Price Risk Management through Commodity Derivatives

Overview of NCDEX

Launched in 2003
Now India's most vibrant platform for price discovery and risk management for agricultural commodities.

Network
460 members
Trading in 20 commodities

Product Offering
2.3 million client base
More than 1,000 towns and cities.

Logistics
300 approved warehouses
Cumulative storage capacity of 1.8 million tonnes.
### Global agri futures

#### A perspective

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Exchange</th>
<th>OI / Crop Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>CBOT</td>
<td>21.0 %</td>
</tr>
<tr>
<td>Wheat</td>
<td>CBOT</td>
<td>28.0 %</td>
</tr>
<tr>
<td>Soybean</td>
<td>CBOT</td>
<td>41.0 %</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>ICE</td>
<td>8.0 %</td>
</tr>
<tr>
<td>Cotton</td>
<td>Zhengzhou Commodity Exchange</td>
<td>20.0 %</td>
</tr>
<tr>
<td>Soybean oil</td>
<td>CBOT</td>
<td>30.0 %</td>
</tr>
</tbody>
</table>

Source: USDA & FIA

### Indian agri futures

#### An opportunity

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Exchange</th>
<th>Crop Production (in million MT)</th>
<th>Open Interest (in million MT)</th>
<th>OI / Crop Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>NCDEX</td>
<td>20</td>
<td>0.02</td>
<td>0.1 %</td>
</tr>
<tr>
<td>Wheat</td>
<td>NCDEX</td>
<td>99</td>
<td>0.07</td>
<td>0.1 %</td>
</tr>
<tr>
<td>Soybean</td>
<td>NCDEX</td>
<td>11</td>
<td>0.20</td>
<td>1.8 %</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>NCDEX</td>
<td>8</td>
<td>0.20</td>
<td>2.5 %</td>
</tr>
<tr>
<td>Cotton</td>
<td>NCDEX</td>
<td>6</td>
<td>0.04</td>
<td>0.7 %</td>
</tr>
<tr>
<td>Refined soy oil</td>
<td>NCDEX</td>
<td>2</td>
<td>0.07</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Source: NCDEX
Offering in Oil Seed Complex

- Soybean
- Refined Soy oil
- Mustard Seed
- Castor Seed

Soybean Basis & Additional Delivery Centres

- Vidisha (MP)
- Sagar (MP)
- Indore (MP)
- Shujalpur (MP)
- Mandsaur (MP)
- Nagpur (MH)
- Akola (MH)
- Kota (RJ)
- Latur (MH)
Physical Deliveries in Soybean

- Successfully handled physical deposits and deliveries of more than 2 Lakh MT during last 2 years
- Deliveries are smoothly handled and completed without major issues
Soybean Deliveries at NCDEX

SYBEANIDR – NCDEX Soybean Futures contract
Refined Soy oil

- Refined Soy oil futures contract at NCDEX is considered as benchmark in India
- Currently it is offered as intention matching (Cash Settled) contract
- Exchange has halved transaction charges in Refined Soy oil

Price Risk

- Risk taking is inevitable. Managing the unwanted risk is necessary for the sustainability of the organization
- Price risk is the uncertainty and impact of market price fluctuations on the cash flows / profitability of an organization
- Complex deals, Geopolitical linkages, increasing dynamism in the business environment and price volatility makes it imperative for the corporates and trading houses to look for effective and efficient tools and policies to reduce the uncertainty
- Price risk management is a systematic approach to understand, measure, monitor and mitigate the uncertainty of price risk and its impact on cash flows
Price Risk Management

- Once the risk is identified and quantified, one can hedge the risk on a particular position by making use of Forwards contracts / Futures markets / Options.
- Hedging mitigates the price risk but gets exposed to additional risk called basis risk.
- Spread (basis) between Spot and Futures price keeps changing and if not addressed properly can ruin the hedge outcome.
- To overcome the basis risk, one can alter the quantities on the futures market for a given spot exposure, so that the expected change in the value will be equal. This is given by the Hedge variance ratio.

Farmer Engagement

Farmer engagement programme

- NCDEX engaging with farmers through FPOs.
- No. of FPOs account opened: 243
- No. of states already covered: 13
- No. of commodities traded: 17
- Total trade quantity: 32,581 MT
- Farmers represented through FPOs: 4,58,914
Major Development

- Options introduced in Soybean and Refined Soy oil
- Converted Soybean into compulsory delivery contract
- Introduction of trading in indices
  - NKRISHI
- Participation of FPIs & EFEs
- Mutual Funds and PMS allowed now in commodities
- Increasing the basket of Agri commodities futures offered

Thank you!