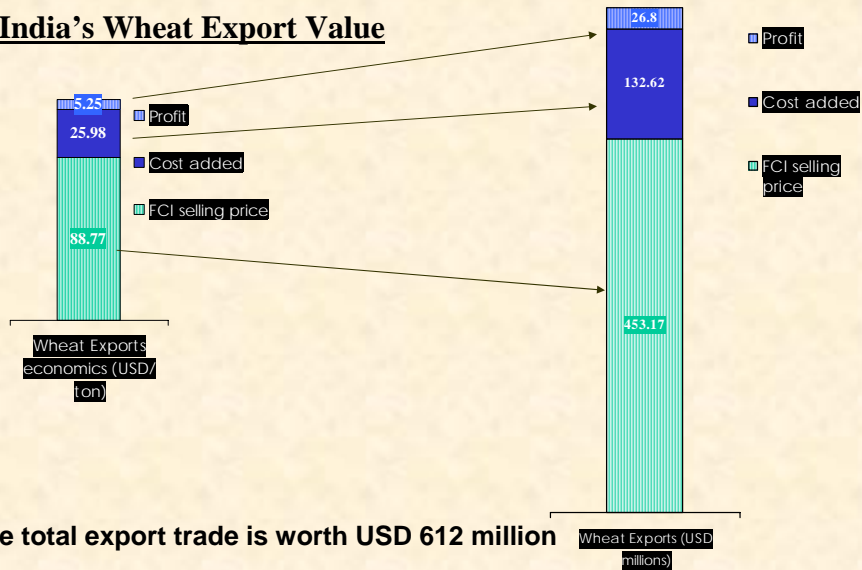
Wheat trade- Characteristics

1. **Infrastructure - Inadequate**
2. **Grading System/identity preservation-Lacking**
3. **Intermediaries- Multi Level**
4. **Cost of transportation - High**
5. **World wide SND - Positive / Negative**
6. **Govt. role -Limited in the future**

“Last three years there was net export of Wheat from India while in the current year wheat is being imported”

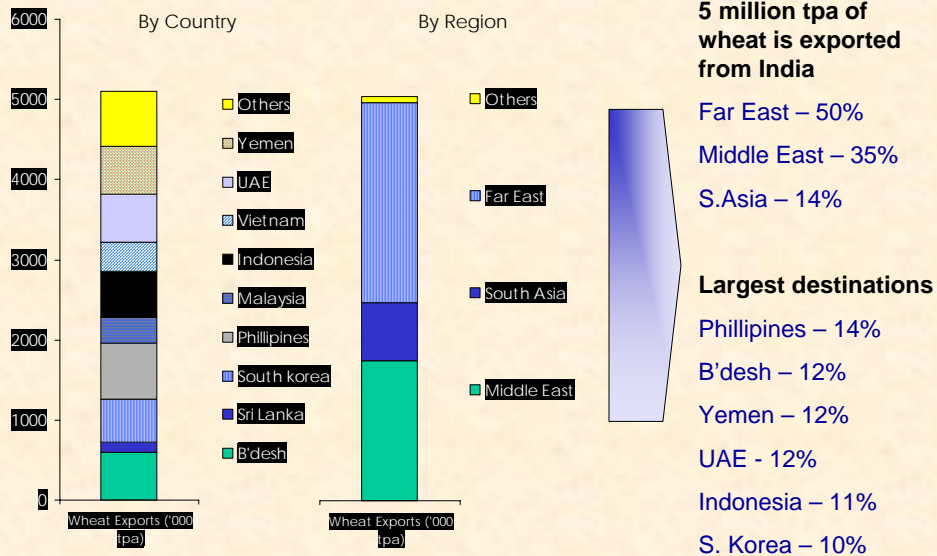
Example under Export Scenario

India's Wheat Export Value

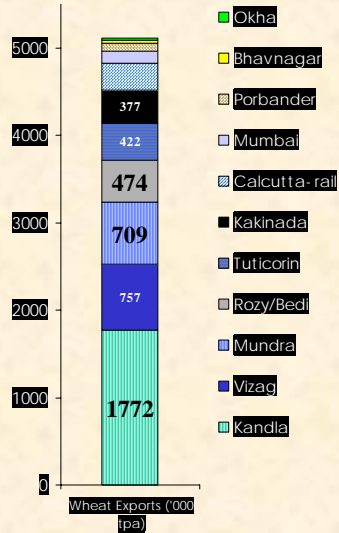


The total export trade is worth USD 612 million
 The total profits are worth USD 27 million

India's Wheat Export Destinations



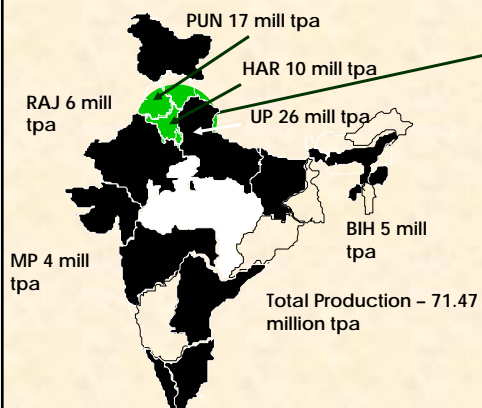
India's Wheat Export Sources



Kandla is the largest source, accounting for 35% of exports

Kandla, Vizag, Mundra, Rozy/ Bedi and Tuticorin together account for 81% of exports

India's Wheat Production Sources

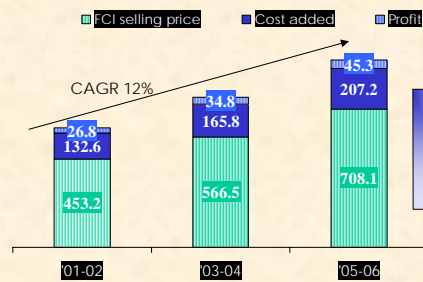


60% of total comes from this region

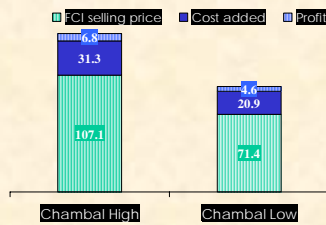
6 states produce 80% of the total

Basic surplus for exports originates in Punjab, Haryana, West UP, Rajasthan and MP

Achievable share of wheat under export scenario



All values in USD millions



During the next few years

- Exports likely to increase to 8 million tpa from current 5.1 million tpa
- Total Exports set to expand to USD 960 millions from USD 612 millions
- Additional annual profits of USD 19 millions
- Currently two players Cargill and Adani control 40-45% of the export.

•Expanding market and few players – hence entry not too difficult

•25 to 30% of additional market is achievable for new entrant within 3-4 years

•A higher share (40-45% of additional market) is achievable with some stretch

•High end scenario – 1.2 million tpa sales (USD 145 million) – Profit USD 6.8 million

•Low end scenario – 0.8 million tpa sales (USD 97 million) – Profit USD 4.6 million

Opportunities for Fertilizer Sector

1. Enter into commodity trading business

2. Equity partnership with trading companies to leverage on individual strength.

Food Processing

Why ?

- ❖ Supply driven, rather than demand led.
- ❖ Wastage –Very high 25% of production.
- ❖ Intermediaries - Innumerable
- ❖ Storage facilities-Lacking
- ❖ Grading & sorting infrastructure- Inadequate
- ❖ Pricing- Lacks transparency
- ❖ Wholesale markets - Cartelization

**Opportunity for leveraging
networking strength across nation**

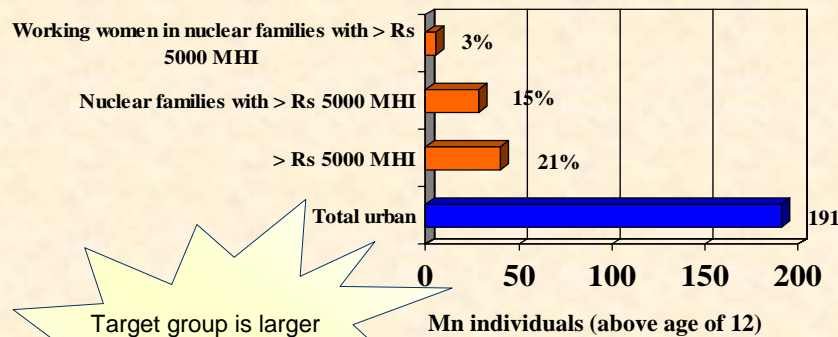
Food Processing

- **Processed food industry ranks 5th in country**
- **Contributes 6.5 % in GDP**
- **Accounts for 13% of the country's exports**
- **Involves 6% of total industrial investment in the country**
- **Industry employs 1.6 million workers** (18% of country's industrial labour)
- **India produces 600 million Tons of food products every year**
- **Size of processed food industry is estimated at Rs. 3150 bn** (include Rs 990bn of value added products)
- **Un organised small player process 75% output in volume and 50% in value**



Key Drivers

Change in Consumer Demographics

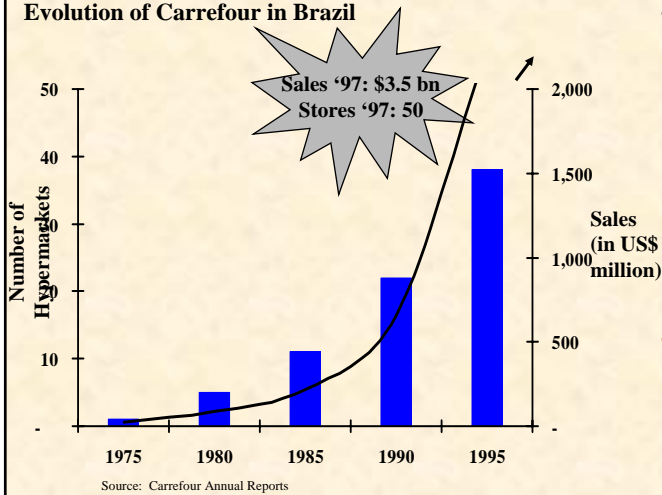


Target group is larger than entire population of Australia or Canada

Clear target group of over 40 mn consumers (urban, > Rs 5000 MHI, above 12 age group) spread over a few cities which has been growing much faster than the Indian GDP.

Emerging Retail market

Evolution of Carrefour in Brazil



- In South East Asia, modern retail growth has been speeded up by introduction of new retail concepts by foreign retailers. This has forced local retailers to catch up
- Chinese retail industry has benefited from FDI and has been growing at 40% since 1996.

The desired value chain - reduce intermediaries & increase food safety



Optimize the supply chain:

- Better infrastructure – rail & road
- Refrigerated vans
- Faster communication
- reduce losses and costs

Food Processing

Potential and Reliable Growths Rates (1998-2010) (in percent)				
Frozen Food Product	Potential Growth Rate	Realisable Growth Rate		
		High	Medium	Low
Dairy Products	30	25.0	15.0	5.0
Fruit & Vegetables	42	35.7	29.8	18.8
Meat & Meat Products	40	25.6	22.9	16.4
Poultry Products	80	40.0	25.9	15.0

(source; APEDA study)

Opportunities for Fertilizer Sector

1. Diversify in Food processing business
2. Enter warehousing / storage facilities
3. Cold chain / Logistics
4. Leverage farmer linkages – supply base

Micro Irrigation

Why ?

Current water use efficiency in agriculture – 30 – 40%

Mkt size – 500 Cr with past growth rate of 15-20% per annum

**Proposed area for adoption Xth plan – 3 m ha & XIth plan 14 m ha
(potential of 72 million ha)**



Contd.....

Govt support : National Horti. Tech Mission – cover 60% of area under horti. Crops

Govt Budget outlay for 2006-07 is Rs.520 Crore under MI

Budget outlay for 2006-07 under National Horticulture Mission is Rs. 1000 Cr.

Presently Top 6 companies enjoy 78 % of mkt share

Many Israeli companies keen to establish tie ups for mktg.

Opportunities for Fertilizer Sector

- 1. Technology tie ups with world leaders**
- 2. Distribution tie ups - Leverage existing strength**
- 3. Increase in product portfolio**

Medicinal Plants

Why ?

Global trade USD 80 Billion

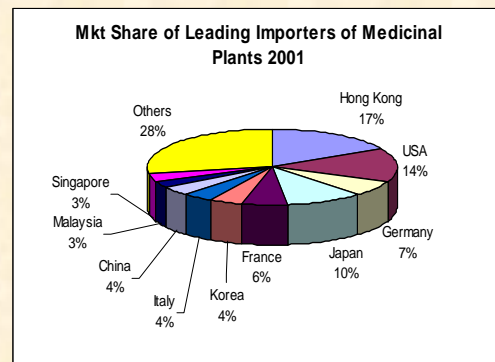
Leading importers Hong Kong, USA, Germany and Japan

Major exporter China

China earning USD 5 million from herbal trade

India exports 447 Crore

Market growing at the rate of 15-25 % annually

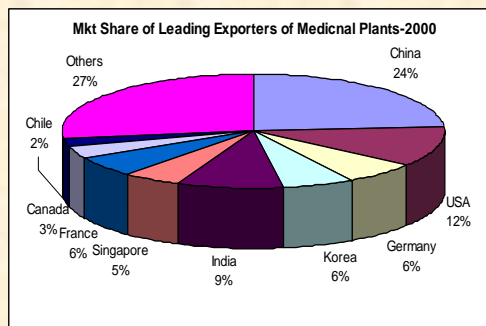


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India Advantage

1. Rich Biodiversity 40% of the world
2. 880 species in active trade 48 species exported and around 42 imported Major plants(Amla, Satawar, Ashwagandha, Harar, Asoka, Bael,Senna)
3. 61% of traded species are sourced from the wild
4. Commercial cultivation picking up

Organised sector showing interest –
Reliance, Dabur etc.



Top Ten Highly Traded Medicinal Plants				
S.n o.	Botanical Name	Common name	Part used	Cultivated (c) wild (w)
1.	Emblca officinallis	Amla	Fruit 7 seed	c / w
2.	Asparagus racemosus	Satawar	Roots, leaves, whole plant	c / w
3.	Withania somnifera	Ashwagandha	Root, Leaf	c / w
4.	Terminalia chebula	Harar	Fruit , Seed	c / w
5.	Saraca asoca	Ashoka	Stem, Bark	w
6.	Aegle marmelos	Bael	Fruit, bark, Flower. Leaf,	c / w
7.	Cassia augustifolia	Senna	Seed, Root, Leaf, fruit	c
8.	Adhatoda vasica	Vasa	Leaf, flower, root	c / w
9.	Piper longum	ppippali	Fruit & Root	c / w
10.	Bacopa monnieri	Brahmi	Whole plant	c / w

Jatropha – a case study for wasteland development ?

- **Drought resistant perenial shrub – req 500 mm rainfall**
- **Grows in marginal and poor soil**
- **Easy to establish**
- **Non grazing for cattle – hence no fencing requirement**
- **Produces seeds (37%) oil content for 50 years**
- **Shrub thrives on infertile soils**
- **Oil can be combusted as fuel without refinement**
- **Intercropping can be done with pulses and oilseeds in the first 3 years**



Where this can be grown ? 19 mha

- 3 million ha from forest area**
- 4 million ha from additional wasteland**
- 2.4 million ha from cultivable fallow land**
- 1 million ha from strip land along roads/rail lines**
- 3million ha from agriculture (boundary plantation)**
- 2 million ha agriculture forestry**
- 2 million ha under watershed**



Benefits of Jatropha

10 Mha land would yield

- 1. 1.5 ton/ha seed**
- 2. 4 Mmt of oils (1/10th of country's oil requirement),**
- 3. 11 Mmt of organic manure**
- 4. huge employment potential**
- 5. Income to rural household after 3 years**



**Can provide income to the extent of Rs
50000/ha from 5th year onwards**

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Opportunities for Fertilizer Sector

- 1. Trading in Medicinal plant**
- 2. Extraction plant for derivatives**
- 3. Sourcing tie up with reputed companies**
- 4. Contract farming for buyers**

Cattle Nutrition

WHY ?

- Same target audience
- Similar retail outlets
- Economies of scope – existing mktg team
- Growing market – 16-18%
- Value addition – Trade & Company

ABOUT THE INDUSTRY....

- All India Cattle Feed – Approx 2000 Crore
- Industry Growth –10% Per Annum
- Reason for Growth – Breed improvement, Response to feed concentrates, awareness, Shortage of fodder
- Production Capacity– 50% est. Demand
- Major Players – GODREJ , MARKFED, COOPERATIVES etc.
- Local players - QUALITY ???

Feed segments –Gap analysis

CATEGORY	in mMT					
	2000			2006		
	DEMAND	SUPPLY	% DEFICIT	DEMAND	SUPPLY	% DEFICIT
DRY FODDAR	632.61	523.61	17.3	561.8	483.26	13.98
GREEN FODDAR	830.12	573.5	31	839.07	743.46	11.48
CONCENTRATES	88.05	46.18	47.6	127.09	45.63	64.1

Sources – report of the policy Advisory group on Integrated Grazing policy, Ministry of Environment & forests, GOI, Sub group on Feed Production Enhancement for the 10th Five Year Plan 2001

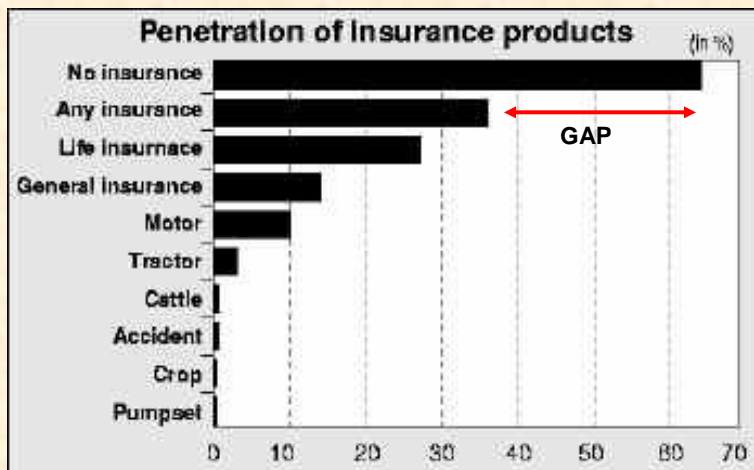
Opportunities for Fertilizer Sector

- 1. Setting up of Cattle feed plant eg. IPL**
- 2. Marketing tie up**

Insurance

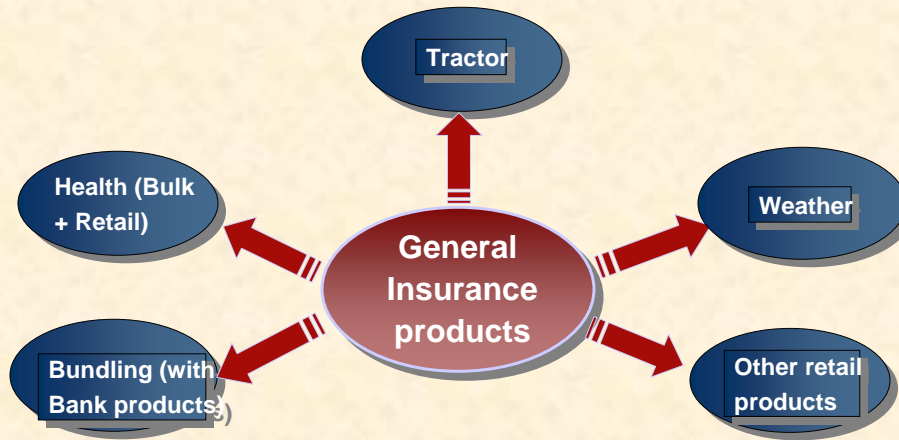
WHY ?

- ✓ Rural population with 142 million household is three times urban population
- ✓ 41 percent of middle class resides in rural India
- ✓ Controls 58 per cent of disposable income
- ✓ Savings ratio is a healthy 30% of income
- ✓ Awareness about Life Insurance is near universal
- ✓ Nearly 20% of farmers in rural India own a Kissan Credit Cards.
- ✓ It offers a huge data base and opportunity for insurance.
- ✓ Opening up of insurance sector for private players

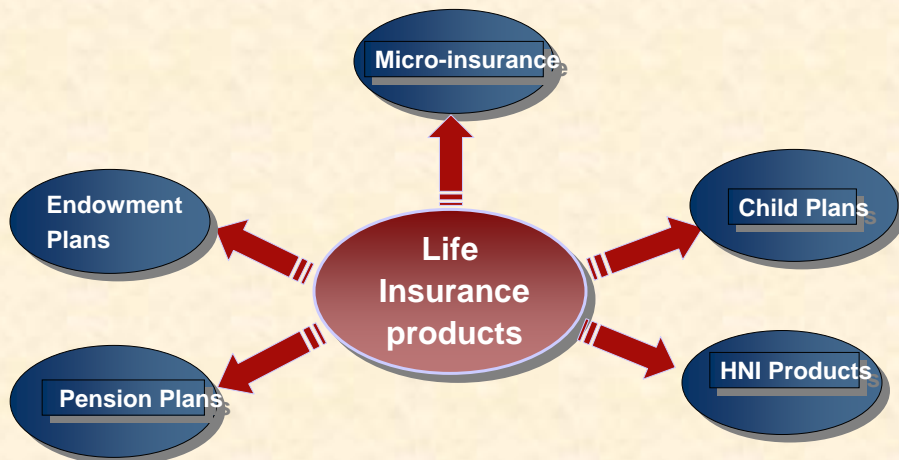


Large Gap exists for Insurance products

Increase in availability of insurance products



Increase in availability of insurance products



Opportunities for Fertilizer Sector

- 1. Entry into Insurance Business – IFFCO**
- 2. Distribution tie up for Insurance products - DSCL**
- 3. Value addition to existing business – Tata Krishi Sansar**

Contract Farming

WHY ?

Food processing business requirement - assured supply base

Quality aspects gaining importance

Introduction of new crop / Variety / technology

Reduce risk for farmers – guaranteed & fixed pricing

Easy access to crop finance and insurance

Companies ventured in Contract Farming

Company	Crop	Area
Pepsi Co	Tomato, Chilli, Potato, Citrus	Punjab / Gujarat
Frito Lays	Seed Potato / Ware Potato	Punjab, W. Bengal, Karnataka, Maharashtra, MP, UP
MCCAIN	Potato	Gujarat
DSCL	Wheat seed, Basmati, Potato	UP, Haryana, Punjab, Rajasthan
Escorts	Basmati	Punjab, Haryana
Mahindra Shubhlabh	Seed potato, Basmati, Maize, barley	Punjab
Airtel-Bharti (Field Fresh)	Vegetables	UP, Punjab, Uttranchal
Godrej	Potato, Maize	Gujarat, MP, AP, Maharashtra
Chambal –FPU	American sweet corn, Green pea, Vegetables	UP, Haryana, Uttranchal
Chambal Agritech Ltd	Potato	(Seed potato) Punjab, U.P., Haryana

Opportunities for Fertilizer Sector

- 1. Tie ups to take large scale contract farming**
- 2. Backward integration with farmers**

Rural Retail Chain

Why?

- Existing Rural market of Rs.1,23,000 crore
- Increasing disposable income (annual average household income Rs.56,630)
- There are a total of 3.7 lakhs shops (retail outlets) in the rural sector, leading to an average of 5.85 shops per village.
- With establishment of (permanent) shops, Haats are moving out.
- 33% of total villages are connected by pucca roads.
- Growing literacy rate (60% presently)
- Increasing aspirations – media exposure

Opportunities / Strength

- ✓ Agri input sector already commanding 36% of rural market share
- ✓ Understanding of buying behavior of consumers
- ✓ Existing awareness about of the company's name / brand
- ✓ Experience in logistics and supply chain at micro (village) level
- ✓ Leverage existing strength of agri inputs to diversify into newer product / business portfolio

Major trends

Many Corporate venturing into rural hyper mkts

ITC	Choupal Sagar
Cargill	Sathi Krishi Samadhan Kendras
Godrej	Adhar
DSCCL	Hariyali
Triveni	Khushali
TATA	Tata Krishi Sansar

In Pipeline (Retail & backward integration)
Reliance, Bharati, Adani, Pantaloon etc.

Thank You